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ABSTRACT BOOK

for

**II. WORLD CONGRESS OF
PERINATAL MEDICINE
For Developing Countries
&**

**VIII. ULUSAL
PERİNATOLOJİ KONGRESİ**

1 - 5 October / Ekim 2002

Belek - Antalya / Turkey

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PERİNATOLOJİ

DERGİSİ ■ PERİNATOLOJİ DERNEĞİ YAYIN ORGANIDIR

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YAZARLARA AÇIKLAMA

- **Perinatoloji Derneği** nin yayın organı olan **Perinatoloji Dergisi**, üç ayda bir olmak üzere yılda 4 sayı halinde çıkar. Dergide, perinatoloji ile ilgili deneysel ve klinik araştırmalar, olgu bildirimleri, derlemeler, yorumlar, Perinatoloji Kongreleri ve Mezuniyet Sonrası Eğitim Kursu tebliğleri yayınlanır.
- Dergide yayınlanacak yazılar **2 kopya** (Tablo, şekil, grafik ve resimler dahil) ve yazıyı içeren bir adet **disket** ile birlikte aşağıdaki adrese taahhütlü olarak gönderilmelidir.

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- Yazılar **değerlendirme formu** ile birlikte gönderilmelidir.
- Dergide yayınlanmak üzere gönderilen yazılara, daha önce yayınlanmadığına ya da yayınlanmak üzere başka bir yere gönderilmediğine ilişkin yazılı beyan eklenmeli ve bütün yazarlar tarafından **imzalanmalıdır**. Tebliğ olarak sunulmuş çalışmalar ise ayrıca belirtilmelidir.
- Yazıların sorumluluğu yazarlara aittir.
- Yayın Kurulu, yayın kurallarına uymayan yazıları yayınlamamak, düzeltmek üzere yazara geri vermek, biçimce düzenlemek, yazarın izni ile düzeltmek ya da kısaltmak yetkisindedir. Yazı ve ilişkili eklerin kaybolması Dergi sorumlu tutulamaz. Bu nedenle araştırmacıların bunlara ait bir kopyayı kendilerinde bulundurmaları uygundur.

YAZI STANDARTI

- Yazı; A4 dosya kağıtlarına, mekanik veya elektronik yazıcıda 12 punto ile, yaprağın bir yüzüne, iki aralıklı olarak ve kenarlardan 3 cm kalacak şekilde hazırlanmalı ve her sayfa numaralandırılmalıdır. Yazının içinde bulunan her bölüm ayrı bir sayfadan başlamalıdır.
- Yazılara **"Word for Windows"** formatında yazılmış ve gönderilen yazının tamamen aynı olan bir dosyayı içeren disket eklenmelidir. Disketin üzerine, kullanılan yazı programının adı, yazının başlığı veya kısaltılmış hali ve birinci yazarın adı, soyadı yazılmalıdır.

DERGİDE YAYINLANAN YAZI TİPLERİ VE ÖZEL FORMATLARI

Yorum Yazısı: Davetli yazarlar tarafından yapılır. Tartışılan bir konu üzerinde en fazla 10 ile 12 kaynak içeren ve 2000 kelimeli geçmeyen ve yazarın o konudaki yorumuna ağırlık veren yazılardır. Yorum yazılarında özete gerek yoktur.

Derleme Yazısı: Davetli yazarlar tarafından yapılır; 4000 ile 5000 kelime (20 sayfa) içeren, belirli bir konuyu son gelişmeler ışığında ele alan ve literatür sonuçlarını sunan yazılardır. Özet yazılacaksa 300 kelimeden fazla olmamalıdır.

Araştırma Yazısı: Klinik ve deneysel çalışmaya dayanan yazılardır. En fazla 6 yazar ismi olmasına gayret edilmelidir. Yukarıda belirtilen formatta, 4000 kelimeli (16 sayfa) geçmeyecek şekilde yazılmalıdır.

Olgu Sunumu: İlginç olguların ve tedavi şekillerinin sunumlarıdır. En fazla 5 yazar ismi olmasına gayret edilmelidir ve 2000 kelimeli (8 sayfa) geçmeyecek şekilde yazılmalıdır.

Editöre Mektup: Dergide çıkan yazılara yönelik yazılardır; 500 kelimeli (2 sayfa) ve 3 kağıdı aşmamalıdır. En geç son altı ay içinde yayınlanmış yazılara yönelik olmalıdır.

YAZIDA BULUNMASI GEREKEN BÖLÜMLER

1. **BAŞLIK SAYFASI:** 1. Konu başlığı; 2. Yazarların (ünvan kullanmaksızın) ad ve soyadlarını; 3. Çalışmanın yapıldığı kuruluş(lar); 4. Türkçe ve İngilizce anahtar kelimeleri (en çok beşer tane); 5. Yazışma ile ilgili yazarın posta adresi, e-mail adresi, telefon ve faks numarasını içerir.
2. **ÖZET / ABSTRACT SAYFASI:** Yazının Türkçe ve İngilizce başlığını ve özeti içerir. Kaynak ve kısaltmalar kullanılmamalıdır. Özet, aşağıda belirtilen kurgu ve sırada hazırlanmalıdır.
 - a) **Araştırma Yazısı:** **Amaç** / *Background and Objective* (Birinci cümlede çalışmaya temel oluşturan bilgi, ikinci cümlede çalışmanın hipotezi ve amacı); **Yöntem** / *Methods* (Çalışmanın istatistiksel kurgusu; prospektif, retrospektif, randomize oluşu, araştırılan olgular, örnekler ve metodlar); **Bulgular** / *Results* (Çalışmada elde edilen bulgular) ve **Sonuç** / *Conclusion* (Çalışmanın bildirilen hipotezi ve amacına yönelik sonucun bir cümlelik yorumu); **Anahtar Kelimeler** / *Key Words* (en çok beş adet) başlıkları ile düzenlenmelidir. Araştırma yazısı özeti 250 kelimeden fazla olmamalıdır.
 - b) **Olgu Sunumu:** **Amaç** / *Background* (Sunulacak olgu veya tedavi biçiminin orijinalliğinin bir veya iki cümle ile belirtilmesi); **Olgu(lar)** / *Case(s)* (Bir veya iki cümle ile olgunun özelliği) ve **Sonuç** / *Conclusion* (Sunulan olgu veya tedavi şeklinin katkısı nedir?); **Anahtar Kelimeler** / *Key Words* (en çok üç adet), başlıkları ile düzenlenmelidir. Olgu sunumu özeti 125 kelimeden fazla olmamalıdır.

c) **Derleme:** Yazarlar tarafından gerek görülürse, bir paragraf halinde konunun önemi, literatür taramasının sonuçları ve yazarın yorumunu içerir. Derleme yazısı özet 300 kelimeden fazla olmamalıdır.

3. **YAZI METNİ:** Aşağıda belirtilen başlıklar halinde ve her başlık ayrı bir sayfadan başlayacak şekilde düzenlenmelidir.

a) **Araştırma Yazısı:** **Giriş** (*Introduction*) Araştırmaya esas teşkil eden konularla hatları ile ele alınmalı ve araştırmanın amacı belirtilmeli; **Yöntem** (*Methods*) Araştırmada kullanılan gereçler, klinik ve laboratuvar yöntemler ayrıntı ile açıklanarak belirlenmeli, etik kurallara uygunluk belirtilmeli; **Bulgular** (*Results*) Araştırmada saptanan belirgin bulgular yazıda ele alınmalı, diğer bulgular ise ekli tablo ve grafiklerde gösterilmeli, tekrarlardan kaçınılmalı; **Tartışma** (*Discussion*) Araştırmada elde edilen sonuçlar literatür bilgileri ışığında değerlendirilerek olarak ele alınmalı, gereksiz ve geleceğe dönük yorumlardan ve tekrarlardan kaçınılmalı; **Sonuç** (*Conclusion*) Araştırmada elde edilen sonuç kısa ve öz bir şekilde belirtilmeli, çalışmanın amacı ile uyumu ve bunun klinik uygulamadaki yeri vurgulanmalı.

b) **Olgu Sunumu:** **Giriş** (*Background*); **Olgu(lar)** (*Cases*); **Tartışma** (*Discussion*) bölümlerinden oluşur.

c) **Derleme:** Konunun özelliğine bağlı olarak yazar(lar) tarafından bölümlendirilir.

d) **Editöre Mektup:** Düz metin şeklinde olmalıdır.

4. **TEŞEKKÜR BÖLÜMÜ:** Yazar bölümüne girmeyen ancak araştırmaya katkı sağlayan ve maddi destek sağlayan, kişi veya kurum hakkındaki bilgilerin yazılacağı bölümün sonunda 4 satırı geçmemek kaydı ile verilmelidir.

5. KAYNAKLAR

* Kaynaklar yazıda kullanım sırasına göre (2,3,6-8).... şeklinde rakam ile sıralanmalı ve yazı içerisinde cümlenin sonunda parantez içinde belirtilmelidir. Tablolardaki kaynak numaraları o tablonun yazı içindeki sırasına uygun olarak verilmelidir.

* **Türkçe kaynak** kullanmaya özet gösterilmelidir.

* Aynı hususta fazla sayıda kaynak gösterilmesinden kaçınılmalıdır.

* Özetleri kaynak olarak kullanmaktan kaçınılmalıdır.

* Dergi isimleri **"Index Medicus"**a uygun olarak kısaltılmalı, indekste geçen dergiler açık adı ile belirtilmelidir.

* Altı veya daha az sayıda yazar varsa hepsi belirtilmeli; yazar sayısı yedi ya da üzerinde ise **ilk 6'sı** yazılıp Türkçe kaynaklarda "ve ark.", yabancı kaynaklarda ise "et al." kelimeleri kullanılmalıdır.

* Kaynakları yazarken sıralamalar ve noktalamalar aşağıda belirtildiği şekliyle yapılmalıdır.

Dergi: Tabor A, Jerne D, Bock JE. Incidence of rhesus immunization after genetic amniocentesis. Br Med J. 1986; 293: 533-6.

Kitap: Jones KL. Practical Perinatology. New York, Springer-Verlag, 1990; 112-9.

Kitap bölümü: Sibai BM, Frangieh AY. Eclampsia. In: Gleicher N (Ed). Principles and Practice of Medical Therapy in Pregnancy. 3rd ed. New York, Appleton & Lange; 1998; p: 1022-7.

Kurum yazısı: Institute of Medicine (US). Looking at the future of the Medical program. Washington: The Institute; 1992.

6. **TABLOLAR:** Tabloların her biri ayrı kağıda çift aralıklı olarak yazılmalı, yazısı bulunmalı ve arabik rakamları ile numaralandırılmalıdır (Tablo 1, Tablo 2 gibi). Tablolarda yatay ve dikey çizgiler bulunmamalıdır. Tablolar içerisinde geçiş sıralarına göre numaralandırılmalı ve yazı içerisinde parantez içinde belirtilmelidir. Dipnot sırası *, +, #, **, ++, ## şeklinde olmalıdır.

7. **GRAFİK VE ŞEKİLLER:** Aydınlatma kağıdına çini mürekkebi ile çizilmeli veya bilgisayarla koyu karakterde A4 dosya kağıdına basılmalıdır. Her grafikte da şekil üzerinde numara ve açıklayıcı yazılar bulunmalıdır. Grafik ve şekiller arabik rakamları ile yazı içerisinde geçiş sıralarına göre numaralandırılmalı ve yazı içerisinde parantez içinde belirtilmelidir.

8. **RESİM VE FOTOĞRAFLAR:** Fotoğraflar parlak kağıda basılmış olmalıdır. Rasonografi resimleri anlaşılır yapıda olmalıdır. Resim ve fotoğrafların numara ve açıklayıcı yazıları ayrı bir kağıda yazılmalıdır. Resim ve fotoğraflar arkasına, bastırılmadan kurşun kalem ile numara ve yazar adı belirtilmelidir. Herhangi bir kağıda yapıştırılmaksızın ayrı bir zarfa koyulmalıdır. Renkli sim giderleri yazarlara aittir.

DİĞER HUSUSLAR

Başlık ve özetle **kısaltma** kullanılmamalı, metin içinde ilk kez kullanıldığında saltmanın önündeki kelimelerin tümü açık olarak yazılmalıdır. Özel kısaltma kullanılamaz. İlaç isimlerinde jenerik isimleri kullanılmalıdır. Cihaz ve kıf isimleri yanına parantez içinde firma adı, şehir ve ülke ismi belirtilmelidir. Deneyişmelerde ilgili **etik kurul** onayının alındığını gösteren belge yazıya eklenmelidir. Başka bir kaynaktan alıntı yapılan tablo, şekil, grafik ya da resim, ancak ilgili yazarın yazılı izni ile kullanılan bölümün altında belirtilmek kaydı ile kullanılabilir.

PERİNATOLOJİ DERGİSİ

(Perinatoloji Derneği Yayın Organı)

PK 34 Cerrahpaşa, İstanbul - 34301

YAZI DEĞERLENDİRME FORMU

Yazının ismi: _____

Lütfen yazınızı hazırlarken ve gönderirken aşağıda belirtilenleri okuyunuz ve işaretleyiniz. Gönderilen yazılar bu form ile birlikte gönderilmelidir. Bu belge bütün yazarlar tarafından imzalanmalıdır.

- ☐ Başlık sayfası, Özet/Abstract, Yazı metni, Kaynaklar, Tablolar ve şekiller 2 kopya olarak düzenlendi.
- ☐ Başlık sayfası, Özet/Abstract, Yazı metni (içindeki her bir bölüm), Kaynaklar, Tablolar ve şekiller, her biri ayrı sayfa başlıyor
- ☐ Yazı, A4 dosya kağıdına 12 punto ile yaprağın bir yüzüne, iki aralıklı olarak ve kenarlardan 3 cm kalacak şekilde yazıldı. Her sayfa numaralandırıldı.
- ☐ **Başlık sayfası**, yazının başlığı, yazarların adları soyadları, çalışmanın yapıldığı kurum, sorumlu yazarın adresi, telefon ve fax numarası, Türkçe ve İngilizce anahtar kelimelerini içeriyor.
- ☐ **Özet/Abstract**, Türkçe ve İngilizce başlık ve özeti içeriyor. Araştırma, olgu sunumu ve derleme yazıları için belirtilen formatlarda hazırlandı.
- ☐ **Yazı metni**,
Araştırma yazıları; Giriş, Yöntem, Bulgular, Tartışma, Sonuç ve Kaynaklar bölümlerinden oluşuyor. 16 sayfayı geçmiyor.
Olgular; Giriş, Olgular, Tartışma ve Kaynaklar bölümlerinden oluşuyor. 8 sayfayı geçmiyor.
- ☐ **Kaynaklar**, yazıda kullanım sırasına göre numaralandırıldı ve yazılış biçimi ve noktalamalar dergi kurallarına uygun
- ☐ **Tablolar, Şekiller ve Resimler**, Her biri ayrı bir dosya kağıdında, her bir tablo, şekil veya grafik altında numara ve açıklayıcı bilgi mevcut. Resimler dergi kurallarına uygun şekilde gönderildi.

İsmi belirtilen yazının kendi çalışmamız olduğunu ve daha önce yayınlanmadığını beyan ederiz.

Her bir yazarın imzası: _____

Tarih: _____



II. WORLD CONGRESS OF PERINATAL MEDICINE

For Developing Countries

&

VIII. ULUSAL PERİNATOLOJİ KONGRESİ



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Final Programme

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ABSTRACTS FOR LECTURES

II. WORLD CONGRESS OF PERINATAL MEDICINE For Developing Countries & VIII. ULUSAL PERİNATOLOJİ KONGRESİ

1 - 5 October / Ekim 2002
Belek - Antalya / Turkey

L01

PERINATAL PROBLEMS IN DEVELOPED AND DEVELOPING COUNTRIES - UNACCEPTABLE DIFFERENCES

Asim Kurjak, *Department of Obstetrics and Gynecology, Medical School University of Zagreb, Sveti Duh Hospital, Zagreb - Croatia*

Every year approximately 600 000 women die of pregnancy-related causes - 98% of these deaths occur in developing countries. Complications of pregnancy and childbirth are the leading cause of death and disability among women of reproductive age in developing countries. Of all human development indicators, the maternal mortality ratio shows the greatest discrepancy between developed and developing countries. In fact maternal mortality itself contributes to underdevelopment, because of its severe impact on the lives of young children, the family and society in general. Furthermore, in addition to more than half million maternal deaths each year 7 million perinatal deaths are recorded and 8 million infants die during the first year of life.

Maternal morbidity and mortality as well as perinatal mortality can be reduced through synergistic effect of combined interventions, without first attaining high levels of economic development. These include: education for all; universal childbirth; access to family planning services; attendance at birth by professional health workers and access to good quality care in case of complications; and policies that raise women's social and economic status, and their access to properly, as well as the labor force.

L02

REDUCTION IN MORTALITY NEEDS A BIT MORE THAN THE SCIENCE OF PERINATOLOGY

Shirish S. Sheth, *FRCOG (Ad Eundem), FACS President, International Federation of Gynecology & Obstetrics (FIGO)*

High Perinatal losses at regular intervals, which are taken for granted, are to my mind an acceptance of 'terrorism' since it is the deprived and handicapped world which suffers without receiving the required attention and management. The modus operandi to deal with the problem may vary in different regions but can be translated and applied to similar situations to reduce the magnitude of the crisis.

Thus Bangladesh provides a classic example of Government's will, direction from Obstetricians and the importance of partners while reducing neonatal mortality due to Tetanus.

It is an extremely difficult task to interfere with ongoing traditions, as distinctly learnt from for neonate's cord cutting at birth in Cochabamba, Bolivia.

A pregnant mother from a developing country is 30 times more likely to die than a mother from a developed country and her newborn faces the same risk of mortality. Therefore, it is education and education alone that is the ultimate solution as shown by few countries.

Thus, attention and plans needed to be orchestrated and acted upon to reduce perinatal losses are beyond the science of perinatology.

L04

NEONATAL CARE AND TRAINING SERVICES BY THE MINISTRY OF HEALTH IN TURKEY

Dilek Haznedaroğlu, *Md. Phd. Head of Child and Adolescent Health, Ministry of Health*

There are important problems regarding mother and child health in our country. The infant mortality rate which is an important health indicator is 33 per thousand (SIS 2001). As postneonatal deaths began to decrease due to immunisation, oral rehydration therapy and promotion of breast feeding activities; neonatal deaths have emerged more. 63 percent of infant deaths are due to neonatal deaths. Neonatal death rate is 25.8 per thousand, postneonatal death rate is 16.9 per thousand. 44.3 percent of neonatal deaths occur on the first day of life.

Using available information and strategies, different programmes are being implemented to reduce the problems. Some of the programmes regarding perinatal and neonatal health are:

- Safe Motherhood and Reproductive Health Programme
- Improvement of Family Health Project
- Promotion of Breast Feeding and Baby Friendly Hospital Initiative Programme
- Prevention of Genetic Diseases Programme
- Prevention of Perinatal and Neonatal Deaths Programme
- Neonatal resuscitation Programme

As part of neonatal care, early initiating breast feeding has been widespread in our country. Asfixia seems to be the most fundamental neonatal problem and neonatal resuscitation can be required in the health institutions without specific experience on this issue. Intervention to a baby with asphyxia in the first few minutes of life can have a lifelong effect.

Neonatal Resuscitation Programme targets "every one in the delivery room". The Neonatal Resuscitation Programme context not only includes training activities, but also the improvement of delivery room conditions in order to receive maximum benefit from the training.

134 (Neonatal Resuscitation) NR providers and 24 NR trainers training courses were held since 1998 when the national expansion of the programme began, till the end of 2001. 40 NR providers, six NR trainers training courses were conducted in the first six months of 2002 (January-June).

L6

REMOTE TEACHING IN ULTRASOUND IN OBSTETRICS AND GYNECOLOGY USING NIT

Yves Ville, Marcel Spector, *Université Paris 5, France*

Background: The Tunisian society of Obstetrics and Gynecology joined the French National Diploma of US in obs & gyne to allow 100 obstetricians to benefit from 100 hours of theoretical teaching from 50 teachers while the original course was organised in Poissy France.

Methods:

1. Real time using a satellite technology encoded at 300 Kbps and lend by the CNES (France) fed via IP and transmitting to Tunis
2. Video-recordings of the lectures and powerpoint presentations sent to Tunis one week in advance and shown in Tunis with visio-conferencing with a group of French specialist at the end of each session.

Results:

1. realtime teaching was indeed the preferred mode of teaching. However both costs of transmission and constraints on both sides were heavy.
2. The two-step approach was acceptable and cheap. However the fine tuning of the projections was sub-optimal.

Conclusion: The most logical approach, accounting for these results seems to be a rich-media presentation with targetted visioconferencing at the end of each important session.

L10

ANTENATAL CARE AND SAFER MOTHERHOOD – UNICEF VIEW

Edmond McLoughney, *Unicef Representative in Turkey*

Insufficient maternal care during pregnancy and delivery is largely responsible for the appalling annual toll of 515,000 maternal deaths and the estimated 8 million infant deaths (over half of them foetal deaths) that occur either just before or during delivery or in the first week of life. During the pregnancy, regular contact with a doctor, nurse or midwife allows health personnel to manage the pregnancy; immunize the

mother-to-be against tetanus to protect her and her infant; promote good nutrition, hygiene and rest; and detect potential complications making it advisable to give birth in a health facility equipped to handle high-risk deliveries and aftercare. The World Health Organization (WHO) recommend a minimum of four antenatal visits. Labour and delivery, too, should be supervised by doctors, midwives or nurses with the midwifery skills to handle normal deliveries safely and recognize the onset of complications beyond their capacity to handle, referring the mother for emergency care.

Women are most in need of skilled care during delivery and the immediate postpartum period when roughly three quarters of all maternal deaths occur. Traditional birth attendants trained or untrained, can neither predict nor cope with serious complications. The single most critical intervention for safe motherhood is thus to ensure that a competent health worker with midwifery skills is present at every birth, and transport is available to a referral facility for obstetric care in case of emergency.

Maternal care rates tend to be low, and maternal mortality rates high, in countries where women have low status, and also in areas with poor access to routine health services in general. Vast disparities persist in maternal health coverage between the industrialized and developing countries; rich and poor; urban and rural; educated and uneducated. All women should have access to basic maternity care, through a continuum of services offering quality antenatal care, clean and safe delivery, and postpartum care for mother and infant, with a functioning referral system linking the whole.

L11

THE ROLE OF NURSE/MIDWIFE IN PERINATAL MEDICINE

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Perinatal health care comprises care, education, consultation, practice and research which aim the physical, psycho-social harmony and well being of the pregnant, lying-in woman and the newborn together with the family. It is multidisciplinary service area in contemporary medicine and can be widened to professions like doctor, nurse/midwife, psychologist, biologist, social service specialist, genetic consultant, dietitian and physiotherapist.

Basic problems in perinatal medicine

- The Controlling of prolificacy
- The genetical and medical conditions for the healthy beginning to life
- The observation and management of the pregnancy and birth
- The care of the mother and the newborn in the post partum period
- The improvement of the demographic, economic and educational performances

The problems faced in perinatal medicine in Turkey when the official performance and research results are inspected (TNSA 1998, UNICEF 2001)

- | | |
|--|-------|
| • The number of women who don't want another child | 70% |
| • The rate of unwanted pregnancies | 19% |
| • The rate of contraceptives among married women | 64% |
| • The use of effective contraception | 37% |
| • The use of Withdrawal | 24% |
| • The rate of total prolificacy | 2.6% |
| • The rate of population growth | 1.47% |

• Maternal Mortality Rate (MMR) has fallen to 42.2% in a hundred thousand 30% bleedings, 15.5% toxemia, 9.6% infections, 4% complications of abortus.

• Infant Mortality Rate (IMR) has fallen to 38 in a thousand.

• Death under the age of 5 is 48 in a thousand (Turkey is in the 77 th place in the world)

The Targets of "Health to Everybody in Turkey" (Ministry of Health 2001)

Until 2020

- To decrease (IMR) below 20 in a thousand
- To decrease death under the age of 1 below 30 in a thousand
- To decrease LBW rate by 20%
- To increase antenatal care to 100%
- To decrease (MMR) by 50%
- To increase effective use of contraceptives to 70%

When the perinatal problems in Turkey are investigated, it can be seen that is possible to overcome the problems and the aims are possible to be reached. In solving these problems the personnel having the most effective role are the nurses and midwives. The developed countries have carry out effective policies in the mother and child health since 1930's and have educated nurses and midwives.

Parallel to the changes and trends in general health care in the 21 th century the role of nurses and midwives have changed and widened. It was wanted from the nurses and midwives, who will plays a key role in perinatal medicine in the modern health care, to be specialised, to gain the abilities to critical thinking, to give desicions and the solve problems. The care plans are being applied according to the standarts developed and an influence is given to the quality control and accreditation studies.

increased McInoney defended that the nurse practitioners were useful in chronic illnesses, search of physical health, specialised care, counselling, research, care of newborn and rehabilitation

The problem is related to the distribution of the doctors, nurses and midwives among the regions, being unbalanced in Turkey more then the insufficiency in the number of the health associations and the health personnel. The characteristics of the cities and provinces are not being taken in consideration for the distribution

L13

PREVALENCE AND DETERMINANTS OF ANEMIA AND IRON DEFICIENCY: AMONG JORDANIAN WOMEN 15-49 YEARS OF AGE: A NATIONAL STUDY

Abdel Wahed, Jordan

Introduction :

Anaemia affects over 2 billion people worldwide, causing tiredness, poor quality of life and low productivity. Over half the pregnant women in the world are vulnerable to these consequences because they are anemic. The consequences of anemia can be devastating in pregnant women. It can result in maternal mortality and stillbirth if Hemoglobin level is less than 7 gm/10ml. Moderate anemia (7-11 gm/100ml) can lead to stillbirth and low birth weight and maternal death if the pregnant woman suffered another maternal complication.

The Great majority (99%) of maternal deaths occur in developing countries. In response to the enormity of the problem, the Safe Motherhood initiative (SMI), an interagency effort to reduce maternal mortality and morbidity, was launched in 1987 in Nairobi. Its target is to reduce levels of maternal deaths by at least half by the year 2000 and to achieve substantial reduction in maternal morbidity.

Contribution of anemia to maternal mortality

A number of hospital-based and community-based studies that were carried out in developing countries have shown that anemia contributed from a low (4-5%) of maternal deaths in Senegal and Bangladesh to a high of 16% in Ambala, North India. Many other countries reported figures somewhere in the middle (about 9%).

Anemia sequelae

In pregnancy, severe anemia can lead to cardiac failure. Moderate anemia is associated with decreased maternal well being and contribute to maternal deaths from hemorrhage or infections. The sequelae of anemia are not limited to maternal complications but also contribute to perinatal morbidity and mortality by increasing the likelihood of intrauterine growth retardation and pre-term delivery.

The effects of anemia on maternal and perinatal mortality are largely preventable with appropriate treatment. However, in developing countries, there are as yet few MCH programs that successfully implemen-

ted comprehensive control strategies. This meager intervention comes as a surprise when it is known that the epidemiology of anemia, the knowledge and technical means of prevention treatment are distributed worldwide.

Common Causes

- nutritional deficiency
 - iron
 - folate
 - vitamin B12
- blood loss
 - menstruation
 - repeated child birth
 - hookworm infestation
- infections
 - malaria
 - HIV infection
- genetic defects
- sickle cell disease
- thalassemia
- metabolic disorders

The most common causes of anemia are iron and folate deficiency, malaria and hookworm infestation. It has been found that these common causes of anemia can be managed in a cost effective manner through the primary health care system.

This national study of 1801 Jordanian women in the child bearing age is the first and only study of the prevalence and determinants of anemia and iron deficiency among Jordanian women. In November of 1995, UNICEF in cooperation with the Ministry of Health, launched this study that aimed at examining the prevalence and determinants of anemia among Jordanian women in the child bearing age. UNICEF Jordan country program and the Ministry of Health were the first among five other countries in the ME-NA region to respond positively to a call by UNICEF regional office to participate in a multi-center study. Based on a randomly selected sample, prepared in cooperation with the Department of Statistics, women were interviewed in their homes to obtain a comprehensive data on their reproductive experiences, nutritional status, and demographic information that would help explain their hematological status. Blood samples were also drawn for all study subjects. Hemoglobin level and complete blood picture were determined for all study participants. Serum ferritin levels were analyzed for all women who were found to be anemic and an equivalent controls of non-anemic women.

The study results have shown that, on average, study women were 28 years old, married (68%), married at the age of 19 years, have been pregnant (5.6 times), and delivered (4.9 babies), have on average (4.6) living children, and pregnant in the sixth month. On average, a study woman has a mean hemoglobin of 12.4 gm/100 ml (+ 1.45) with a minimum level of 5.7 gm/100 and a maximum of 16.7 gm/100ml. Serum ferritin values had a mean of 18.8 (+21) with a minimum value of 0.1 and a maximum of 165 ng/u1. A WHO recommended values were used as cut off points to estimate the proportion of women who were anemic and/or iron deficient. Among the study participants there were 28.6% anemic women and 55.3 % iron deficient women. In comparison to prevalence figures published by the WHO Maternal Health and Safe Motherhood Program (.), Jordanian figures are better than the world average of 37% anemic women. The prevalence of anemia in Jordan is also far better than developing countries in Africa (44%), Asia (45%), Latin America (31%).

Mean hemoglobin, serum ferritin, proportion of anemic, and iron deficient women were further analyzed by examining the contribution of socioeconomic well being, reproductive health practices and indicators of nutritional status into current hematological status of study women. Out of the studies determinant factors, reproductive health indicators were very closely related to mean hemoglobin level, prevalence of anemia and iron deficiency. We were unable to demonstrate a definitive and consistent relationship between women hematological status and the studied indicators of socioeconomic and nutrition indicators. The report also concludes by a set of recommendations that feed into programming ef-

forts of UNICEF and Ministry of Health with regards to strengthening of existing maternal health services.

L14

FETAL OXYGEN PULSE OXIMETRY: PRELIMINARY DATA

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The monitoring of fetal oxygen saturation (Sat O₂) has been conceived to improve the surveillance of fetal conditions as a complement to FHR tracing (CTG). We have tested this method in our Institute in pregnant women, in order to validate the efficacy of pulse oxymetry. Normal term pregnancies were considered with the following inclusion criteria: at least three ultrasound scans in pregnancy for the confirmation of gestational age and placental situation, spontaneous labor and not assuming medicines able to influence the results of the analysis.

The average of the gestational age at birth has been of 40.3 ± 1.0 (39-42 weeks), the average of the neonatal weight has been of 3468 ± 163 g. We have used for this study the fetal oxygen monitor OBS-500 (OB Scientific, Inc.), a compact pulse oxymetry device that appraises in contemporary the signal of the Sat O₂ and the fetal cardiac frequency by means of a flexible sensor (OBS-900) situated on the shoulder of the fetus during labor. Umbilical cord blood sampling was obtained at birth after double clamping and before the first neonatal breath and subsequently performed the umbilical blood gas analysis (UBGA) of the artery and the umbilical vein.

We have inserted the probe to laboring women, when the cervix showed a dilation between 4 and 8 cm (average 6.6 ± 2.2 cm). In one case the probe has been inserted with entire membranes, under ultrasound guide (for checking placental situation). The average of the umbilical artery pH has been of 7.28 ± 0.06 , and of the umbilical artery pO₂ 15.4 ± 3.4 mmHg. The average of the values of Sat O₂ to 5, 10 and 15 minutes from birth were 50.0, 55.0 and 51.1 respectively. The median of Apgar scores to 1 and 5 min has been respectively 8 and 9.

From our data it emerges that a value of Sat O₂ > 50 corresponds to an Apgar score and to UBGA values at birth within normality.

These are preliminary results to ascertain the reliability of the method in one cluster of normal pregnancies at term. A harvest of cases is in progress including alterations of CTG tracing in labor, with the aim to evaluate the utility of pulse oxymetry in the decision of "timing" and modalities of birth.

L16

ROUTINE ULTRASOUND IN THE SECOND TRIMESTER

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Historically, first attempts on fetal screening were held on Northern Europe in 70's. Ultrasonographic evaluation of the pregnancy has advanced rapidly in the past decades. However, the routine use of ultrasound in the second trimester of pregnancy was controversial. In addition, indications, timing and quality of machine were the main debates. In 80's and early 90's, routine use of the ultrasound was not recommended especially in western countries because of lack of evidence on the improvement of perinatal outcome. While there are still great differences on the detection of fetal anomalies because of the skill of the operator and quality of the machine, routine use of ultrasonography is now well-accepted as a standard obstetrical care in many centers around the world.

Not only verification of gestational age and viability, but also investigation for entire fetal anatomy should be done. Other main purposes of the ultrasound screening are to allow timing and transporting to referral center for delivery, alternative options, for antenatal and/or postnatal therapy.

Principles of investigation consist cardiac activity, number of fetuses and presentation, amniotic fluid volume, placental localization and structure, measurements of BPD, HC, AC and FL, examination of the

myometrium, adnexa and cervical canal and finally fetal anatomy. Examination of fetal anatomy is not an option, but should be a standard. Absence of a normal system or organ, presence of an extra structure, herniation from a defect, dilation behind an obstruction, abnormal biometry, lack of fetal movements are the alarming signs. In addition, soft markers of aneuploidy should be investigated in the second trimester of pregnancy.

Finally, screening programs which are predictive and highly specific may reassure some parents falsely or make them anxious leading to invasive procedures. Such programs may also be subject of malpractice. Cost effectiveness and educational problems for these screening programs are still subjects of debate.

L19

FETAL INTERVENTIONS

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Invasive fetal diagnosis includes techniques such as amniocentesis, chorionic villus sampling, fetal blood sampling, fetal tissue sampling, embryoscopy and fetoscopy. The specimens are obtained directly from the fetus or indirectly from an associated fetal structure or product by needle or biopsy technique, allowing assessment of specific fetal characteristics.

Amniocentesis is a second trimester prenatal diagnostic procedure usually performed after 14 weeks gestation. The indications for amniocentesis include advanced maternal age, history of a previous child with a chromosomal abnormality, parental chromosomal translocations, history of specific biochemical or molecular genetic diseases, fetal infections. The technique is performed under ultrasound guidance with a 20-22 gauge needle and amniotic fluid is removed 1 ml per week. The risks of amniocentesis include fetal loss about 1 in 200, leakage and fetal injury (1). Some centers performs early amniocentesis at 10-14 weeks of gestation, but the risk of fetal loss is high compared to chronic villus sampling at the same gestational age. The karyotyping results can result in 15-20 days. Chronic villus sampling can be performed after 10 weeks of gestation. Indications are same as amniocentesis. Single or double needle technique can be used to make needle biopsy. After sampling it has to be done separation from the maternal cells and clots. It has same fetal loss rate compared to second-trimester amniocentesis and disadvantages such as mosaicism, maternal contamination and takes time for separation (2). It's advantages are early procedure and early direct results obtained. If chorionic villus sampling is performed before 10 weeks of gestation there is a high risk for limb reduction(3). Amniocentesis or chorionic villus sampling can be preferred depends on which specific disease studied on. Fetal blood sampling can be utilized to obtain fetal blood from the umbilical cord usually from 18 weeks gestation until term. Fetal karyotyping by fetal blood sampling may be indicative when congenital malformations or early IUGR are identified by ultrasound or when the pregnant with high risk for chromosomal abnormality comes to hospital at late stage. Evaluation of fetal status regarding fetal infections, hematological abnormalities, maternal platelet disorders, inborn errors of metabolism and fetal well-being can be performed (4). Karyotyping results can be obtained within few days. Complications rate is nearly same as compared to amniocentesis or chorionic villus sampling in experienced hand.

Other fetal tissue sampling include fetal skin, liver and fluid collections in fetal urinary tract, thorax or cystic hygroma. Techniques are similar to free-hand ultrasound guided techniques like amniocentesis and fetal blood sampling. Needle insertion into specific fetal areas requires appropriate fetal positioning. Risks and complications are similar to those quoted for fetal blood sampling.

Invasive Fetal Therapy includes amnio-infusion, amnio-drainage, laser ablation in twin to twin transfusion syndrome, fetal fluid drainage such as urine, ascites, hydrothorax, hydronephrosis, fetal shunting procedures, fetoscopic catheterisation, intrauterine transfusion. In severe erythroblastosis fetalis intrauterine washed red cell is carried out to prevent fetal anemia and it's complications. It can be performed by either intraperitoneal or intravascular route. Intravascular transfusion is more effective than intraperitoneal route (5). In case of unilateral or bilateral pleural effusion the shunting is necessary to prevent the fetus from the lung hypoplasia and other complications until term. Vesico-amniotic shunt is another shunting procedure in the case with Posterior-Urethral Valve syndrome as early as possible before nephrogenic

stage of fetal kidneys if there is severe enough bladder outlet obstruction. Sometimes it will be necessary to put a shunt into pelvis of the kidney in case of severe bilateral or unilateral hydronephrosis due to uretero-pelvic junction obstruction or reflux (6). Amnio-drainage and laser coagulation can be performed in twin to twin transfusion syndrome. Also amnio-infusion can be instilled into amniotic cavity in case of severe oligohydramnios to delineate and easily visualise the fetus during ultrasound examination, and sometimes to replace the amniotic fluid. It should be kept in mind that there is a complication rate about 3-5% with invasive fetal therapy techniques. These procedures should be performed in experience hands and centers.

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L20

MEDICOLEGAL ASPECTS OF OBSTETRICS

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The main subject in medicolegal aspect of obstetrics is the medical malpractices. Medical malpractices is a growing problem in many countries including Turkey.

Usually Obstetrics 's core business is a physiological process which usually ends successfully without medical intervention. When it does not medically, emotionally and financially consequences can be disastrous. The risks involved in pregnancy and childbirth have changed over the years and are continually being reassessed.

At Turkey there are malpractices like in other countries including obstetrics. Between years 1990-2000 there were 103 cases which State Institute of Forensic medicine of Ministry of Justice of Turkey has given opinion as expert witness. 69 % of the cases were performed by Obstetrics and 22 % of them were performed by midwives.

In this paper I will try to give some details about legislations, procedures and situation of malpractice cases in Turkey.

L22

NEW TECHNOLOGIES FOR INTRAPARTUM MONITORING

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The poor specificity of cardiotocography has stimulated the research on complementary fetal intrapartum monitoring techniques. In addition to analysis of fetal heart rate variation, there are three different approaches to evaluate fetal response to labour.

The first is represented by the assessment of intrapartum fetal acid-base status with the use of fetal blo-

od sampling (FBS). FBS can reduce operative intervention but it requires additional expertise, is dependant on appropriate interpretation of CTG patterns, is time consuming and give only intermittent information and thereby it is not widely used.

The second is represented by pulse oximetry. This procedure allow the continuous evaluation of fetal O₂ saturation and can help in differentiating abnormal CTG patterns. Recent clinical studies have shown a reduction of 50% in the rate of caesarean section for suspected fetal distress. However the current literature holds somewhat diverging views on the information available from fetal pulse oximetry during labour in particular regarding the ability of CTG + pulse oximetry to provide diagnostic capacity on fetal metabolic acidosis.

The third is focused on evaluation of function of a high priority organ like the heart, based on the analysis of the ST waveform of the fetal electrocardiogram. ST waveform elevation reflects compensated myocardial stress and a switch to anaerobic metabolism. Persistent biphasic or negative waveform changes indicate myocardial decompensation as a result of direct myocardial ischemic hypoxia. Extensive experimental work indicate that analysis of changes in ST waveform provide continuous information on metabolic events occurring within myocardial cells which allow cardiac function to be maintained during hypoxia. This information is available from the same source from which we obtain the fetal heart rate. Large clinical studies have shown that ST analysis of the fetal ECG provide useful information on fetal reaction to labour and can safely reduce the number of obstetric operative intervention with a parallel improvement in fetal outcome.

Improvement of intrapartum fetal monitoring however require also the capacity of making the appropriate use of the information available.

L23

ELECTIVE CESAREAN SECTION: IS IT ABUSED?

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Cesarean section (CS) still remains the most common operation, being performed in the world. Although The World Health Organization suggested a limit of 15% for cesarean section rate, it has grown markedly in recent years. In Turkey, there are not healthy records regarding the rate of caesarean section but as far as we know in private hospitals it reaches 90%.

The reasons for this unacceptable rate are not understood exactly. Advanced maternal age, widely use of electronic fetal monitoring, breech presentation, concern for malpractice litigation, socioeconomic/cultural factors and "maternal request" might be the possible reasons.

In this presentation, the aspects of cesarean section mainly performed by maternal request and the following questions will be discussed.

What is the exact reason for a physician to perform CS in the case of advanced maternal age, poor obstetric history, infertility history, or a history of ovulation induction/ART?

Does CS really carry more morbidity than vaginal delivery? Or

Is it safer for the fetus/mother?

Is it more comfortable than a vaginal delivery?

Is CS cause less complications than vaginal delivery concerning pelvic floor disorders, stress incontinence and sexual disorders?

Who makes the decision to made CS? The physician? The patient? Or both of them?

Has the woman have a right to chose the mode of delivery? Is it a human right or not?

Should physicians perform an elective CS on request?

L25

THE MISGAV LADACH METHOD – METHOD OF CHOICE OF CESAREAN SECTION FOR DEVELOPING COUNTRIES

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Introduction

Among obstetric techniques, cesarean section seemed to represent a well-defined procedures and significant advances in this intervention were considered to be unlikely. But during the last time obstetric surgery has undergone many improvements. In the 1970s Joel-Cohen presented a new method for opening the abdomen [1] This method is the result of critical assessment of each surgical step.

It is performed by a superfital transverse cut in the cutis, two to three cm below the line between the anterior and superior spinae illiacae; deepening the cut in midline with a scalpel to expose the fascia; dissecting fascia laterally below the fat tissue with scissors; then manual bilateral traction of the recti muscles and the subcutis at the same time. The parietal peritoneum is opened manual transversaly to avoid damage of the bladder. After the delivery, the abdomen is closed by a continuous suture of the fascia, and few, widely spaced stitches in the scin.

One of the most important step is the leaving non-sutured visceral and parietal peritoneum. Namely, peritoneal repair of surgical defects occurs simultaneously in multiple sites by migration of mesothelial cells into supportive matrix. Reestablishment of the peritoneal layer is observed within 72 h of surgery and complete repair occurs within 1 week where the peritoneum is leaving unsutured because of avoid ischaemia, necrosis, foreign body reaction [6]. In the case of sutured peritoneum normal fibrinolytic activity is suppressed under ischaemic conditions. Fibrin that is not resorbed becomes stabilised, infiltrated by fibroblasts, and ultimately organised into permanent adhesions [7]

Advantages of this metod are: less ferquency of fever and urinary tract infection as well as the administration of therapeutic antibiotics and narcotics, mean time to positive auscultation of bowel sounds, shorter maternal hospital stay and avoiding postoperative adhesion formation [5].

L26

DELIVERY CONSIDERATIONS OF MULTIPLE PREGNANCY

Mehmet Uludoğan, *Zeynep Kamil Doğumevi Istanbul, Turkey*

The overall incidence of spontaneous multiple gestations is approximately 1-2 %. About 95 % of multiple pregnancies are twin pregnancies. Multiple pregnancies are coming increasingly common after ART. This is true for especially for triplets and higher order pregnancies where antepartum and intrapartum complications are much more higher.

Approximately half of twins and 90 % of triplets have low birthweight and they are more likely to have complications immediately or later on.

Labour and delivery management is very important in multifetal pregnancies, because complication of labour and delivery such as preterm labour, uterine disfunction, abnormal presentations, and uterine laceration and atonia is much more common than sigleton pregnancies.

Special precautions and arrangements and close monitoring must be considered when delivery of two or more fetusus is expected.

L27 & L32**WHO PROGRAMME TO MAP BEST REPRODUCTIVE HEALTH PRACTICES**

A. Metin Gülmezoglu, José Villar, Guillermo Carroli, Linan Cheng, G. Justus Hofmeyr, Ana Langer, Pisake Lumbiganon, Suneeta Mittal, Kenneth F. Schulz, World Health Organization

The WHO Programme To Map Best Reproductive Health Practices was initiated by the Department of Reproductive Health and Research, W.H.O. in 1997. This Programme includes activities to generate evidence by conducting primary research, synthesizing relevant evidence through systematic reviews and disseminating evidence on best practices through the WHO Reproductive Health Library (RHL). RHL is an annually updated specialist database in reproductive health targeting health workers in developing countries and is available on a free-subscription basis in these countries. RHL includes Cochrane systematic reviews from The Cochrane Library, commentaries specially written for RHL and other useful information.

Published in English and Spanish, RHL currently has around 10,000 subscribers worldwide. A Chinese version is being prepared and the sixth issue will be published in early 2003.

Questions important in developing countries are regularly identified and systematic reviews conducted to answer these questions. These activities are undertaken with a capacity building component where training in systematic review methodology is provided.

Altogether, the Programme conducts research in implementation of reproductive health practices, systematic reviews in reproductive health and disseminates globally, reliable and up-to-date information on best practices in developing countries.

L28 & L29**IMPLEMENTING EVIDENCE-BASED PRACTICES IN CHILDBIRTH: THE "BETTER BIRTHS" INITIATIVE (BBI)**

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In the past two decades, considerable evidence has been produced regarding the effectiveness or otherwise of childbirth procedures. Evidence from randomized trials has been synthesized in systematic reviews published in the Cochrane Library and the WHO Reproductive Health Library (RHL). The RHL is distributed by free subscription to health workers in low-income countries.

Despite the availability of evidence, surveys in resource-poor countries show that women using state maternity services are often subjected to uncomfortable and degrading procedures for which there is no evidence of benefit. They will then avoid services where there is a community perception of poor quality obstetric care.

Procedures for which there is no evidence of effectiveness include confinement to bed, routine starvation, routine early amniotomy, birth in the supine position and routine episiotomy. Procedures with evidence of effectiveness include childbirth companionship, magnesium sulphate for eclampsia, and active management of the third stage of labour.

The Births Initiative (BBI) is a new strategy developed by health professionals in South Africa and internationally, to help provide a better quality of childbirth care for women and improve maternal outcomes in low-income countries.

The purpose of the initiative is to improve the quality of care by encouraging health care workers to abandon practices that are painful, uncomfortable, and potentially harmful and have no evidence of benefit, and to implement effective procedures. This means women will have a better experience of childbirth.

Principles of the BBI:

Humanity : women to be treated with respect

Benefit: care that is based on the best available evidence

Commitment: health professionals committed to improving care

Action: effective strategies to change current practices

BBI Materials

These include a workbook, posters, video presentation, a slide power point presentation of best evidence for procedures during labour, a reference booklet, and a self-audit mechanism. The video programme shows real experiences of implementing companionship in labour wards in South Africa.

The BBI materials are available free of charge on the WHO Reproductive Health Library, from rhl@who.int, and on the BBI website: <http://www.liv.ac.uk/lstm/EHCP.html>. Accessing these materials and the evidence on childbirth procedures from the RHL will be demonstrated during the presentation.

L30 & L31

WHO ANTENATAL CARE RANDOMISED TRIAL FOR THE EVALUATION OF A NEW MODEL OF ROUTINE ANTENATAL CARE

Guillermo Carroli, *on behalf of the Antenatal Care Trial Research Group*

Most of the antenatal care models currently in use around the world have not been subjected to rigorous scientific evaluation to determine their effectiveness. Despite a widespread desire to improve maternal care services, this lack of "hard" evidence has impeded the identification of effective interventions and thus the optimal allocation of resources. In developing countries, routinely recommended antenatal care programmes are often poorly implemented and clinical visits can be irregular, with long waiting times and poor feedback to the women.

To address this paucity of information, the UNDP/UNFPA/WHO/World Bank Special Programme for Research, Development and Research Training in Human Reproduction (HRP) implemented a multicentre randomised controlled trial that compared the standard "Western" model of antenatal care with a new WHO model that limits the number of visits to the clinic and restricts the tests, clinical procedures and follow-up actions to those that have been proven by solid research evidence to improve outcomes for women and newborns.

Clinics in Argentina, Cuba, Saudi Arabia, and Thailand were randomly allocated to provide either the new model (27 clinics) or the standard model (26 clinics). All women presenting for antenatal care at these clinics were enrolled. Women enrolled in clinics offering the new model were classified on the basis of history of obstetric and clinical conditions. Those who did not require further specific assessment or treatment received the new model, and those deemed at higher risk received the usual care for their conditions.

Women attending clinics assigned the new model (n= 12568) had a median of 5 visits compared with 8 visits within the standard model (n= 11958).

The results of this trial showed that there were no significant differences between the new and standard model in terms of severe postpartum anaemia (new model: 7.59% vs standard model: 8.67%), pre-eclampsia/eclampsia (1.69% vs 1.38%), urinary-tract infections (5.95% vs 7.41%) or low-birth-weight infants (7.68% vs 7.14%). Adjustment by several confounding variables did not modify this pattern. Similarly, there were no significant differences in secondary outcomes for either women or infants, including the rates of maternal and neonatal death. Women and providers in both groups were satisfied with the care received, although some women assigned the new model expressed some concern about the timing of visits. There was no cost increase, and in some settings the new model decreased cost.

Provision of routine antenatal care by the new model seems not to affect maternal and perinatal outcomes. It could be implemented without major resistance from women and providers and may reduce cost.

L36

MEDICAL MANAGEMENT OF ECTOPIC PREGNANCIES**Jaideep Malhotra, Narendra Malhotra, Malhotra Test Tube Baby Centre, Agra**

Ectopic pregnancy is still the number one cause of maternal even in the developed countries like USA. The incidence is around 20% of all pregnancies the incidence of ectopic pregnancy is on the rise (6 fold increase) due to the increase in sexually transmitted diseases, PID and ART procedures.

If we can diagnose ectopic pregnancy early by the routine use of TVS & color doppler we might be able to offer a medical option to these patients and save them from surgery.

The medical option of treatment of ectopic could be local injections of anti trophoblastic drugs or systemic injections. It has to be kept in mind that to offer medical option a strict preselection criteria must be observed specially a sac size of < 3.5 cm and a β -HCG of less than 10,000 units with systemic methotrexate use as single injection or variable region the success rate. In one study (n = 75 cases) was 90% as compared to Speroff 94 (95%) & Slaughter 95 (92%). A non-responsive rate and tubal rupture was seen in 3-4%. Only 3-10% pts. have shown side effects. Medical treatment is safe and very effective in properly selected cases

Today a Risk approach to all antenatal and intrapartum cases is strongly advisable.

L37

CERVICAL PATHOLOGIES IN PREGNANCY

**Fuat Demirkıran, Istanbul University, Cerrahpaşa Medical Faculty Department of OB&GYN
Division of Gynecologic Oncology, Istanbul, Turkey**

Cervical cancer and its preinvasive lesions are the first and second gynecologic malignancy in developing countries. Also in these countries, the pregnancy rate is high. So, cervical pathology is the most common gynecologic malignancy in pregnant women in developing country. When we look at the statistics of developed country, we also see that cervical pathology the first and second gynecologic malignancy in obstetrics practice. Cervical preinvasive and invasive lesions are seen one per 700-2000 pregnancies. Essentially, diagnostic and therapeutic approaches of this disease are similar to non-pregnant women. The key issue is to think possibility of cervical pathology at the management of a pregnant woman and to be aware of necessity of cervical evaluation in pregnancy.

In pregnant women, preinvasive pathologies are mostly asymptomatic and cervical screening programs using vaginal cytology and colposcopy perform their diagnoses. Punch biopsy and leep excision from cervix can be made easily with insignificant complication in pregnant women, especially in first trimester. However, indication of conization is highly limited, because of the possibility of ominous hemorrhage. Treatment of these lesions may be postponed after the delivery, but at this approach, micro invasive cancer should be eliminated.

With respect to invasive cervical cancer, the firstly there seems to be no prognostic difference between patients treated in pregnancy and non-pregnant patients with the same stage of disease. That is, pregnancy is not effect prognosis of disease. During the first two trimesters the treatment is carried out along the same principles in non-pregnant patients. The patient is treated without respect to the pregnancy. In advanced pregnancy with viable a fetus, Cesarean section is carried out. Afterwards the patient is treated in the same way as a non-pregnant pregnant woman.

L38

ADNEXAL MASSES IN PREGNANCY

Derin Kösebay, *University of Istanbul, Cerrahpaşa School of Medicine Department of OB&GYN, Division of Gynecologic Oncology, Istanbul, Turkey*

The incidence of adnexal masses in pregnant women is 1/81-1/2500 live births. Since ultrasound examination has become a routine component of current obstetric management, nearly 1% of women have an adnexal mass diagnosed during pregnancy. Dermoid cysts are the most common adnexal masses seen in pregnancy. The second and third common ovarian tumor affected pregnant women are serous or mucinous cystadenoma and endometrioma. Also all of the functional ovarian cysts are frequently seen in this period. Malignant ovarian neoplasms account for 2-6% of all persistent adnexal masses diagnosed during pregnancy. The frequency of ovarian cancer in pregnant women is 1/18000 to 1/25000 pregnancy. Management of adnexal masses during pregnancy remains controversial. If a mass is diagnosed early in pregnancy, it is reasonable to follow it with serial pelvic ultrasound examination. Complex ovarian masses or cysts having any malignancy characteristics should be removed. The ideal time for laparotomy is between 16 and 22 weeks gestation.

L39

DIAGNOSTIC ULTRASOUND FOR DEVELOPING COUNTRIES

Asim Kurjak, *Department of Obstetrics and Gynecology, Medical School University of Zagreb, Sveti Duh Hospital, Zagreb, Croatia*

The relevant characteristics in the developing countries are the lack of technological and organizational infrastructure, the lack of appropriate technology implementation programs as well as the lack of well-trained specialists. Some of our efforts should be redirected towards the appropriate introduction and application of medical technology in developing countries.

Ultrasound is being used at an ever increasing rate for diagnostic purposes in developing countries. However, it is also obvious that in the most parts of the world, the availability of ultrasound facilities is relatively poor or absent. On the other hand, the diagnostic problems for which ultrasound is particularly suited are closely related to the requirements of developing countries, viz. obstetrics and many parasitic diseases, and this is therefore obvious that this technology should have a higher priority in such countries. When used rationally and with appropriate technology it seems certain to become of increasing importance to developing countries where completing more expensive imaging modalities such as MRI or digital radiography cannot replace its wide scale use. Furthermore, as already mentioned the usefulness of any ultrasound appliance depends on great extent on the skill and experience of the operator. Qualified obstetricians are not available in many parts of the world and it is impossible to achieve an adequate standard by self-learning and/or reading. The study of books and stored images can help but does not replace "hands-on" experience. In particular, the affective use of an ultrasound scanner is very dependent on the skill of the operator. Therefore, training for ultrasonic diagnostic must be focused both on the sonologist themselves and on the community as a whole.

L40

ADVANCES IN DIAGNOSIS AND TREATMENT OF ECTOPIC PREGNANCY

Sonja Kupesic, *Sveti Duh Hospital, Medical School, University of Zagreb, Croatia*

Early and reliable diagnosis of ectopic pregnancy still remains a challenge but is essential to avoid life-threatening bleeding or consequent infertility. The introduction of transvaginal sonography has improved diagnostic accuracy, but using this technique in about half of ectopic pregnancies an ectopic gestational sac is not clearly visualized. Color Doppler ultrasound contributes to detection of hemodynamic changes

in tubal arteries by enabling demonstration of high vascularity in approximately 94% of ectopic pregnancies. The appearance and the location of the blood flow relate to the gestational sac dimension and flow velocity waveform characteristics and are similar to those obtained from the spiral arteries in normal intrauterine pregnancies ($RI = 0.42 \pm 0.12$). Color Doppler studies demonstrate a high quantity of color in ectopic pregnancies with vital trophoblast and/or a live embryo as well as those with relatively high beta hCG levels. Demonstrations of the "hot flow pattern" shortens the diagnostic process and enables an easier clinical decision to be reached on the treatment of ectopic pregnancy. Based on our clinical experience in patients with less color signals and increased vascular resistance to blood flow, both indicating a non-vital trophoblast and/or long-standing demise, expectant management can be introduced. Our preliminary data suggest that three-dimensional sonography is an effective procedure for early diagnosis of ectopic pregnancies, which enables demonstrations of hyperechoic border, an apparently specific feature not reported by conventional ultrasound studies. It seems that shortening diagnostic procedure process and proper selections of the patients based on color Doppler and 3D ultrasound evaluation enables introduction of more sufficient treatment options.

L41

EARLY PREGNANCY COMPLICATIONS ASSESSED BY COLOR DOPPLER AND THREE DIMENSIONAL ULTRASOUND

Sonja Kupesic, Asim Kurjak, *Sveti Duh Hospital, Medical School, University of Zagreb, Croatia*

Objective: To investigate the role of 3D and color Doppler ultrasound in the evaluation of the patient with early pregnancy complications.

Design and Methods: Seventy five patients whose gestational age ranged from 6 to 14 weeks presented with vaginal bleeding, closed cervix, ultrasound finding of a living embryo and subchorionic hematoma were analyzed with both methods. A total of 150 matched controls were randomly selected from a pool of 1200 pregnant women in the same gestational age who were studied during the one year period at our Department. Subchorionic hematoma was diagnosed as echo-poor or echo-free area between the chorionic membrane and the myometrium. Multiplanar imaging enabled correct imaging of the subchorionic hematoma diameters and volume in each patient. The hematoma size was categorized as a small or large, according to whether it was more or less than 20ml. Color flow Doppler was used to visualize spiral arteries and blood flow velocity waveforms were analyzed by means of pulsed Doppler using resistance index (RI) as the measurement parameter. The patients were evaluated in two weeks` period, at least three times, and both parameters, the hematoma volume and spiral artery RI were statistically analyzed.

Results: Hematomas ranged from 9.5 to 78.4 ml. The RI slowly declined during the 8 weeks` period, while hematoma volume showed a week positive correlation. Most spontaneous abortions occurred in the group of the patients with subchorionic hematomas (18.7% vs 6%), documenting a significant difference. Another significant factor was the presence of the hematoma in the corpus of the uterus.

Conclusions: Three-dimensional ultrasound enables precise localization and volume measurement of the hematoma, while color Doppler evaluation allows detection of the patients with altered spiral artery blood flow who are at increased risk for spontaneous abortion.

L42

TRANS-ABDOMINAL CERCLAGE

Maher Mahran, *Egypt*

The treatment of repeated early pregnancy loss caused by incompetence of the cervix by means of transvaginal cervical cerclage is well documented, however, the vaginal procedure may be rendered unfeasible or unsuccessful by a cervix that is badly lacerated, very short, or absent. Benson and Durfee, in 1965 were the first to report on transabdominal cervical cerclage, stating, "we have reasoned, if cervical cerclage is not possible vaginally, it should be possible abdominally."

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lage during gestation is indicated but the vaginal approach is impossible, why not accomplish constriction from above?" All agree, however, that whatever approach is used, the operation is better done during pregnancy.

In 1977 we introduced a modified technique reporting our first 10 cases with fetal salvage of 87.9% in otherwise hopeless cases (Mahran, 1978). In 1991 Novy published a review of 25 years experience of published cases (111 cases).

This study includes 250 cases our experience until the end of the year 2001 with an adjusted fetal salvage of 90.7 %.

L43

PRENATAL DIAGNOSIS OF ANEUPLOIDY IN THE FIRST TRIMESTER USING ULTRASOUND AND MATERNAL SERUM BIOCHEMISTRY

Kevin Spencer, United Kingdom

Screening for trisomy 21, often in conjunction with screening for neural tube defects, by the measurement of second trimester maternal serum biochemical markers has become an established part of obstetric practice in many countries.

Although trisomy 21 screening protocols vary from centre to centre the average detection rate in prospective studies has been 64% (range 48-75%) for a false positive rate of about 5%. For the other major chromosomal anomalies, only algorithms for trisomy 18 have been successfully implemented in routine practice.

During the last decade, extensive research has demonstrated that effective screening for chromosomal abnormalities can be achieved by maternal serum free b-hCG and pregnancy associated plasma protein-A (PAPP-A) and the ultrasonographic measurement of fetal nuchal translucency (NT) thickness. In a multicentre study involving about 100,000 pregnancies screening by fetal NT, with measurements performed in a standardised way (defined by the Fetal Medicine Foundation; www.fetalmedicine.com) by suitably trained sonographers, the detection rate for trisomy 21 was 73% for a 5% screen positive rate.

Subsequently, it was estimated that a combination of fetal NT with maternal serum free b-hCG and PAPP-A would increase the detection rate for trisomy 21 to about 90% and also allow the detection of 90% of other chromosomal anomalies, including trisomy 13, trisomy 18, turner's syndrome and triploidy.

The advent of rapid immunoassays, suitable for point-of-care testing, has enabled the development of a multidisciplinary one-stop clinic for assessment of risk for fetal anomalies (OSCAR). Within a one hour visit, the patient can receive pre-test counseling, blood collection and biochemical testing, ultrasound examination and post-test counseling of a combined risk estimate. The first year of prospective intervention screening using this approach has been reported.

In this paper I will summarise results from three years of screening for chromosomal anomalies in our routine NHS OSCAR clinic in which we have screen approximately 12,000 women. The uptake of first trimester screening was 97.5% and the uptake of invasive testing in the increased risk group was 77%. The rate of detection of trisomy 21 was 92% (23 of 25), of trisomy 13 or 18 was 100% (all 15) and of all aneuploides was 96% (49 of 51). The false positive rate was 5.2%. I will also report on the outcome of screening 15,030 pregnancies in a private Fetal Medicine Centre, in which 91.5% (75 of 82) cases of trisomy 21 were identified along with 88.5% (54 of 61) of pregnancies with other chromosomal anomalies. I will also outline results from 3 years of screening in our private self referral OSCAR centre

I will conclude with a discussion of new research initiatives which may enhance the OSCAR process and lead to even higher detection rates (95%) at a much lower false positive rate (2%) for trisomy 21.

L45**IUGR: DEFINITION: LUBCHENCO OR WHAT ?**

Ali Ergün, *Obs & Gyn. Dept. GATA Ankara, Turkey*

The fetal weight below the 10th percentile for gestational age is been accepted as IUGR generally. But there is no international consensus about the definition. Lubchenco and co-workers had been defined the IUGR status in 1963 and published the details from Denver. Lubchenco and other authors have developed or changed the definition by their own examinations in consecutive years. The statements of; Fetal weight below the 3th percentile, below 5th or below 15th percentile, fetal weight below two standard deviations for normal gestational age, head circumference / abdominal circumference ≥ 2 standard deviations, ponderal index (birth weight – gr / height – cm³) below 10th percentile for gestational age, fetal abdominal circumference \geq two standard deviations for gestational age, are the different definitions of IUGR. Small for gestational age (SGA) is a different terminology for that situation which has been used by Lubchenco and Battaglia in 1967 for the first time.

Lubchenco's results from examination on white infants in 1963 has been used for over 30 years as standard datas in USA. Brenner and colleagues used white and black infants delivered in Cleveland and North Carolina in 1976 and Williams used live births in four ethnic groups in California to examine fetal growth curves and found that fetal growth may vary in different ethnic and religious groups from each other. Ott used postnatal assesment of infants born in St Louis in different national groups and found that each of these growth curves were different from each other in different populations. For that reason they were not considered a certain growth curve necessarily representative of the entire population. In USA the fetal growth datas derived from Alexander's nationwide basis examination in 1996 and in Canada Arbuckle's nationwide basis examination in 1993 are being used in these countries.

L46**IUGR- DETECTION AND MANAGEMENT**

Asim Kurjak, *Department of Obstetrics and Gynecology, Medical School University of Zagreb, Sveti Duh Hospital, Zagreb, Croatia*

Intrauterine growth restriction refers to condition in which a fetus is unable to grow to its genetically determined potential size to a degree that may effect the health of the fetus. It is considered that fetus is growth restricted if presents weight below two standard deviations of the expected weight for its gestational age or below the tenth percentile of the weight curve. It is a syndrome that corresponds to different, but interrelated causes. IUGR may be considered as the consequence of a disease process within three elements that sustain and regulate fetal growth - the maternal component, the placenta, or the fetus.

IUGR remains a challenging problem for obstetricians. Identifying this group of fetuses is important in order to have the opportunity to intervene. No single measurement or assessment helps to diagnose or exclude possible IUGR. Therefore, systematic approach, complex strategy and assessment are necessary. To reduce perinatal morbidity and mortality it is necessary to do serial ultrasound scans and investigate fetal well-being. If fetal hypoxia occurs, it should be detected as early as possible. This can be done by Doppler measurements of fetal and uteroplacental blood flow.

Estimation of overall fetal growth, individual body parameters, amniotic fluid volume, and Doppler studies are useful in order to reduce perinatal and maternal morbidity and mortality.

L47

MONITORING THE IUGR FETUS**GP Mandruzzato, GP Maso, YJ Meir**, *Dept Obst. Gynaecol. Istituto per l'Infanzia Burlo Garofolo IRCCS Trieste, Italy*

Intrauterine growth restriction(IUGR) according to the present definition is encountered in about 15 % of the pregnancies. It can be associated to many fetal or adnexal abnormal conditions but the most frequent and dangerous complication is represented by foetal hypoxaemia observable in 30-35 % of the cases. This is the principal cause of fetal demise and /or neonatal morbidity and mortality. As a consequence in order to improve the clinical outcome an objective monitoring of the fetal oxygenation is crucial particularly for assessing the timing of the delivery. In case of hypoxaemia the fetus adapts to this condition by altering the vital functions. Blood flow redistribution first occurs and the cardiac functions are also altered. Doppler technology allows to observe haemodynamic changes and cardiotocography (CTG) depicts, if assisted by computer evaluation, even subtle changes in heart activity particularly the variability of the heart rate.

By investigating with Doppler umbilical arteries and fetal aorta and studying the fetal heart rate variability it is possible to assess with good accuracy the presence or absence of hypoxaemia and the risk to develop acidemia therefore modulating the characteristics of the control and of the management improving the perinatal outcome.

L49

MANAGEMENT OF IUGR FETUSES**Yves Ville**, *Poissy, France*

Background: When decisions about the optimal timing of delivery have to be made in pregnancies complicated by intrauterine growth retardation, the risks of prematurity must be balanced against the risks of prolonged fetal exposure to a hostile intra-uterine environment. Investigation of the time sequence in which alterations of fetal monitoring parameters occur, may assist in the management of these pregnancies.

Methods: 110 singleton fetuses with intrauterine growth retardation were studied longitudinally from 24 weeks of gestation onwards. Short-term variation (STV) of fetal heart rate, pulsatility indices (PI) of arterial and venous Doppler waveforms and amniotic fluid index were assessed at each monitoring session. The study population was divided into two groups: group 1 comprised pregnancies with severely premature fetuses, which were delivered < 32 weeks and group 2 included pregnancies delivered after 32 completed weeks. Logistic regression was used for modeling the probability for abnormality of a variable in correlation to the time interval before delivery. Trends over time were analyzed for all variables by multilevel analysis.

Results: 93 (60 in group 1 and 33 in group 2) fetuses had at least three data sets (median: 4; range: 3-27) and last measurements were taken within 24 hours of delivery or intrauterine death. The percentage and degree of abnormal findings were much higher in group 1 as compared to group 2. Amniotic fluid index and umbilical artery PI were the first parameters to become abnormal and they were followed by the middle cerebral artery, aorta, STV, ductus venosus and inferior vena cava. In group 1, STV and ductus venosus PI showed mirror images of each other in their trend over time. Perinatal mortality was significantly higher if both parameters were abnormal as compared to only one or neither of them being abnormal [13/33 (39%) vs 4/60 (7%); $P = 0.0002$].

Conclusions: Ductus venosus PI and STV of fetal heart rate are important indicators for the optimal timing of delivery before 32 weeks of gestation. Delivery should be considered if one of these parameters becomes persistently abnormal.

Key Words: Intrauterine growth retardation, Fetal monitoring, Fetal heart rate, Fetal Doppler, Amniotic fluid index, Short-term variation, Ductus venosus.

L51

PREGNANCY, LABOUR AND DELIVERY: A JOURNEY TO BE MADE SAFE

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Statistics on maternal mortality show the persistent inequity existing for women of the developing world and remain the indicator with the greatest gap between the western, industrialized world and many countries in Africa, Asia and Latin America, where more than 95% of all deaths occur. The difference between the more and the less fortunate women is abysmal: in the west, death rates fluctuate around 10 per 100'000, whereas in certain parts of Africa they reach 1'500 per 100'000. While, in 1990, there were no deaths attributable to pregnancy, labour or delivery in Iceland, Luxembourg and Malta, in certain areas of Africa the lifetime risk of dying because of pregnancy-related causes, is 1 in 7. The World Bank has reported that, in developing countries, maternal mortality is the most important health problem for women aged 15-44, accounting for 18% of the total burden of disease.

In addition, maternal mortality must be recognized as the tip of an iceberg made of human suffering because of sequelae of maternal morbidity; WHO has estimated that between 15 and 20 million women each year suffer long-term disabilities because of child-bearing and delivering. Although no firm statistics exist, it is guessed that vesico-vaginal fistulae alone affect over 2 million young women of Africa and Asia and that only a fraction of those are repaired.

Maternal mortality and morbidity should not be ranked with other diseases and set aside because of low figures compared to malaria or tuberculosis, because child bearing is not a disease. It is the means through which every species, including the human, propagates. For this reason a global ethical consideration imposes an obligation upon society to avoid those almost totally preventable deaths.

FIGO, the International Federation of Obstetrics and Gynecology, has recently decided to make the journey through pregnancy, labour and delivery a safe one for all women; to this end, it is mobilizing the obstetricians-gynecologists of the world to join the fight against maternal mortality and morbidity, utilizing the skills existing in its member societies in the industrialized world to help those from the most affected countries. We hope that all obstetricians-gynecologists will join this fight.

L53

ORGANISATION OF PERINATAL CARE IN DEVELOPING COUNTRIES

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Everyone acknowledges that maternal and perinatal mortality in developing countries represents an appalling and shameful disrespect for mankind – figures speak for themselves. The question, however, is what has been done about it? The answer is nothing. What can be done? The answer is a lot.

Although perinatal care is a medical problem it is also, and primarily, a social-political affair. The first step is education. To try to deliver medical services to an illiterate population with a great preponderance of women is a pointless exercise. It is then a Public Health matter to provide minimal housing and sanitation without which it is fruitless to even attempt to have any sort of health care; to improve nutritional status of women of reproductive age; to implement a nationwide vaccination schedule for mothers-to-be; to eradicate malaria and other parasitic infections; to instruct women on HIV infection and transmission (whether they will have any choice is a different matter); to identify and train 2-3 midwives per 1000 inhabitants in the communities, providing them with the skills for family planning, antenatal care and advice, applying scientific knowledge to local customs; to advise mothers on simple but very important issues of personal hygiene; to encourage mothers to breastfeed and kangaroo mother care; to create small personalised health centres ("Day Hospitals") with minimal facilities for a normal birth in safety and make them available to the population; to initiate immunisation schemes for babies immediately after birth; to supervise the welfare of mothers and babies by offering postnatal consultations and follow-up clinics for children which can easily be run by trained nursing personnel under the regular supervision of medical officers.

These measures should start at local level and then spread regionally, establishing priorities and goals. Most pregnancies and deliveries are normal and physiological - efforts should be made to keep them that way. Once a risk pregnancy has been identified regional services should then make arrangements to provide advice and care in loco.

With these simple measures some women and many babies will, of course, continue to die - but a lot more will be saved. It can be argued that the organisation of perinatal care in developing countries is a total and unrealistic utopia and this may be true. However, many of the past attempts and failures are not just due to the lack of financial resources but also due to indiscriminate misuse, to permissiveness, to greed and corruption, often with the blessing of the Western World. It should be emphasised that the organisation of perinatal care in developing countries does not include the availability of high technologies which, I am convinced, will make no difference whatsoever to the overall perinatal scene at this stage.

L55

THE ROLE OF PERINATAL CENTER ON NEONATAL SURGERY FOR GIS

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The fetus with an anomaly requires a team of specialists working together. A multidisciplinary team includes perinatologists experienced in fetal diagnosis and intrauterine interventions, geneticists, obstetrical sonologists experienced in the diagnosis of fetal anomalies and a pediatric surgeon and neonatologist who will manage the infant after birth. Fetal therapy is a team effort needing varying amounts of input from all team members.

The options for perinatal management of a fetus with gastrointestinal malformation cover a wide spectrum, depending on the type and the severity of the lesion and on the probability of associated malformations. Most correctable defects are best managed by maternal transport to an appropriate center and delivery near term. Some may benefit from change in timing or mode of delivery to minimize postnatal morbidity and mortality.

Esophageal duodenal or jejunoileal atresias, anorectal malformations, enteric ovarian mesenteric or choledochal cysts, uncomplicated meconium ileus and small intact omphalocele are best corrected after delivery.

Gastrochisis or ruptured omphalocele, intestinal ischemia-necrosis secondary to volvulus, meconium ileus etc. may benefit from induced preterm delivery for early correction ex utero.

Giant omphalocele, large sacrococcygeal teratoma or a cervical cystic hygroma may benefit from cesarean delivery.

Congenital gastrointestinal malformations comprise a relatively small proportion of all fetal anomalies (less than 10%) and prenatal ultrasound is commonly used to detect them. Duodenal and high intestinal obstructions are more readily diagnosed. The ability of prenatal ultrasound to detect esophageal atresia depends on the presence of a trachea esophageal fistula. The diagnosis of pure esophageal atresia is relatively easy. However midgut abnormalities and hindgut abnormalities are difficult to diagnose. The commonly reported sonographic appearance of "echogenic" bowel is usually nonspecific. Those involved in prenatal scanning must be aware of limitations of ultrasonography. It is important to ensure that the level of diagnostic uncertainty is communicated to parents and those responsible for the postnatal care of the infant.

L57

THE ROLE OF PERINATAL CENTER ON NEONATAL SURGERY FOR LUNG

Abdurrahman Önen, *Department of Pediatric Surgery, Dicle University School of Medicine, Diyarbakır, Turkey*

Many congenital defects can now be detected before birth. Fetal anatomy, normal and abnormal, can be accurately delineated by prenatal ultrasound. Prenatal diagnosis and treatment has decreased mortality rate in some life-threatening thoracic malformations, such as congenital diaphragmatic hernia (CDH) and congenital cystic adenomatoid malformation (CCAM) of the lung.

Although less severely affected babies survive with modern postnatal surgical care, including extracorporeal membrane oxygenation support, many neonates with CDH defect die despite all intervention because of underdeveloped (hypoplastic) lungs and associated pulmonary hypertension. These lesions, when first evaluated and treated postnatally, demonstrate a favorable selection bias because the most severely affected fetuses often die in utero or immediately after birth. Salvage of these severely affected babies remains an unsolved problem. It has been shown experimentally that repair before birth, allowing the lungs to grow while the fetus remains on placental support, is physiologically sound and technically feasible. Fetal intervention may be recommended in the fetuses of <32 weeks' gestation who in the poor prognosis group (herniated early in gestation, herniated liver, low lung-to-head ratio, severe mediastinal shift, dilated intrathoracic stomach). Presently, fetal intervention for CDH consists of endoscopic (FETENDO) tracheal occlusion to induce lung growth; the hernia is repaired postnatally.

Although CCAM often presents as a benign pulmonary mass in infancy or childhood, some fetuses with large lesions die in utero or at birth from hydrops or pulmonary hypoplasia, or both. Differences in the survival rate of patients with CCAM are related to the associated hydrops. The potentially fatal outcome with large CCAM lesions may also be related to lung hypoplasia secondary to prolonged compression in utero. Most lesions can be successfully treated after birth, and that some lesions resolve or significantly regress before birth. Less than 10% of all fetuses with CCAMs can be successfully treated by emergency resection of the cystic lobe in utero. For lesions with a single large cyst, percutaneous thoracoamniotic shunting may be successful.

Mild hydrothorax especially when unilateral is relatively benign. The diagnosis of severe pleural effusion, particularly bilateral once, before 32 weeks' gestation may be associated with considerable morbidity and mortality. A small number of these lesions may progress rapidly and cause lung hypoplasia secondary to prolonged compression. In such cases, if fetal needling fails, thoracoamniotic shunting may improve the outcome by preventing lung hypoplasia and hydrops.

L58

FETAL WEIGHT ESTIMATION IN DIABETIC PREGNANCIES: THE REAL FACTS

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Ultrasound plays a crucial role in the management of diabetic pregnancies. Among its aims is the correct estimation of fetal weight, especially when suspicion of either macrosomia or IUGR develops during pregnancy. Although ultrasound can detect in many instances the macrosomic fetus, still a debate exists regarding the use of EFW in preventing adverse outcome. A macrosomic fetus may be defined as one whose absolute weight is of 4000-4500 grams and in the diabetic patient the macrosomia is asymmetric (AC>HC), leading to an increased risk of shoulder dystocia. Therefore, US prediction of fetal weight is extremely important.

The question to be asked is: is US a goof tool for EFW in utero? Several methods for EFW exist: clinical, maternal, sonographic (2D, 3D) and by MRI. Over the last 30 years, numerous formulas for EFW have been suggested using sonographic measurements of fetal organs with consideration of AFI and obesity. The predictive accuracy of these formulas varies from +/- 14.8% to +/- 20.2%, and the accuracy is related to the size of the fetus. It was found by many investigators that formulas incorporating AC alone are

better than those using measurements of BPD. Regardless of the formula used, the accuracy of the EFW decreases with increasing BW. In most recent published articles it was found that only 50-100% (median 62%) of macrosomic fetuses are successfully predicted by sonographic measurements, and 15-81% (median 67%) predicted to be macrosomic are confirmed to be macrosomic at birth.

3D US may help assessing fetal BW offering some superiority to standard 2D techniques, but we have to wait for results of studies in progress attempting to establish its clinical relevance in the practice of obstetrics.

In conclusion, it was found that sonographic estimated are no more accurate than clinical estimates of fetal weight. Regardless of method used – the higher the actual BW, the less accurate the BW prediction. To date, no management algorithm involving selective interventions based on EFW, demonstrated efficacy in reducing the incidence of either shoulder dystocia or brachial plexus injury.

L60

PREVENTION OF MACROSOMIA, CUT-OFF FOR C/S

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For decades Obstetricians have long debated the dilemma of how best to anticipate and manage a mother whose fetus weighs more than 4,000 gr. Macrosomia is defined as an estimated fetal weight or actual birth weight in excess of a threshold value, typically between 4000 and 4500 grams. A common recent definition is a weight of >4500 gr. Using such a definition 1.5% of births will be macrosomic, where if 4000gr is used it will be 9.9%. In contrast to macrosomia which uses an absolute cutoff, large for gestational age (LGA) is defined as actual or estimated weight in excess of a certain value standardized for gestational age. Such results are usually reported as greater than a cut-off percentile (often the 90 th percentile). A fetus at an early gestational age can be estimated to be LGA but not (yet) macrosomic. Because morbidities are related to absolute rather than relative size, macrosomia may be more important to identify than LGA.

All techniques for diagnosing macrosomic fetus has limitations. An accurate diagnosis of macrosomia can be made only weighing the newborn after delivery. Unfortunately, the prenatal diagnosis of fetal macrosomia remains imprecise.

The main risk factors for macrosomia are: prior history of macrosomia (5-10x relative risk); maternal obesity; excessive weight gain during pregnancy; multiparity, gestational age >40 weeks; ethnicity: latinas appear to be at increased risk; maternal birthweight in excess of 4000-5000gr; age <17 years and male fetus. There has been a great effort to prevent and predict fetal macrosomia specifically in diabetic mothers. Induction of labor is also a common approach for prevention of suspected fetal macrosomia and in order to reduce the risk of difficult operative delivery. Compared to expectant management, induction of labor for suspected macrosomia did not reduce the risk of cesarean section (odds ratio 0.85, 95% confidence interval 0.50 to 1.46) or instrumental delivery (odds ratio 0.98, 95% confidence interval 0.48 to 1.98). Perinatal morbidity was similar between groups induction of labor for suspected fetal macrosomia in non-diabetic women does not appear to alter the risk of maternal or neonatal morbidity (Cochrane 2000;2). For non-diabetic mothers, no clinical interventions designed to treat or curb fetal growth when macrosomias suspected have been reported.

With the exception of optimal blood glucose management in pregnancies complicated by diabetes, little is known about the prevention of macrosomia. The association between maternal weight, weight gain during pregnancy and macrosomia has led to a proposal that the optimization of maternal weight before pregnancy and limitation of weight gain during pregnancy would be useful strategies. The impact of maternal weight restrictions or outcomes is unclear.

Macrosomia remains a common complication of pregnancy; its prediction is imperfect, and there are no reliable interventions to improve outcome in uncomplicated pregnancies. Elective cesarean section is seldom a suitable alternative, and elective induction of labor appears to increase rather than decrease the cesarean section rate. Uncertainty surrounds the management of suspected fetal macrosomia in pregnant patients with diabetes concerning elective cesarean section or elective induction versus expectant management.

L63

MANAGEMENT OF NEONATES OF DIABETIC MOTHERS**Manuel RG Carrapato**, *Hospital S Sebastião, Santa Maria da Feira, Portugal*

The potential complications affecting the conceptus of the diabetic woman have been identified for centuries and include a multitude of problems from macrosomia/IUGR, birth asphyxia, RDS, hypoglycaemia, hypocalcaemia, polycythaemia, hyperbilirrubinaemia, heart failure and cardiomyopathy, renal vein thrombosis, etc., and these babies still require a higher rate of admission to neonatal intensive care units posing a considerable medical and financial burden

Respiratory distress syndrome (RDS) due to hyaline membrane disease (HMD) is common in the infant of the diabetic mother (IDM) and is due to either inhibited or decreased lung surfactant. RDS may also be due to transient lung adaptation, a condition often associated with caesarian section and birth asphyxia, both common in diabetic pregnancies. Although the respiratory distress is often managed with O₂ supplementation alone, on occasions it may require assisted ventilation (CPAP/IPPV). In addition hypoglycaemia and polycythaemia may also play a further role in the development of RDS and if the PCV is above 65-70%, with or without hyperviscosity symptoms, it may require a modified, partial, exchange transfusion to enhance respiratory function, to prevent neurological symptoms and the risk of renal vein thrombosis.

Neonatal hypoglycaemia remains controversial. Methodological problems of glucose measurement make for different definitions. Whether or not asymptomatic hypoglycaemia is less damaging than when coupled with symptoms and whether the neonate can utilize any other alternative substrates all add to the problem. Given that the sustained hyperinsulinism will make compensatory mechanisms of mobilising other fuels quite unlikely in these babies, it is recommended that blood levels should be kept in the range of ≥ 2.6 mmol/l regardless of gestational and postnatal age by promoting early enteral feeds and/or intravenous glucose if feeds are not tolerated. Glucagon administration may exceptionally be needed to promote glucose release from glycogen storages as well as to increase hepatic acids oxidation.

The whole spectrum of neonatal problems and complications can primarily be attributed to excessive maternal transferral of glucose to the fetus inducing fetal hyperglycaemia, β cell hyperplasia and sustained fetal hyperinsulinism. Therefore, the management of an IDM should start well in advance, from before conception, throughout pregnancy and delivery, with a tight metabolic control if the immediate neonatal complications are to be avoided. Moreover, in recent years it has been put forward that many adult cardiovascular disorders, as well as type 1 and 2 diabetes, may have a fetal origin in a hostile metabolic environment, placing even greater importance upon the need for good antenatal care.

L64

EFFICIENT, SIMPLE AND INEXPENSIVE PROGRAMME FOR PREVENTION OF VERY EARLY PREMATURITY**Erich Saling**, *Berlin, Germany*

OBJECTIVE: Prevention of prematurity by use of a self-care program for pregnant women consisting of self-observation of warning signs and self-measurement of the vaginal pH.

INTRODUCTION: Prevention of early prematurity (<32 gest.w.) and of very low birthweight infants (<1500 g) is - because of the associated considerably increased risk of mortality and morbidity - one of the most urgent tasks of perinatal medicine. Particularly ascending genital infections are the most important avoidable causes of early prematurity. Consequently our program is concentrated on their prevention.

Ascending genital infection (mostly combined with bacterial vaginosis) starts frequently with a disturbance of the vaginal milieu and then often takes its course asymptotically. Regular screening for signs of such a disturbance using vaginal pH-measurements (and if necessary further diagnostics and therapy) makes possible the detection of an "early marker" to prevent prematurity in an effective and inexpensive way.

Our prematurity-prevention-program was at first intended for physicians. It is based on an anamnestic assessment of prematurity risk, the early detection of warning signs (including regular measurement of the vaginal pH) and, if necessary, the appropriate therapeutic measures. It should start as early as possible after pregnancy has been diagnosed. In cases of disturbance of the vaginal milieu (only pH increase) a therapy with lactobacillus acidophilus preparations is mostly successful. In cases of bacterial vaginosis however local therapy, for example with metronidazol or clindamycin, is undertaken, and in other infections specific treatment.

DESIGN AND METHOD: As an additional measure we developed the self-care program for pregnant women which has been in use since 1993. The pregnant women receive information about risk factors and warning signs of prematurity and recommendations to measure their vaginal pH twice a week (with an indicator strip or indicator coated test-glove). She should see her doctor if the vaginal pH is elevated to more than 4.4 or any other of the warning signs occur. In our own study we had 1120 multiparae and we compared the outcome of the pregnancy with self-care activities with the outcome of the immediate previous pregnancy. Our program was then used in two prospective projects in Erfurt (Capital of Thuringia, Germany) and afterwards in the entire state of Thuringia. In Erfurt half of the practitioners motivated patients to take part in the self-care activities (no. of births: 381). All patients in Erfurt who did not take part served as control group (no. of births: 2341). In Thuringia during the first half of the year 2000 the women served as control (no. of births: 7870) and in the second half of 2000 the doctors in Thuringia encouraged their patients to take part (no. of births: 8406).

RESULTS: In all studies the rate of premature births could be considerably reduced. Most interesting are the results of the children at particularly high risk: In our collective the rate of very low birthweight infants (<1500 g) could be reduced from 7.8% in the immediate previous pregnancy to 1.3%. In Erfurt the rate of very early prematures (< 32+0 gw) amounted to only 0.3% in contrast to 3.3% in the control group. In Thuringia the rate of infants born <32+0 gw was reduced from 1,58 % to 0.99% respectively in infants < 1000g from 0.61% to 0.38%.

CONCLUSION: The self-care program for pregnant women proved to be a very efficient method for the prevention of prematurity and should be recommended to every pregnant woman. In cases where this is not possible, at least the doctors and midwives should measure the vaginal-pH at each prenatal care examination.

L65

THE ROLE OF CERVICAL ULTRASOUND IN THE MANAGEMENT OF PRETERM LABOR.

Yves Ville, Poissy, France

Background : Different strategies have been developed to refine the risk of preterm delivery in asymptomatic patients. Transvaginal sonography (TVS) has been used in this indication to measure and examine the length and shape of the cervix.

TVS of the cervix in clinical studies conducted in asymptomatic women at high risk of preterm delivery: Three ultrasound signs are suggestive of cervical incompetence : Dilatation of the internal os (I.O.); sacculation or prolapse of the membranes into the cervix (with shortening of the functional cervical length), either spontaneously or induced by transfundal pressure; and/or short cervix in the absence of uterine contractions. TVS has clearly demonstrated that cerclage leads to a measurable increase in cervical length which may contribute to the success of this procedure in reducing the risk of preterm delivery. Several non-randomized interventional studies among patients with cervical incompetence have been published. They have defined a new group of patients requiring cerclage when they show progressive cervical modifications on TVS. In other studies, cerclage performed on the basis of cervical changes on TVS did not prevent premature delivery. One prospective randomized trial in asymptomatic high-risk women has shown 2 benefits in cerclage following TVS indications : i) this would generate less prophylactic cerclages in high risk women; and ii) therapeutic cerclage before 27 weeks may reduce the incidence of premature delivery before 34 weeks.

TVS of the cervix in clinical studies among patients at low risk of preterm delivery:

The risk of preterm delivery is inversely correlated with the cervical length. Routine TVS of the cervix

performed between 18 and 22 weeks can help identify patients at risk of preterm delivery. However, given the low prevalence of preterm births, screening would generate either a high false positive rate or a low sensitivity. One non-randomized interventional study among patients with a short cervix on routine ultrasound examination found a lower risk of delivery before 32 weeks in the cerclage group than in the expectant management group. However, the only prospective randomized trial published in a low risk population has shown that cerclage of a modified cervix on TVS in the second trimester did not improve perinatal outcome.

Conclusion: Although the level of evidence is still low, there does appear to be a benefit in performing a cerclage rather than continuing with expectant management in cases with ultrasound appearance of cervical incompetence. Ultrasound can be offered to reduce the indications of cerclage in cases where the situation is uncertain.

Within the general obstetric population, TVS might help selecting asymptomatic but high risk women, however, the benefit associated with cerclage for sonographic indication is not demonstrated.

Key-words : Preterm labor. Preterm delivery. Cervical length. Cervical incompetence. Cerclage. Ultrasound

L66

PREMATURITY AND PREVENTION: IS IT FEASIBLE?

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Preterm birth, especially at gestational ages less than 33 weeks is the major cause of neonatal mortality and late morbidity as well. In the last two decades major improvements have been achieved in the field of management both on the obstetrical and neonatological side. Consequently the mortality rate has been strongly reduced but unfortunately the same success has not been always observed as far as handicaps rate in survivors is concerned. Moreover it has been pointed out that the positive trend observed in the first half of the last decade has stopped and no major progresses have been noticed after 1995. Therefore it is crucial to prevent the premature birth. Unfortunately the rate of babies born at very early gestational ages seems to be increasing mainly due to the increasing number of multiple pregnancies from IVF programs and a better detection of fetal compromise inducing iatrogenic premature birth. Prevention's programs can be applied with success when dealing with one particular possible cause but, due to the multiplicity of aetiological factors, preventive programs directed toward a general population have offered unsatisfactory results. Among the many factors responsible of premature births socio-economic conditions play a principal role and any effort should be directed toward removing the unfavourable situations. From the neonatological point of view the availability of technical resources adequate for assisting these fragile babies is necessary to improve at least the mortality rate. The clinical and ethical implications must be evaluated.

L69

A NEW NON INVASIVE METHOD FOR THE PREDICTION OF FETAL LUNG MATURITY

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We have observed by ultrasound (US) technology recurrent patterns in respiratory behaviour during the study of fetal breathing movements (FBMs) related with pulmonary maturity/immaturity. We aimed to correlate these findings with fetal lung maturity (FLM) tests currently performed in our institution in order to validate the hypothesis that some FBMs patterns may correspond to FLM, independent from gender, weight and gestational age. We enrolled 39 high risk pregnancies in whom a complete US study of FBMs was performed and correlated to FLM tests. All women delivered by cesarean section within one week from amniotic fluid sampling. US-FLM was defined as presence of nasal fluid flow velocity wave-

forms (NFFVW) detected by Doppler flow plus spectral image analysis synchronous to thoracic movements (TM) as evaluated by M-mode. An US guided amniocentesis was performed and FLM testing evaluated by L/S ratio, phosphatidylglycerol presence and lamellar bodies count. Diagnostic accuracy for US-FLM, with RDS as endpoint parameter, was as follows: sensitivity: 100%, specificity: 80%, PPV: 73% and NPV: 100%.

FBMs are known to reflect pulmonary development and maturation and thus are feasibly correlated with the risk of RDS. The synchronous presence of NFFVW and TM correlate accurately with conventional FLM tests.

We suggest that this non-invasive assessment of FLM may be the choice when certain situation arise, such as: amniocentesis refusal, religious concerns, critical anhydramnios, laboratory logistic difficulties or heavy stained amniotic fluid sample.

L71

ANOMALIES IN TWINS

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There is an increased prevalence of congenital anomalies in twins (6-10%). This increase in malformations is due to both constraint deformities and malformations associated with monozygotic (MZ) twins. Classification of anomalies in twins should be as follows:

1. Anomalies unique to multiple conception (Conjoined twins, Acardiac twins, Fetus in-fetu).
2. Anomalies not unique to multiple conception, but that occur more often in twins (Hydrocephalus, CHD – congenital heart defects).
3. Anomalies not unique to twins, but more frequent because of mechanical or vascular factors associated with twinning (Clubfoot, CDH – congenital dislocation of hip).

The rate of concordance for congenital malformations in twins varies from 3/6-18.8%, and this rate is influenced by zygosity and type of anomaly.

Obstetrical problems associated with anomalies in twins include: a. Ultrasound demonstration of a twin pregnancy with discordant anomalies; b. amniocentesis with discordancy for abnormal karyotype. Selective fetocide is the solution for discordant anomalies, however, there risks to the procedure including abortion/death of the second twin and permanent damage to brain and renal tissue of the remaining fetus.

Prenatal diagnosis using ultrasonography for the various types of anomalies in twins, will be presented.

L72

IATROGENIC MULTIPLE PREGNANCY: LESSONS FROM THE DEVELOPED COUNTRIES

Isaac Blickstein, *Kaplan Medical Center, Rehovot, Israel*

Assisted reproduction technologies (ART) expose multiple ova to sperm, either in-vivo (by ovulation induction - OI) or in-vitro (IVF). Iatrogenic – physician-made – multiple pregnancies (IMPs) are a consequence of an attempt to increase pregnancy rates of costly therapies. A distinction is made between unavoidable (most of OI cases) and avoidable (IVF) IMPs. Over the last decade, epidemic dimensions of IMPs have been observed: twins increased 60-80% and higher-order multiples increased 400-600% in most developed countries. The common etiology for this increase in developed countries is advanced maternal age at conception, characterized by reduced fecundity and increased need for ART. ART is a particularly efficient treatment of mechanical infertility – the most common cause of infertility in developing countries.

Irrespective of debates such as therapy vs. prevention and governmental vs. private subsidizing, data show that most developing countries have ART centers. It is therefore important to learn a lesson from the developed countries about the consequences of this mode of conception.

The most serious complication of IMPs is preterm birth of very and extremely low birth weight infants. The expecting mothers of twins and triplets have a 10% chance of delivering at least one infant who weighs <1500 and <1000 g, respectively. Preterm delivery and very and extremely low birth weight correlate with neonatal mortality and with short- and long-term morbidity. For example, it is currently estimated that IMPs alone increase the cerebral palsy rate by 8%. In addition, although most IMPs are polyzygotic, it has been established that ART is associated with a 3- to 10-fold increased incidence of zygotic splitting. The consequences of monozygosity are higher frequencies of malformations, twin-twin transfusion, and complications of monoamniocity. The expecting mother is at 4 to 6 times increased risk to develop serious hypertensive disorders, to experience preterm contractions, to be anemic, to sustain hemorrhage, and to undergo operative interventions.

Because there are no practical methods to significantly reduce these complications, the only potential solution is to control the frequency of IMPs by either avoiding OI or by transferring only a single high-quality embryo in each IVF cycle.

L73

MANAGEMENT OF MULTIPLE PREGNANCY: APPLICATION TO DEVELOPING COUNTRIES

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Multiple pregnancies (MP) are at high risk for adverse perinatal outcome. The following objectives seem to be important in the management of MP and are applicable for developing countries. Keeping in mind these objectives may reduce perinatal and maternal morbidity and mortality.

1. Early diagnosis of MP is essential for a successful follow up. This can be done by clinical and sonographic means.
2. Physicians who are specialized in obstetric care should do pregnancy follow up.
3. Diagnosis of chorionicity by simple sonographic means is of central importance.
4. Care for the mother having a MP should include liberal work leaves and reduced physical activity.
5. Complications occurring more frequently in MP (PET, anemia, PTD, etc.) should be looked for.
6. Frequent assessment of cervical status towards the end of the second trimester may help recognizing impending preterm birth.
7. Transport of high-risk patients to secondary or tertiary centers should be available.
8. Delivery of multiples should be carried out in a tertiary center or where cesarean delivery and blood transfusion are at hand.

L74

CONTRIBUTION OF MULTIPLE PREGNANCIES TO PERINATAL MORTALITY AND MORBIDITY

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The twinning rate has increased from 10 per 1000 pregnancies in the 1970s to 13 per 1000 pregnancies, as a result of infertility treatment. But for every twin pair born, at least 10 singletons are conceived as one of a twin pair (the vanishing twin syndrome). The dizygotic to monozygotic ratio is up to 2.0 in some countries. Monozygotic twinning rate is constant worldwide at 3-5 per 1000 pregnancies. Dizygotic twinning is highest in Africa and lowest in the Far East, with Caucasians and Indians in between (increasing with maternal age and parity). Australian data showed that multiple births account for 10% of perinatal deaths (7% of fetal deaths and 13% of neonatal deaths). Perinatal mortality rate in twins is 4.1 times higher than singletons (stillbirth rate 3.1 times higher and neonatal mortality rate 5.6 times higher). Data from the United Kingdom showed that the infant mortality rate in twins is 6.2 times higher than singletons. Furthermore, the cerebral palsy rate among survivors is 5.5 times higher in twins compared to singletons (difference greatest among term infants). The risk for both mortality and morbidity is increased in monozygotic twins due to (1) the cell division process leading to chromosomal or other ano-

malous lethal aberration in one fetus, (2) twin-twin transfusion syndrome (TTTS), and (3) adverse consequences on the surviving fetus after the fetal death of its co-twin. The incidence of TTTS is 15-30% in monochorionic monozygotic twins. Obstetric risks, survival and neurological outcome associated with interventions for treating TTTS (serial amnioreduction, fetoscopic laser ablation of placental vascular anastomoses, amniotic septostomy, and selective feticide) have been reported, and several randomised controlled trials are in progress.

L75

MULTIFETAL PREGNANCY REDUCTION

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This study was undertaken to evaluate the pregnancy outcome in women who underwent multifetal pregnancy reduction

The data reported here reflect the multifetal pregnancy reduction experience of Hacettepe University Hospital Dept of Ob/Gyn, Division of Perinatology from 1995 through 2002.

Pregnancy records were retrospectively reviewed.

In the absence of any abnormal findings, the fetuses most readily accessible were chosen for reduction, usually those most fundal in location. All multifetal pregnancy reduction procedures were performed between 9 and 14 weeks gestation via intrathoracic injection of potassium chloride under ultrasonographic guidance.

The fetus chosen for reduction was the one with suspicious ultrasonographic findings such as increased nuchal translucency thickness or delayed growth in comparison with others.

122 procedures were performed on 83 pregnancies. Of these pregnancies 53 (63,85%) were triplets, 20 (24,09%) were quadriplets, 6 (7,22%) were quintuplets and 4 (4,81%) were sextuplets.

Mean age of patients was 31,8±4,2, mean gestational age at MFPR was 11,2±1,2, mean starting number was 3,4±0,8 (3-6) and finishing number was 2.

Fetal loss rates according to starting number of fetuses are summarised in Table 1.

	Loss<20 weeks	Loss btw 20-28 weeks	Total loss
3-2 (53)	1 (1,88%)	2 (3,76%)	3 (5,66%)
4-2 (20)	1 (5%)	2 (10%)	3 (15%)
5-2 (6)	1 (16,6%)	2 (33,3%)	3 (50%)
6-2 (4)	1 (25%)	1 (25%)	2 (50%)
Total loss	4 (4,81%)	7 (8,43%)	11 (13,25%)

L76

WEIGHT GAIN IN PREGNANCY: DEFINITIONS AND CONSEQUENCES OF ABNORMAL PATTERNS

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The weight gain of the pregnant women is the end result of many, usually physiologic metabolic changes occurring during pregnancy and is prone to wide individual variation. Strict control of weight gain during pregnancy as practiced worldwide until mid seventies gave way to a more liberal approach following reports revealing a direct relationship with suboptimal weight gain and low birth weight and prematurity. Currently recommendations of weight gain during pregnancy are based on the prepregnancy body mass index. Roughly a gain of less than 10 kg is associated with an abrupt increase in the incidence of low birth weight infants whereas a gain of more than 16 kg is associated with an increase in macrosomia and cesarean section rate. Another late sequelae of excessive weight gain during pregnancy is the retention of the weight gain after delivery, which occurs more frequently among black race. Though the meta-analysis of mostly observational studies done so far suggests optimum maternal and

fetal outcome for pregnancies with weight gains within the recommended limits, the recognition of a real causative relationship and definition of abnormal patterns in temporal and compositional terms still needs large scale, well designed, prospective comparative studies.

L79

IRON SUPPLEMENTATION IN PREGNANCY

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Iron deficiency anemia is the most common nutritional deficiency in the world. Pregnant women are at especially high risk for iron deficiency and iron deficiency anemia. A considerable proportion of pregnant women in both developing and industrialized countries become anemic during pregnancy. The prevalence of anemia in pregnant women has remained unacceptably high worldwide despite the fact that routine iron supplementation during pregnancy has been almost universally recommended to prevent maternal anemia especially in developing countries over the past 30 years. The major problem with iron supplementation during pregnancy is compliance. Despite many studies, the relationship between maternal anemia and adverse pregnancy outcome is unclear. However, there is now sufficient evidence that iron supplements increase hemoglobin and serum ferritin levels during pregnancy and also improves the maternal iron status in the puerperium, even in women who enter pregnancy with adequate iron stores. Recent information also suggests an association between maternal iron status in pregnancy and the iron status of infants postpartum. The necessity of routine iron supplementation during pregnancy has been debated in industrialized countries and routine supplementation is not universally practiced in all these countries. In view of existing data, however, routine iron supplementation during pregnancy seems to be a safe strategy to prevent maternal anemia in developing countries, where traditional diets provide inadequate iron and where malaria and other infections causing increased losses are endemic.

Key words: Iron supplementation, pregnancy, anemia.

L80

VITAMIN SUPPLEMENTATION IN PREGNANCY

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The prescribing of vitamin supplements during pregnancy has become standard in obstetric practice. It is obvious the growth and development of the fetus depend on maternal supply of essential nutrients, e.g. vitamins. In some studies it was reported that vitamin deficits during pregnancy might result in megaloblastosis, neural tube defects, placental and fetal defects, low birth weight and premature delivery. But these subjects are still being studied because the recommendation, which suggest that these supplements improve maternal and fetal outcome, however are often based on studies with serious deficiencies. Moreover, the increase in vitamin requirements during pregnancy usually can be more than adequately provided by dietary sources, assuming appropriate caloric intake and the consumption of animal protein. Much knowledge regarding transport of vitamins across the placenta is derived from animal studies and simple case reports. The animal data are generally obtained using study designs in which vitamins are totally excluded or administered to excess. This type of study design has little potential application to the human experience, even in a severely malnourished mother or a mother who is taking "megadose" vitamins. Human studies of pregnancy complications associated with vitamin deficiencies are generally uncontrolled; frequently they are performed in populations of patients with generally poor nutrition and multiple vitamin and mineral deficiencies. For this reason, it is difficult to extrapolate from these data to populations of pregnant women with well-balanced and nutritionally complete diets. Finally, there is no agreement on what constitutes normal serum levels of vitamins during pregnancy. Normal values for nonpregnant states do not correspond to values in the pregnant state. All maternal serum vitamin levels decrease as pregnancy progresses and hypovitaminemia compared to non-pregnant women seems to be a normal status even in pregnant women who is using vitamins. This is because of the nor-

mal physiologic changes of pregnancy, which result in a decrease in many binding globulins and an increase in plasma volume and also the increased placental vitamin transfer to the fetus from the mother. While it is generally agreed that the scientific evidence for universal vitamin supplementation during pregnancy is ambiguous, when undertaken with reason, it represents a benign therapy with potential for improved outcome. Newer data support more conclusively the therapeutic benefit of some vitamin supplementation to prevent specific diseases. Example is vitamin use for the prevention of neural tube defects. On the other hand, frequently uncontrolled vitamin use, especially of megavitamins, may cause increased risks for pregnancies.

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LOW BIRTHWEIGHT

Edmond McLoughney, *UNICEF Representative in Turkey*

In the developing world, low birthweight stems primarily from the mother's poor health and nutrition. Three factors have most impact: the mother's poor nutritional status before conception, short stature (due mostly to undernutrition and infections during her childhood), and poor nutrition during the pregnancy. Inadequate weight gain during pregnancy is particularly important since it accounts for a large proportion of foetal growth retardation. Moreover, diseases such as diarrhoea and malaria, which are common in many developing countries, can significantly impair foetal growth if the mother becomes infected while pregnant.

According to the most recent estimates for 145 countries, approximately 14% - or 18 million - newborns each year are low birthweight. The majority of these babies are born in developing countries. South Asia has by far the highest levels, with one out of every four babies born with low birthweight. More than half of all low birthweight infants in the world are born in South Asia. Low birthweight is also relatively common in Sub-Saharan Africa, and in the Middle East and North Africa, at least 12% and 11%. By contrast, the percentage of low birthweight in the industrialized countries is only 7%.

Weight at birth reflects the intrauterine experience: It is a good indicator not only of a mother's health and nutritional status but also the newborns' chances for survival, growth, long-term health and psychosocial development.

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CONGENITAL CYTOMEGALOVIRUS INFECTION: HEMATOLOGICAL EVOLUTION IN NEWBORN INFANTS TREATED WITH GANCICLOVIR

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Objective: To verify the hematological evolution of newborns with congenital cytomegalovirus infection treated with Ganciclovir and two type of regimens. **Methods:** From January 1998 to December 2000, we studied 24 neonates with symptomatic congenital cytomegalovirus infection (CMV) that were admitted to the Neonatal Intensive Care Unit (NICU). The newborns were classified into two groups: 14 neonates were given an initial treatment course of 7.5 mg/Kg twice daily for three weeks, then a maintenance course of 10 mg/Kg three times a week for 3 months (Nigro 1994) (group A) and 10 neonates received 7.5 mg/Kg twice daily for three weeks (group B). **Criteria for eligibility** were: signs and symptoms compatible with a congenital infection from whom a specimen of urine and blood could be taken in the first 21 days of life. **Results:** In group A the CMV cultures and CMV DNA of specimens from eleven infants (80%) became sterile. In group B, five infants (50%) had negative CMV culture and CMV DNA results. The clinical features in group A included hepatomegaly (92.8%), splenomegaly (64.2%), anemia (57.1%), jaundice (55%) and petachial rash (55%). Hematological results are shown below: table 1 and table 2.

Table 1 - Group A median values

	Before	During	After
Ganciclovir treatment			
Hemoglobin (g%)	12.5	10.7	12.1
Neutrophils (mm ³)	4258.5	3378	3215*
Platelets (mm ³)	63250	272000	175006

Table 2 - Group B median values

	Before	During	After
Ganciclovir treatment			
Hemoglobin (g%)	11.4	10.6	10.2
Neutrophils (mm ³)	4700	4079	526*
Platelets (mm ³)	72750	130233	18006

Conclusions: The authors concluded that the newborn infants that had been treated with Ganciclovir for a period of 3 months (group A) presented hematological evolution better than the group that was treated for a period of three weeks (group B) and the majority of newborn infants from group A showed CMV culture e CMV DNA negative shortly after the treatment. It is safe to assume that patients submitted to a prolonged treatment with Ganciclovir respond far better than the ones treated over a shorter period.

L83

ETHICAL ASPECTS OF HIV INFECTION AND REPRODUCTION

J.Schenker, Israel

1. HIV infection is a transmissible disease with profound social and psychological implications for the woman, her partner and her family as well as for the health care team and society. Its characteristics include a prolonged latent period, a very high morbidity and mortality and social stigma. In addition, there is as yet no vaccine or curative treatment. Vertical transmission from mother to fetus, or to infant via breast milk may occur. The incidence of this transmission may be reduced by drug therapy.
2. These facts bring sharply into focus the ethical conflict between patient privacy and confidentiality and the need to protect the sexual partners, the health care team and the public from a fatal communicable disease.
3. Because the disease has the potential of reaching epidemic proportions, the overriding consideration of infection control for the whole population comes into tension with the limits of individual rights. As well as aggressive educational programs, other measures that may be considered would be mandatory offering of antenatal screening and confidential disclosure of HIV status to sexual partners and to health care workers at risk of exposure. Information regarding numbers of seropositive individuals should be made available to public health officials.
4. Individuals who are informed of positive serostatus suffer severe psychological sequelae including the sense that they have been given a death sentence. Furthermore discrimination based on seropositivity in regard to housing, jobs and insurance exists. Physicians have a duty, therefore, to provide not only individual counsel and care for patients but also public advocacy to protect them from unfair and punitive actions.
5. While appreciating the importance of confidentiality and patient privacy, the ethical responsibility of individual patients to prevent harm to others still exists. Informed consent must be obtained prior to testing for HIV infection and communication of the resultant information. Every effort should be made through counseling to convince individual patients of their responsibility to others including the importance of allowing such information to be used to protect sexual partners and health care workers. If in spite of every effort, consent is not obtained and the risk of transmission is high in certain circumstances, with consultation, it may be justified to override patient confidentiality.
6. Assisted reproductive technology requires the elective donation of gametes, embryos or surrogate carriage of pregnancy. Because of the elective nature of this technology confidential counseling and testing can be done and inclusion of only those with negative HIV status is possible. To protect the in-

terests of those at risk of unwanted exposure to HIV including the potential child only seronegative individuals should be allowed to participate.

7. Breastfeeding: In societies where safe, affordable alternative methods of infant feeding are available, it may be unethical for an HIV infected mother to breastfeed her child. Where the risks of alternative infant feeding are high, the balance of risk to the infant.

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PERINATAL INFECTION & HOW TO MANAGE IN DEVELOPING COUNTRY

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Perinatal infections especially neonatal bacterial sepsis is the commonest cause of neonatal mortality in India. The fetus may get infected in utero or during birth from the infected birth canal or may develop nosocomial infections any time after birth. Few other factors are responsible like spontaneous premature rupture of membrane if un care & unattended, unnoticed leaking of membranes at any stage of pregnancy, fetal birth in an unhygienic condition, prolonged labour with rupture membranes and compromised and premature birth of a fetus.

Common maternal infections in India:

U.T.I, helminthiasis, monilial and trichomonal vaginosis, Chlamydia infection, recurrent gastroenteritis and amoebiasis, malarial fever, recurrent throat and chest infection, hepatitis A, B, & E, maternal syphilis, TORCH infection and AIDS.

Intrauterine infections:

It may occur due to virus, protozoa, spirochaetes and occasionally by bacteria including mycobacterium tuberculosis. They are popularly known as TORCH infection. Fetal infection occurs either as a result of direct transplantation passage or due to ascending infection.

Factors predisposing neonatal infections:

Low birth weight fetus, contaminated in utero environment, infected birth canal, infection at birth or after birth, congenital anomalies, top feeding, sex of the child, amniocentesis, cordocentesis, amnio infusion, endotracheal intubation, assisted ventilation, umbilical catheterization and exchange transfusion.

Types of infection:

Superficial infections- pyoderma, conjunctivitis, umbilical sepsis and oral thrush.

Infective diarrhoea, septicemia, meningitis, pneumonia, pyelonephritis, sclerema, necrotizing enterocolitis, systemic candidiasis, tetanus neonatorum (rare), congenital tuberculosis(rare), DIC (rare).

How to manage in developing countries:

1. preventive aspect

2. curative aspects

preventive: adolescent health care, awareness regarding STD and menstrual hygiene, pre marital counseling, pre pregnancy counseling, provision of clean drinking water and net, clean surrounding, stop promiscuity, use of condom to be promoted, improve general health, avoid sex discrimination, good ante natal care, requisite investigations-routine & specific, high vaginal swab collection, pap smear of cervix, any fever and infection during pregnancy to be investigated and treated adequately, toxoplasmic in endemic and cat-friendly population, handle cat safely, meat should be eaten after thorough cooking, routine administration of chloroquine to all the mothers.

Curative:

Early recognition and evaluation of extent of disease, biochemical and radiological investigation, prompt administration of effective antimicrobial agent, optimal supportive management, immunotherapy, and human and emotional care.

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HYPERTENSIVE DISORDERS AND DIABETIC PREGNANCY

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Barker et al pioneered the idea that the epidemic of coronary heart disease in Western countries in the 20th century, which paradoxically coincided with improved standards of living and nutrition, originated in fetal life. An association of low birth weight with high risk of later ischemic heart disease and stroke, or impaired glucose tolerance and diabetes mellitus (DM) was found in other studies. Accordingly, low birth weight was also found to be associated with high blood pressure (BP) in childhood and adult life. In another study, Barker et al observed that the effects of impaired fetal growth are modified by subsequent growth. As such, individuals who were small at birth but became overweight in adulthood, were at the highest risk of heart disease and type 2 (non-insulin-dependent) DM, a physiological resistance to insulin action. This finding led to the second part of the hypothesis, the thrifty phenotype. The insulin resistance syndrome is characterized by a cluster of clinically recognizable physiological abnormalities, namely, glucose intolerance, high BP, and unfavorable lipid profile, all alterations induced by the compensatory hyperinsulinemia. It also involves biochemical abnormalities. Insulin resistance now appears to be the epidemiological link between high BP and obesity, both risk factors for developing cardiovascular disease later in life. The insulin resistance can induce hypertension include via mechanisms at the cellular, circulatory, and neurological levels, as well as via possible polygenic factors. Acquired or transient insulin resistance is associated with certain physical conditions, such as pregnancy, obesity, oral contraceptive use, and severe distress. Type 2, or non-insulin-dependent DM, is a state of increased insulin secretion owing to the physiological resistance of insulin action and lower than normal beta cell reserve. Diabetes in pregnancy, or gestational DM (GDM) may precede the clinical expression of type 2 DM in the nonpregnant state, even by several years. Preeclampsia and other hypertensive disorders, which are known to have a higher incidence in GDM, can be linked to increased insulin resistance. To understand the association between insulin resistance and hypertensive disorders in pregnancy, we first need to elucidate the role of insulin resistance in hypertensive disorders in the nonpregnant state. The pathogenesis of essential hypertension is multifactorial, involving complex interactions between endocrine, metabolic, and genetic factors. Obesity, aging, and diabetes can amplify genetic tendencies toward the clinical expression of the disorder.

Gestational Diabetes and Hypertensive Disorders: The study of both GDM and PIH has suffered from the lack of international consensus about classification, definitions, and nomenclature, leading to difficulties in comparing studies that used different diagnostic criteria. Nevertheless, epidemiological and physiological evidence suggests that GDM and PIH are etiologically distinct entities and that GDM is strongly associated with insulin resistance and glucose intolerance, whereas preeclampsia is probably not.

Pregestational diabetes and hypertensive complications

In most cases, pregestational diabetes refers to type 1 DM; the incidence in of type 1 DM in pregnancy ranges from 0.2-0.5%. These women make up a heterogeneous group in terms of duration of diabetes (White's classification), presence of hypertension, and end-organ damage, especially damage to the eye (retinopathy) and kidney (nephropathy). Pregnancy in women with type 1 diabetes is associated with increased risks of preeclampsia, intrauterine growth restriction (IUGR), neonatal morbidity, and perinatal mortality.

L92

EXPECTANT MANAGEMENT IN PREECLAMPSIA

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Outcome of preeclampsia is changed depending on severity. Maternal and perinatal mortality and morbidity in the hospitalized case with mild preeclampsia are extremely low and approaches those of normotensive pregnancies. In contrast in case of severe preeclampsia the maternal and perinatal mortality are very high. The most effective therapy for severe preeclampsia and eclampsia is delivery of the fetus and placenta. There is universal agreement that all such patients should be delivered at or after 32-34 week's gestation. Depending on the situation, delivery has to be taken into account in severe preeclampsia between 28 and 32 weeks' gestation. At this stage, the neonatal mortality is not very high depending on the ability and experience of the neonatal intensive care unit¹⁰. Aggressive management with immediate delivery will result in extremely high neonatal mortality and morbidity. In contrast attempts to prolong pregnancy may result in fetal demise and high maternal morbidity and mortality. There was no structured policy to deliver the cases with severe preeclampsia in the first period of the study (1989-91). In the second part (1991-99), the cases were classified as moderate preeclampsia if there is hypertension (Diastolic pressure more than 100 mm/Hg), proteinuria less than 5gr/L and no any other pathological signs for severity. Moderate preeclampsia were managed conservatively. The outcomes were reviewed retrospectively. There were 252 and 188 cases with hypertension in the two period of the study (years of 1989-91 and 1991-99) respectively. The perinatal mortality are 182‰ and 142‰ retrospectively. Also There were 5 cases of maternal mortality in 252 patients and 1 case in 188 cases in this two groups of patients. It has been achieved better outcome in cases with the classification of moderate preeclampsia by expectant management.

In order to evaluate and properly manage the cases with hypertension in pregnancy we should identify which case is at high risk. In our practice we do classify the cases with hypertension in pregnancy as follow: 1) Chronic hypertension 2) gestational hypertension (appeared in this pregnancy without proteinuria) 3) Mild preeclampsia (Hypertension less than 110 mm/Hg diastolic pressure and proteinuria >0.5 gr/L and <5 gr/L) 4) Moderate preeclampsia (Hypertension equal or more than 110 mm/Hg diastolic pressure and proteinuria less than 5 gr/L, no other clinical/laboratory signs for severity) 5) Severe preeclampsia (Hypertension equal or more than 110 mm/Hg and/or proteinuria more than 5 gr/L, and/or clinical-laboratory sign for severity such as oliguria, scotom, headache, confusion, epigastric pain, retinal haemorrhage, pulmonary oedema, HELLP syndrome) or (a moderate preeclampsia which can not be undercontrolled by antihypertensive therapy) 6) Superimposed preeclampsia 7) Eclampsia.

The cases with moderate preeclampsia, as classified above, can be managed with expectant management. At this stage of pathophysiology blood supply from mother to placenta and fetus can be achieved by increased blood pressure. The pathophysiology is not generally systemic and the organ systems of the mother are not compromised. There is no increased risk for the mother but fetal morbidity and mortality are very high in which fetal well being should be undertaken as a main approach. Another important point is that the expectantly managed pregnant should be hospitalized and followed intensively for the probability of severe form of preeclampsia which can cause severe maternal morbidity and mortality.

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PREECLAMPSIA IN TURKEY

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INTRODUCTION

Preeclampsia is the most common hypertensive disorder of pregnancy, with the incidence of %2-35. The incidence varies in accordance with the criteria used for diagnosis and the population studied mortality. Maternal mortality due to hypertensive disorders is 1.5, 7, 9.1 per 100.000 live birth in Netherlands, in United Kingdom, in United States of America respectively. In developing and underdeveloped countries the rate is high as 420 and 640 per 100.000 live birth in Asia and Africa respectively. In Turkey maternal mortality rate due to preeclampsia varies between reference centers, the range is %0.0- %20.1 among the maternal deaths from all direct and indirect obstetric causes. Although preeclampsia is reported to be the second most common cause of maternal mortality following the postpartum bleeding in Turkey, national data are lacking.

The objective of this study was to collect and analyze the data in Turkey.

MATERIAL AND METHODS

A questionnaire was prepared to collect the data on the type of the preeclampsia, maternal mortality and morbidity rate, gestational age at delivery, the mode of delivery, birth weight of the neonate, previous history of preeclampsia and maternal age. Department of Obstetrics and the data collected from 7 University, 1 HMM and 1 HSII were analyzed.

Data Analysis: Data analysis was performed by using SPSS software. Comparison among groups for characteristics of centers was performed by one-way variance analysis. A p value <0.005 was considered significant.

RESULTS

From 9 centers data about 1316 cases collected. Centers were symbolized with numbers.

Seventy-two percent of the patients' age were between 19-35 years. Mean maternal age was $28,40 \pm 6,9$ years (range between 16-44 year).

The incidence of mild, moderate and severe preeclampsia were %42.6, %27.3 and %29.9 respectively.

Most of the severe cases were from center 9 (Cerrahpaşa, İstanbul). The rate of mild preeclampsia was almost same in all centers.

Out of 1312 cases 484(%36.8) were nulliparous and 733(%56.6) were grandmultiparous.

Nearly five percent of the cases had a previous preeclampsia history. But there was no correlation between the type of the preeclampsia and previous history of preeclampsia.

The high rate of cesarean section in the severe cases is statistically significant ($p < 0.005$).

Cesarean section was the preferred mode of the delivery in the severe cases with the rate of %53 in the study population. Cesarean section indications were due to maternal conditions in % 45.3 of the cases. In mild preeclampsia group both the mean gestational age and neonatal weight were higher than the severe preeclampsia group. This difference was statistically significant $p < 0.005$. The incidence of cases with gestational age between 28-37 week was %78.9.

Different therapeutic regimens were preferred by the centers, but the main therapeutic agents administered in the centers was $MgSO_4$ (i.v). Even in the mild preeclampsia $MgSO_4$ (i.v) was the drug of choice.

DISCUSSION

This is the first study conducted to evaluate the incidence and the national epidemiological data about the preeclampsia in Turkey. Several studies from different Turkish centers with small numbers and various parameters were published both in Turkish and English literature. But the data collected in this study have been showned that there was no uniformity in the registration of the patients. Mean maternal age was $28,40 \pm 6,9$ years. In contrast with the other studies there was no significant difference between maternal age and the severity of preeclampsia.

Although preeclampsia is reported to be the predominantly a disease of primigravidae, in this study the rate of primigravidity was %36.8.

The rate of previous history of preeclampsia was %5. In the literature recurrence rate was reported as %13 and %18 in the primiparous and multiparous respectively. Despite the high multiparity rate(%63.2)

in the study, the recurrence rate was found to be low when compare to the literature. Mode of delivery was cesarean section in %45.3 of the cases due to maternal conditions. Although there is a general consideration as preeclampsia is not an indication for cesarean section, cesarean section still was found to be the most common mode of delivery in preeclampsia in the study. MgSO₄(i.v) administration was the first and the α -methyldopa was the second choice of therapeutic agent in the management of all types of preeclampsia. The rate of MgSO₄(i.v) administration in the mild preeclampsia was %36.15.

CONCLUSION

Demographic characteristics of preeclampsia are different in various geographical region. In order to reach the correct data from different regions, and better understanding of the epidemiology of the disease uniform data collection and analysis must be done.

Preeclampsia is the most but not the first cause of maternal mortality in Turkey.

There must be an agreement about the management in all types of preeclampsia including the mode of delivery.

Epidemiological data from every health care center will provide the information about the real incidence and the demographic characteristics of the disease in Turkey, which can be different from the other geographical parts of the world.

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L96

DOES ROUTINE DOPPLER IMPROVE PERINATAL OUTCOME**Narendra Malhotra, Jaideep Malhotra, Uday Kumar**, *Malhotra Test tube Baby Centre, Agra*

Today it has been well documented that if an obstetric patient receives proper antenatal care the perinatal outcome improves by almost 50%. It has been now shown that if we can noninvasively assess fetal and maternal vascular dynamics in uterus we will be able to predict and treat many problems and further reduce the perinatal mortality.

A literature review of twenty randomised controlled trials of antenatal Doppler was done and the Meta analysis has shown a significant reduction in the number of antenatal admissions, induction of labour, caesarean sections, perinatal mortality & intrapartum distress. We at our centre have reviewed over 1000 cases of Routine antenatal doppler at 24-30 weeks gestation and have come to a conclusion that it is mandatory for all high risk, IUGR, preclampsia cases to have a doppler analysis. We have also concluded that a routine doppler offered at least once in pregnancy will drastically improve perinatal mortality in developing countries.

L102

FETAL ORIGINS OF ADULT DISEASE**Manuel RG Carrapato**, *Hospital S Sebastião, Santa Maria da Feira, Portugal*

Based on epidemiological data from the beginning of the 20th century, David Barker and colleagues have worked to establish a link between intrauterine events and the later development of cardiovascular and related disorders. Their collected observations have become known as the 'Barker Hypothesis' and constitute the basis of 'Programming' - a concept whereby a stimulus or an insult at critical periods of development will determine lifelong effects upon organ structure and/or function.

In order to support this thesis they have elaborated an ingenious mechanism of 'fetal under-nutrition' operating at different stages in pregnancy with consequent differing effects upon body proportions at birth, placental ratios and, eventually, disease patterns later in life. Depending upon the type and timing of fetal nutritional deprivation, intrauterine growth and development would be affected leading to altered ponderal indexes (weight/length³) head circumference, placental size, height and weight at one year of age, differently for boys and girls and, subsequently, hypertension, coronary disease, stroke and insulin-resistant status, all adapted to fit the circumstances. Not surprisingly, such intricate mechanisms and explanations have met with considerable criticisms and controversy remains as to whether it is the intrauterine milieu or postnatal factors 'imprinting' on the genetic background which have a greater influence upon events later on in life.

Nevertheless, in recent years from animal experiments it has been repeatedly shown that by modifying intrauterine conditions the offspring will be differently affected and, quite interestingly, these changes will be further transferred into future generations. In addition, diabetes in pregnancy serves as the ideal model to illustrate how an adverse intrauterine environment will condition fetal and neonatal morbidity and how fetal determinants will impose upon conditions developing from childhood to later in life. Of greater importance is the fact that tight metabolic control will avoid, or greatly reduce the whole spectrum of the diabetic embryofetopathy including the later appearance of adult type 1 and 2 diabetes and their related morbidities.

L103

ORGANIZATION OF NEONATAL CARE SERVICES AND ITS IMPORTANCE**B. Atasay, S. Arsan, Turkey**

Universally 4 million newborns die and another 4 million are stillborn every year. Ninety-eight percent of these neonatal deaths take place in the developing countries. Looking at the state of the world's newborns one can see that, neonatal mortality rate is about 4-5 per thousand in the developed countries while it's nearly 10 fold in the developing world. Causes that underlie these newborn deaths differ according to a country's development rank. According to WHO estimates for the year 2001, newborns die due to infections (32 %), birth asphyxia and trauma (29 %), prematurity (24 %) and congenital anomalies (10 %), mostly in the developing countries.

While organizing neonatal care services in a country or a region, priorities should be decided on looking at neonatal and perinatal mortality rates and causes of neonatal and perinatal deaths. Causes of neonatal and perinatal deaths in the developing countries have been documented and reflect some common underlying problems in the health systems.

Starting points in organization of neonatal health care services seems to be improving women's health and social state, family planning practices, antenatal care and safe delivery conditions. Neonatal resuscitation, essential newborn care and sick newborn care practices should also be improved. Communities and health professionals should be advocates of newborn health in order to seek and deliver newborn health care. Existing health systems should be re-organized to host regionalized perinatal care.

L105

POSTRESUSCITATIVE MANAGEMENT OF THE ASPHYXIATED TERM/PRETERM INFANT**Neslihan Tekin, Osmangazi University, Eskişehir, Turkey**

Following severe perinatal asphyxia the newborn can be affected by multi-organ dysfunction in spite of successful delivery room resuscitation. Central nervous system was the most frequently involved, followed by the kidney, lung, heart, and intestine. Hypotension and heart failure are two of the most serious complications of severe asphyxia as they are associated with secondary ischaemic injury to the CNS, myocardium (endocardial ischemia), kidneys (renal failure) and intestine (NEC). Pulmonary complications with an asphyxiated infant ranges from minimal oxygen requirement to persistent hypertension of the newborn and massive pulmonary hemorrhage. Renal involvement varies from oliguria to azotemia depending on the initial insult. Asphyxia causes activation and consumption of coagulation factors and reduces platelet production and compromise platelet function. While other organs may recover, the consequence of brain damage is long-term abnormal neurologic sequelae.

Postresuscitative management of the asphyxiated infant can be classified in two steps. The first step is the general supportive care in which clinical management is directed at maintenance of adequate ventilation, cerebrovascular perfusion and adequate blood glucose levels. For this purpose the infant's cardiopulmonary status should be monitored and signs of multiorgan system dysfunction sought and treated where appropriate. The second step is neuroprotective therapy, which should be planned according to the phase of postasphyxial injury. After the hypoxic insult, phases of recovery are characterized by the alterations in cerebral blood flow, EEG intensity, and cortical impedance that occur in the first 5 days after perinatal asphyxia. They have been referred as: reperfusion phase (+0-4 hours), latent phase (0-8 hours), secondary energy failure phase (8-72 hours), late phase >72 hours. Current therapy that can be applied in clinical practice includes osmotic agents, barbiturates, allopurinol, ascorbic acid, deferoxamine, ibuprofen and magnesium. Future therapies will be combination of modalities including rescue hypothermia and various pharmacological approaches such as monosialogangliosides, growth factors, gene therapy with anti-apoptotic agents or calcium binding proteins that are appropriate for the phase and mechanism of the postasphyxial injury.

L106**EXOGENOUS SURFACTANT IN THE NEONATE SUGGESTIONS FOR THE USE IN THE DEVELOPING COUNTRIES****Giulio Bevilacqua**, *University of Parma, Italy*

In spite of the improvement of perinatal assistance, the frequency of the Respiratory Distress Syndrome of preterm babies (NRDS) remains very high.

The estimated incidence of NRDS in babies with a birth weight 500- 750. (very low birth weight -VLBW) reaches the value of 86%.

In the last ten years survival of babies with NRDS, significantly improved with introduction of new techniques of prevention and of treatment of the disease, mainly with the diffusion of the use of the exogenous surfactant.

The exogenous surfactant administration in VLBW, either as prophylaxis or as rescue treatment of NRDS, is effective in reducing mortality, morbidity and need for respiratory supports.

No adverse effects related to surfactant administration have been reported.

However there is great variability in the use of the surfactant treatment, within and between countries in Europe and out of Europe, related not only to a different medical strategies and organisations, but also to the costs. The surfactant preparations currently on market are relatively expensive and their supply relatively limited. We must remember, also, that to achieve good results, the supplementary surfactant must be given by qualified physicians trained in neonatal intensive care and in management of mechanical ventilation of preterm babies.

Supplementary surfactant should be used routinely, only, in neonatal intensive care units having the necessary facilities for mechanical ventilation and resuscitation of VLBW infants.

For all these reasons, in the developing countries it is necessary to identify strategies compatible with the health organisation of the country considered.

At the moment, any scheme for prevention and treatment of NRDS, should include the prenatal prophylaxis, with a single course of corticosteroids, given to the mothers at risk of preterm delivery before 34-wk. gestational age (ge). Repeated courses of corticosteroids must be used cautiously, because they may have lasting negative side effects on foetal growth and neurological development, whereas clear benefits for the foetus have not yet been shown.

After birth exogenous surfactant might be use as prophylaxis or as rescue treatment.

In new-borns with ge, 26-28 wk. and with evidence of high risk for NRDS (male sex, perinatal asphyxia, need of intubation at birth, incomplete course of antenatal corticosteroids, caesarean section, multiple pregnancies, maternal diabetes) the early administration, in the first minutes of life, of a single low dose of surfactant improves the outcomes and results more effective then delayed treatment and therefore it is recommended. In the spontaneously breathing babies, continuous positive airway pressure (CPAP), after a brief intubation, might be useful to avoid mechanical ventilation.

In the new-borns, with gestational age > 28 weeks with NRDS, treatment may be delayed, to reduce the number of unnecessary administrations and reserved to the babies that need intermittent positive pressure ventilation (IPPV). In that cases the full dosage of the available surfactant is mandatory.

In extremely low gestational age new-borns (<26 wk.) the surfactant administration must be evaluated case by case and discussed with the parents because of poor outcomes of these babies.

L107**GLOBAL, REGIONAL AND NATIONAL PERINATAL AND NEONATAL MORTALITY****Victor Y.H. Yu**, *Department of Paediatrics and Ritchie Centre for Baby Health Research, Monash University, Melbourne, Australia*

Globally, the perinatal mortality rate (PMR) is 53/1000 (7.5 million annual perinatal deaths) and the neonatal mortality rate (NMR) is 36/1000 (5.1 million annual neonatal deaths). Of the 141 million annual livebirths, 127 million (90%) are born in developing countries, which, compared to developed countries,

have a higher PMR (57/1000 vs 11/1000, 5.2x) and NMR (39/1000 vs 7/1000, 5.6x). Five million annual neonatal deaths (98% of the world's total) occur in developing countries. Regional annual livebirths figures are: Asia-Oceania 76 million, Africa 31 million, Central and South America 12 million, Europe 8 million, and North America 4 million. Regional annual neonatal death figures are: Asia-Oceania 3.3 million, Africa 1.3 million, Central and South America 0.3 million, Europe 0.07 million, North America 0.03 million. The Asia-Oceania region has a PMR of 53/1000 and a NMR of 41/1000. It has half of the world's livebirths and two-thirds of the world's neonatal deaths. The PMR and NMR have often been used as an indicator of the standard of a country's social, educational and healthcare systems. Strategies, which address inequalities both within a country and between countries, are necessary if there is going to be further improvement in global perinatal health.

L108

SPECIAL RESUSCITATION CIRCUMSTANCES

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Meconium Aspiration

If the amniotic fluid contains meconium and the infant has absent or depressed respirations and decreased muscle tone direct laryngoscopy and intubation / suction of the trachea should be done. It has been shown that intubation and suctioning of the apparently vigorous meconium stained infant does not result in a decreased incidence of meconium aspiration syndrome or other respiratory disorders. Complication of intubation are infrequent and short lived.

Pneumothorax

A pneumothorax is a potential problem whenever positive pressure ventilation is used. A pneumothorax should be suspected in any infant who is improving during a resuscitative effort and then suddenly decompensates. Unilaterally decreased breath sounds, distant heart sounds, shift in the point of maximal cardiac impulse, and persistent cyanosis are the signs of pneumothorax. When immediate intervention in the delivery room is needed, it may necessary to insert a needle into the thorax before radiographic confirmation.

Diaphragmatic hernia

Immediate tracheal intubation should be performed to minimize air entry into the gastrointestinal tract. A nasogastric tube should be placed to allow intermittent suction to decompress the small bowel and minimize lung compression.

Erythroblastosis/Hydrops

If the infant is extremely anemic, a coordinated team should be prepared to perform a partial exchange transfusion. Initial lung expansion may be a problem in pleural effusion and ascites. After an airway has been secured, thoracentesis and/or paracentesis may improve ventilation and oxygenation.

L109

RESUSCITATION OF THE NEWBORN WITH ROOM AIR OR OXYGEN?

Ola Didrik Saugstad, *Department of Pediatric Research, The National Hospital, University of Oslo, Norway*

Three new sets of guidelines for resuscitation of the newly born infant have been published the last years. One of these recommends the use of ambient air for basic resuscitation of the newly born and two that 100% oxygen is used.

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The International Liaison Committee on Resuscitation (ILCOR) and American Heart

have a higher PMR (57/1000 vs 11/1000, 5.2x) and NMR (39/1000 vs 7/1000, 5.6x). Five million annual neonatal deaths (98% of the world's total) occur in developing countries. Regional annual livebirths figures are: Asia-Oceania 76 million, Africa 31 million, Central and South America 12 million, Europe 8 million, and North America 4 million. Regional annual neonatal death figures are: Asia-Oceania 3.3 million, Africa 1.3 million, Central and South America 0.3 million, Europe 0.07 million, North America 0.03 million. The Asia-Oceania region has a PMR of 53/1000 and a NMR of 41/1000. It has half of the world's livebirths and two-thirds of the world's neonatal deaths. The PMR and NMR have often been used as an indicator of the standard of a country's social, educational and healthcare systems. Strategies, which address inequalities both within a country and between countries, are necessary if there is going to be further improvement in global perinatal health.

L108

SPECIAL RESUSCITATION CIRCUMSTANCES

İlknur Kılıç, *Division of Neonatology Pamukkale University, Denizli, Turkey*

Meconium Aspiration

If the amniotic fluid contains meconium and the infant has absent or depressed respirations and decreased muscle tone direct laryngoscopy and intubation / suction of the trachea should be done. It has been shown that intubation and suctioning of the apparently vigorous meconium stained infant does not result in a decreased incidence of meconium aspiration syndrome or other respiratory disorders. Complication of intubation are infrequent and short lived.

Pneumothorax

A pneumothorax is a potential problem whenever positive pressure ventilation is used. A pneumothorax should be suspected in any infant who is improving during a resuscitative effort and then suddenly decompensates. Unilaterally decreased breath sounds, distant heart sounds, shift in the point of maximal cardiac impulse, and persistent cyanosis are the signs of pneumothorax. When immediate intervention in the delivery room is needed, it may necessary to insert a needle into the thorax before radiographic confirmation.

Diaphragmatic hernia

Immediate tracheal intubation should be performed to minimize air entry into the gastrointestinal tract. A nasogastric tube should be placed to allow intermittent suction to decompress the small bowel and minimize lung compression.

Erythroblastosis/Hydrops

If the infant is extremely anemic, a coordinated team should be prepared to perform a partial exchange transfusion. Initial lung expansion may be a problem in pleural effusion and ascites. After an airway has been secured, thoracentesis and/or paracentesis may improve ventilation and oxygenation.

L109

RESUSCITATION OF THE NEWBORN WITH ROOM AIR OR OXYGEN?

Ola Didrik Saugstad, *Department of Pediatric Research, The National Hospital, University of Oslo, Norway*

Three new sets of guidelines for resuscitation of the newly born infant have been published the last years. One of these recommends the use of ambient air for basic resuscitation of the newly born and two that 100% oxygen is used.

In 1998 WHO stated that "Additional oxygen is not necessary for basic resuscitation". But the WHO guidelines also added: "However, when the newborn's colour does not improve despite effective ventilation, oxygen should be given if available". Thus the WHO statement acknowledges recent animal and clinical data and also recognizes that oxygen is both expensive and not readily available throughout many places in the world.

The International Liaison Committee on Resuscitation (ILCOR) and American Heart

Association/American Academy of Pediatrics (AHA/AAP) in their new guidelines both advocate the use of 100% O₂ for newborn resuscitation. The International Guidelines 2000 state: "100% oxygen has been used traditionally for rapid reversal of hypoxia. Although biochemical and preliminary clinical evidence suggest that lower inspired oxygen concentrations may be useful in some settings, data is insufficient to justify a change from the recommendation that 100% oxygen be used if assisted ventilation is required. If supplemental oxygen is unavailable and positive ventilation is required, use room air". The oxygen source is recommended to be at least 5 L/ min, and the oxygen should be held close to the face to maximize the inhaled concentration. And it is underlined that self-inflating bags often will not passively deliver sufficient oxygen flow. Free flow oxygen could be delivered through a facemask and a flow-inflating bag, an oxygen mask, or a hand cupped around oxygen tubing. The goal of supplemental oxygen administration should be normoxia. The major change of the points dealing with oxygen since the 1992 recommendations is that the new guidelines explicitly state that room air should be used if oxygen is not available. This is an important statement since in some places resuscitation seems occasionally not to be initiated at all if supplemental oxygen is not present. Furthermore, the sentences in the 1992 AHA recommendations indicating that brief exposure to hyperoxia during resuscitation is not harmful, have been removed.

L110

NEONATAL ETHICAL PROBLEMS IN DEVELOPED AND DEVELOPING COUNTRIES

Victor YH Yu, *Department of Paediatrics, Monash University, Monash Medical Centre, Melbourne, Australia*

Among the many neonatal ethical problems, the one which neonatologists are faced with on a regular basis involves the issue of selective non-treatment, that is, clinical decisions made after the birth of a live-born infant to either withhold or withdraw treatment in certain clinical situations. If doctors believe that the infant has little prospect for intact survival, their management would be suboptimal and they create a self-fulfilling prophecy. A policy establishing criteria for initiating life-sustaining treatment must be developed with proper consideration of the cultural, social and economic factors operating in the developed or developing country. There are infants whose subsequent clinical course after initiation of neonatal intensive care will indicate that further curative efforts are futile or lack compensating benefit. A policy establishing criteria for withdrawing life-sustaining treatment must also be developed, to allow the appropriate use of palliative care in these instances. The clinical situations in which selective non-treatment is taking place in the neonatal intensive care unit are: (1) when death is considered to be inevitable whatever treatment is provided, (2) even when death is not inevitable, there is a significantly high risk of severe physical and mental disability should the infant survive, and (3) when survival with moderate disability is possible, but the infant is likely to experience ongoing pain and suffering, repeated hospitalisation and invasive treatment, and early death in childhood. The principles underlining clinical practice should be the same for developed and developing countries, but there must be less medical paternalism and more informed parental involvement in developing countries. Compared to developed countries, communications between the medical and nursing staff and the parents are less adequate in developing countries.

L111

NEONATAL INTENSIVE CARE NURSING

Zerrin Yıldırım, *Marmara University, Istanbul, Turkey*

Even the specially formed NICUs improve the prognosis of the premature and diseased newborns, they are foreign environments that are full of stimulators for the premature and diseased newborns that have been separated their physiological environments earlier. Technological instruments and interventions performed in this environment make the adaptation efforts of the infant to his/her new life hard, and dan-

ken his/her life with chaos and suffer. The long –term effects of such situation cause the infant to appear motor,sensorial and other developmental problems. "Individualized Developmental Care" which involves communication with the infant,assesment of the infant and plannig the care of the infant forms the key of the success in NICU.The approach of Individualized Developmental Care needs the continual and harmonious working of not only the nurses but also all the members of the medical team. Our basic goal in NICU is to provide the behavioral and developmental organization of newborn and gradually make the care given less required,and to transfer such task to the owners having the rigts mostly that is to say to the parents.

L113

MATERNAL MORTALITY IN MULTIPLE PREGNANCY

Isaac Blickstein, *Kaplan Medical Center, Rehovot, Israel*

The combination of physiological changes and perinatal pathologies certainly increase the maternal risk for serious morbidity associated with multiple pregnancies. A recent review cited mortality cases attributed to beta-mimetic tocolysis, 1:6 deaths from eclampsia, and delivery-related mortality attributed to blood loss.

In France, the maternal mortality was 10.2 vs. 4.4. per 100,000 live birth in multiples vs. singletons, and for the entire Europe, the corresponding figures were 14.9 vs. 5.2.

In a database from Latin America the adjusted relative risks for pre-eclamptic toxemia, eclampsia, pre-term labor, anemia, post-partum hemorrhage, and endometritis were 2.2, 3, 3.9, 1.8, 2, and 1.8, respectively. These risks were mainly associated with nulliparity, but the risk of death for the multipara was twice in a multiple pregnancy than in a singleton gestation.

Admittedly, the true incidence of maternal mortality in multiple pregnancies is unknown, merely because death is registered by the prime cause (e.g., eclampsia) but not attributed to what increased the risk for eclampsia (i.e., a twin pregnancy). With the increasing numbers of multiple births, it is important to register all mortalities by plurality in order to realize the risk of maternal death in multiple pregnancies.

L115

MATERNAL MORTALITY IN TURKEY

Mehmet Ali Biliker, *Ministry of Health, Maternal-Child Health and Family Planning GD, Turkey*

All maternal deaths are considered as a social injustice. For this reason, governments should take necessary measures to make motherhood safer. In order to prevent premature deaths of women, causes of deaths must be known. In Turkey, the latest survey conducted in hospitals in selected 53 provinces. This hospital-based survey revealed that maternal mortalities make up 5% of all women deaths and maternal mortality is 49.2 per hundred thousand live births. Factors which are related with the status of women including, education, socio-economic conditions, early marriage age, and fertility level have influence maternal mortality level in the community. Accessibility and availability of maternal health care services are also very important factor to reduce maternal mortality.

L116

MATERNAL MORTALITY IN DEVELOPING COUNTRIES**Murat Yayla**, *Dicle University Medical School, Diyarbakir, Turkey*

Of all health statistics mentioned by World Health Organization (WHO), maternal mortality is the unique one showing the largest discrepancy between developed and developing countries. Approximately 90% of maternal deaths (more than 0.5 million) occur in developing countries each year.

During the last century, almost all countries have accepted antenatal care principles. However, insufficiency of the resources and lack of women's compliance were the main handicaps in developing countries compelling these countries to apply various standard programs. Unfortunately, these programs are not effective enough in preventing and treating maternal mortality. Both fixing the number (quantity) of antenatal visits and static approach affect the "quality" of antenatal care.

Bleeding, chronic anemia, hypertensive disorders, obstructed labor and infections are the main affecting factors in maternal mortality. The majority of these factors are preventable. It is important to suspect any of these factors and to perform prompt interventions during antenatal care, and immediately after delivery. The way reaching this solution is to realize evidence-based approach. Nowadays, WHO is developing an intervention package, called the "Integrated Management of Pregnancy and Childbirth" (IMPAC), to summarize all evidence-based activities with the aim of reducing maternal and perinatal mortality and morbidity.

Antenatal care is a concept extending from pre pregnancy to postpartum, leading to effective emergency care for unpredictable and predictable complications during pregnancy and childbirth. Worldwide policies are not always available for each country, coercing national policies. There is still need to prospective randomized trials to clarify this concept and relevant policies.

L118

NEW PLACENTAL VASOACTIVE FACTORS AND GESTATIONAL DISEASES**Cosmi E.V.**, *Institute of Gynecology, Perinatology and Child Health, University of Rome "La Sapienza", Italy*

Recently, among the several hormones and peptides produced by the placental tissues, the role of newly discovered vasoactive factors has been investigated for their involvement in the pathophysiology of gestational diseases. Most of them, besides the effects on vascular system are also implicated in the regulation of other functions such as cellular growth and differentiation, inflammation, smooth muscle cells activity. In this light, we have investigated the potential role of endothelin-1 (ET-1), nitric oxide (NO), and adrenomedullin (AM) in some gestational diseases. ET-1, NO and AM were measured by means of a specific RIA in maternal and fetal plasma and in amniotic fluid and, using an immunohistochemical method, in placental tissues in pregnancy complicated by preeclampsia, IUGR and gestational diabetes. We found that all these vasoactive factors are produced by the placental tissues in large amount and are secreted in the fetal compartment where they participate in the regulation of feto-placental circulation. In pregnancy complicated by preeclampsia, IUGR and gestational diabetes, conditions associated with impairment of utero-placental and fetal hemodynamics, ET-1, NO and AM secretion is significantly affected. In particular, NO and AM increase significantly in the fetal plasma in response to fetal hypoxia and correlate with the redistribution of fetal cardiac output in response to reduced utero-placental perfusion.

L120

PERINATAL MORTALITY RATE-HOSPITAL BASED STUDY**Lütfü Önderoğlu**, *Hacettepe University, Ankara, Turkey*

In 1998 the Perinatal Mortality Study Group was established at Hacettepe University to determine the causes of perinatal mortality and to calculate perinatal mortality rates at this institution. The study group was constituted by the Department of Pediatrics, Units of Pediatric Pathology, Pediatric Cardiology, Pediatric Surgery, Genetics and Neonatology and the Department of Obstetrics and Gynecology, Perinatology Unit. At the end of every month, each case was discussed among the group including the autopsy results if available, and the cause of mortality was determined according to the Extended Wigglesworth Classification, by the consensus of the group members. Perinatal mortality rates at Hacettepe University were prospectively calculated. Perinatal mortality figures of two periods were compared (1998-1999 and 2000-2001).

Total number of births over 500 grams was 3173 in the year period 1998-1999 and 3013 in the year period 2000-2001. Perinatal mortality rate was 34,35/1000 in the period from 1/1/1998 to 31/12/1999 and 16,92 /1000 in the period from 1/1/2000 to 31/12/2001.

Among perinatal deaths, 61,46 % were intrauterine deaths and 38,54 % were early neonatal deaths in the period 1998-1999. In the period 2000-2001, 58,83 % were intrauterine deaths and 40 % were early neonatal deaths.

In the period 1998-1999, 62,7 % of the deaths were < 1500 grams, and 46,7 % were between 500-1000 grams. The most common cause of death during this period was prematurity (Extended Wigglesworth Group III) (29,3%), followed by lethal congenital malformations (Group II) (26,6%) and macerated intrauterine deaths (Group I) (22,9%). Autopsy was available in 70,7% of the cases and micronecropsy was available in 12 %. Genetic studies were performed in 24 % of the cases and termination of pregnancy was carried out for fetal anomalies in 10,7 % of the cases.

In the period 2000-2001 72,54 % of the cases were < 1500 grams and 47,1 % of the cases were between 500-1000 grams. The most common cause of death during this period was lethal congenital malformations (Group II) (31,4%), followed by macerated intrauterine deaths (Group I) (21,5%) and specific causes (Group V) (21,5%). Autopsy was available in 70,17 % of the cases and micronecropsy was obtained in 10,52 % of the cases. Twenty percent of the cases underwent genetic studies during pregnancy and termination of pregnancy was carried out in 19,29% of the cases.

Perinatal mortality rate has decreased at Hacettepe University during the last 2 years. Most common cause of mortality has changed from prematurity to lethal congenital malformations in this period. Since our institution is a referral center, around 60% of the mortality is due to intrauterine deaths and around 30% of the deaths are due to lethal congenital malformations.

L121

BREECH DELIVERIES AND C/S**Zoltan Papp**, *I. Department of Obstetrics and Gynecology Semmelweis University, Budapest*

Four to five percent of singleton pregnancies at term are complicated by breech presentation. Complications occur in about 60% of breech deliveries. Fetuses presented by the breech are at increased risk of birth injuries and hypoxia during vaginal delivery. The management of breech presentation is in a state of flux at the present time. Use of cesarean section is increasing. External version -even with the use of tocolytic agents for relaxation- is dangerous because its possible complications. In our practice vaginal delivery is preferred if the following criteria are completed: frank breech only, estimated fetal weight of 2500-3500g, adequate pelvimetry without hyperextended head, normal progression of labor, no evidence of fetal hypoxia with continuous fetal monitoring, and the weight of the mother is under 90 kg. Vaginal frank breech delivery at term may be just as safe as cesarean section when careful selection criteria are used. If these criteria are not fulfilled, or the fetal monitoring cannot be performed, cesarean section is advisable. The increasing rate of cesarean section significantly lowered the perinatal morbidity and

mortality in developed countries in the past decades. In developing countries the operative background for cesarean section is not widely available. In these countries the attending personnel need to be trained to perform breech deliveries to safely deliver these fetuses.

L123

POSTPARTUM HEMORRHAGE

Zoltan Papp, *Department of Obstetrics and Gynecology Semmelweis University of Medicine, Budapest*

Postpartum hemorrhage is defined as excessive blood loss following delivery of the fetus. Bleeding might occur before, during or after the delivery of the placenta. As the consequence of increased blood volume in pregnancy and that of the hemodynamic changes occurring postpartum most patients can tolerate blood losses up to 1500 ml., provided that they are in good health and were not anemic before pregnancy. The diagnosis of postpartum hemorrhage is usually imprecise because for the wide range of blood loss following delivery encountered normally and the inaccuracy of the estimation of the amount of lost blood. The incidence of postpartum hemorrhage is approximately 5-10 % after vaginal delivery.

Postpartum hemorrhage is one of the leading causes of maternal mortality worldwide. Major causes of early postpartum hemorrhage are uterine atony, obstetric trauma, retained placental tissue, uterine inversion and coagulation defects. Causes of delayed postpartum bleeding include: uterine subinvolution, retained placental tissue, endometritis or placental polyp. As caesarean section rate increases in the well-developed areas of the world, dehiscence of the previous uterine scar may be an increasing cause of postpartum bleeding.

When the risk factors of postpartum hemorrhage are suspected or present, preventive measures should be instituted. Correction of anemia before delivery is a basic preventive measure to be instituted. Blood should be readily available in risk patients, like those with known placenta previa. Predelivery replacement of coagulation factors in patients with bleeding disorders should be managed. Prophylactic and proper use of oxytocic agents during and especially after delivery might decrease the risk of atony in the postpartum period.

Two basic principles govern the treatment of postpartum hemorrhage: the bleeding must be arrested and the blood volume must be restored as soon as possible. Successful management with a favorable outcome can be achieved only by correct identification of the cause of the bleeding and a very rapid decision-making at the same time. Wasting time might result in maternal death. Decrease in mortality rates can only be achieved in places where all the vital criteria of controlling serious postpartum hemorrhage meet, and a real teamwork is established.

L124

PERINATAL SCENARIO IN INDIA

Nirmala Saxena, *Dept of OBS/ Gyn., Nalanda Medical College Hospital Patna India, President Indian Society of Perinatology and Reproductive Biology, India*

New born constitutes the foundation of life. Healthy and sturdy baby are likely to evolve as physically and mentally strong adults. Healthy mother produce healthy baby. Female child must be accorded special status and attention. Current population of India is one billion plus.

National Literacy rate is 52% of Female literacy rate is 37.7%. Current perinatal scene in India are indeed dismal. Some Antenatal care of poor quality is received by 60 % of pregnant women. Only 24.5% of deliveries occur at health post and Hospitals. Among domiciliary births, only 24.5% of deliveries are attended by trained traditional birth attendants. The current Neonatal and Perinatal mortality rate is 47 and 44 per thousand live births.

There is an excellent pyramid of MCH Services through the network of Sub Centers, Primary Health Centers District and States Hospitals for providing Health care services in rural area. 75% Population still live in villages.

The provision of health is in domain of individual states but Federal/Central Govt. provide the policy of guidelines and resources for any national programmes. As opposed to recommended allocation of 5 % and 15 % of Gross National Product for health and education respectively by W.H.O., India spares only 2.1 % of GNP for health and education. Only 15 % of health budget is spent on MCH.

Due to integrated child survival services scheme the infant mortality rate has come down to 74/ 1000. All India Post Partum programme was introduced three decade ago for providing population control services and immunization. But no inputs have been provided to create level II new born care facility.

Govt. of India launch the Child Survival and Safe Motherhood Programme with the help of World Bank and UNICEF in 1992. child survival component comprises of universal immunization, VitaminA PROPHY-LAXIS, and rational case management if acute Diarrohea and acute respiratory infection and essential new born care, Neonatal resuscitation and care of sick and low birth weight babies in community.

In 1997 the CSSM PROGRAMME has been replaced by the integrated RCH PROGRAMME. The concept of neonatology first started in early sixties and since then there has been a gradual increase in the number of such units in the country.

In a survey in 1987 only four hospitals was equipped with level II neonatal units.

At present 30 Neonatal nurseries fulfill the requirement of level II units. Intensive care services and Ventilation are provided by fifteen of them. Most of them are located at Teaching hospitals in metropolitan cities. National Neonatal Forum was formed in 1980.

Neonatal Resuscitation Programme was launched in 1985 and around 200 paediatrician have been trained. National Neonatal Perinatal Data Network is located at All India Institute Of Medical Sciences, New Delhi.

Neonatal forum has conducted regular annual meetings with Indian Society of Perinatology and Reproductive Biology to enhance collaboration with obstetrician for improving New born survival.

Innovative strategies further care of newborn has been introduced by introduction of spoon and cup feeding, expressed breast feeding to very small babies in NICU. Most of NICU are focusing efforts on babies 1000 gms. Only a very few tertiary care centers are focusing the care of babies upto 750 gms.

Unlike developed countries where cross training nurses has revolutionized the new born care, in India resident doctors have been trained for this. Due to unsatisfactory referral systems efforts are being made to develop module for identification and management of sick new born babies in community.

The future perspective are to improve maternal health, to raise female literacy, to launch health education programme.

Further expansion and strengthening the facilities at First Referral units and District Hospitals and better utilization of MCH Services. Basic Antenatal care to all the pregnant mothers delivers to be conducted by trained birth attendants in community. High risk pregnant women to be referred to hospitals for delivery. Level II perinatal services to all the medical colleges, political commitments, community involvement and multisectoral approach to health is key to health for all.

It is hoped due to economic liberalization the MCH care in private sector women expand rapidly and there will be a significant improvement in the status of Neonatal services..

L125

CAN WE GET MORE INFORMATIONS FROM PERINATAL AUTOPSY?

Figen Aksoy, *Istanbul University, Cerrahpaşa Medical School, Department of Pathology, İstanbul, Turkey*

Most of neonatal deaths occur in perinatal period in developing countries and there are some differences of mortality rates in one country to another.

Recently, non-invasive techniques for fetal analyses and studies for diagnosis in malformations and hereditary diseases get more people to make detailed pathological analysis of death fetuses and stillbirths. Informations obtained by perinatal autopsies are useful in clinical applications and different scientific areas.

There are important benefits of autopsy like understanding death reason abnormalities in growth of fetus, control of the health care units, correlation of clinical findings, supplement of cumulative national and

international statistics and standardize of autopsy report. Also, these benefits obtain more information to clinicians, families, pathologist and science for healthier babies in the world.

L129

EVALUATION OF OXIDATIVE STRESS

M. Arif Akşit, Neonatology Department of Osmangazi University Medical Faculty, Eskişehir, Turkey

Background: The main structure of living bodies is human cells. To evaluate the function of the cell (especially mitochondria) is nowadays indirectly estimated from the perspective of blood. The values are differentiated in arterial, capillary, venous blood and in intercellular structure. In order to make an exact estimation, all blood values have to altogether discuss under the patronage of clinical evaluation (including neurological, respiratory and other organ system functions, also concerning gut/liver, immune response).

Objectives: Blood gases are classified as; a) Blood gases; pH, pCO₂, pO₂, b) Oxygenation: ctHb (Total blood hemoglobin concentration = cO₂Hb-oxy + cHHb-deoxy + cCOHb-carboxy + cMetHb-met), Hctc, sO₂ (Make correlation with ctHb, oxygen saturation = cO₂Hb/cHHb + cO₂Hb), FO₂Hb (Oxyhemoglobin ratio = cO₂Hb / cO₂Hb + cHHb + cCOHb + cMetHb), FHHb, FmethHb, FetalHb, c) Electrolytes: Na, K, Ca, Cl, d) Metabolic values: Glucose, lactate, bilirubin, mOsm, d) Status of oxygen: ctO₂ (Content = Hb (g/dl) x 1.34 ml O₂ / g Hb x saO₂ x (0.003 ml O₂/mmHg/dl), p50, e) Acid-base status: cBase, cHCO₃, ABE, SBE, AG (Anion gap = [Na + K] – [Cl + HCO₃]).

Design: The values will be taken arterial and venous simultaneously. After the treatment the values can be effect between 2-5 minutes. If you'll obtained no response, than change your approach. Don't just give intravenous fluid, but make reperfusion, prevent the baby from ischemic perfusion complications and edema.

Subjects: The values are not taken alone. We have to discuss the correlations with the concerning parameters. E.g. baby A with paO₂ 85 mmHg, saO₂ 95%, Hb 7 g/dl, is more hypoxemic than the other baby B with paO₂ 55 mmHg, saO₂ 85%, Hb 15 g/dl. CtO₂ is 8.9 in baby A, but 17.1 mlO₂/dl in baby B.

Conclusion: All for one, one for all will be the main topic for evaluation of blood gases. All the components will be systematically examined and must make a correlation with the clinical findings.

L132

RISK APPROACH TO INTRAPARTUM CARE

Narendra Malhotra, Jaideep Malhotra, Prabha Malhotra, R.M. Malhotra, Dr. Amrita Singh, Dr. Samiksha Gupta Malhotra Test tube Baby Centre, Agra

Today obstetric practice has been totally revolutionised the advances in technology and their wide spread clinical application to the antenatal care has led to a drastic decrease in maternal and perinatal mortality and morbidity in the western world.

But inspite of all the new procedures at the disposal of an obstetrician undesirable complications still occur and more so in the developing countries. Almost 10% of such events can be diagnosed and predicted and 48% of these are avoidable.

To reduce the undesirable events a risk approach to pregnancy during the antenatal period and during the intrapartum period is recommended.

We at our tertiary obstetric care centre in Agra have evaluated the Risk approach in 1000 obstetric cases and have compared our figures with the primary health care delivery system in India.

The results have shown a maternal mortality of 1 in 1000, perinatal mortality of 10 in 1000 and a morbidity rate of 5 per 1000 as compared to our national figure of maternal mortality of 10/1000, 110/1000 perinatal deaths and a morbidity of 150/1000.

Today a Risk approach to all antenatal and intrapartum cases is strangely advisable.

L135

OPTIMAL OXYGENATION OF THE NEWBORN

Ola Didrik Saugstad, *Department of Pediatric Research, The National Hospital, University of Oslo, Oslo, Norway*

Oxygen therapy for newborn infants was introduced in the United States in the 1930s to improve respiratory pattern and to reduce a purported risk of brain damage caused by unrecognized oxygen lack. Post World War 2 incubators were built to maintain high oxygen concentration. Not before the discovery of its relation to retrolental fibroplasia (retinopathy of prematurity, ROP) were questions raised concerning the use of oxygen. In the 1970s the transcutaneous oxygen electrode and in the 1980s pulse oximeters were introduced in neonatal intensive care units and many believed the problems related to oxygen toxicity in the newborn nursery could be eliminated or at least reduced. Although it has been acknowledged for 5 decades that oxygen might be harmful to premature infants it is still possible that toxic reactions of oxygen are underestimated. In my opinion it is clear that we have a number of unanswered questions. A simple one is to define the normal oxygen saturation in the earliest newborn period. It has for instance been shown that in very low birth weight infants with gestational age < 30 weeks and weighing < 1000 gram in order to keep SaO₂ between 50 and 90% the PaO₂ should be kept between 2.5 to 5.5 kPa (18-41 mm Hg). A reasonable paO₂ to aim at therefore seems to be around 5.5 kPa, which probably is lower than in most centers.

A recent study from UK by Tin et al indicates that the optimal arterial oxygen saturation of extremely premature infants the first weeks of life perhaps is not known. The normal saturations in term and pre-term infants in the first week of life which previously has been identified between 93-100% but this is probably not applicable to the extremely low birth weight infants. The optimal arterial oxygen saturation of growing extremely premature infants is also not known. Existing recommendations are probably valid for the more mature premature infants only. Therefore new recommendations are needed for the most extreme premature infants for instance with gestational ages between 23 and 27 weeks. These infants should perhaps be nursed with lower oxygen saturations than used by most nurseries today, at least the first few days of life. Data accumulate indicating that even a hyperoxic exposure during a few minutes after birth may increase the oxidative stress for weeks. Because oxidative stress influences apoptosis and cell growth, this may have long-term consequences on growth and development, and further studies should clarify whether such therapy is carcinogenic as well.

L136

ANTEPARTUM FETAL SURVEILLANCE IN HIGH-RISK PREGNANCIES USING HOME FETAL HEART RATE MONITORING DEVICE

Moshe Hod and Benjamin Zeevi, *Perinatal Division and WHO Collaborating Center for Perinatal Care, Department of Obstetrics and Gynecology, Rabin Medical Center, Beilinson Campus, Petah Tikva, Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel*

To evaluate the quality, reliability, safety and cost effectiveness of home cardio-tocographic monitoring in women with high-risk pregnancies.

METHODS AND PATIENTS:

The CG-900P (home cardiotocograph) is designed for monitoring fetal heart rate (FHR), uterine activity (TOCO) and for event marking of fetal movement. 25 pregnant women considered to be at high risk due to diabetes, hypertension, growth retardation, oligo-hydramnion and premature contractions performed daily home cardiotocograph monitoring and transmitted the data for analysis to the Rabin Medical Center Perinatal Service via a built-in modem.

RESULTS:

265 traces were performed and successfully transmitted to the Rabin Medical Center. In 33 cases (13%) additional monitoring was required due to: non-reassuring traces (n=29), technical reasons (n=2), maternal request or premature contractions (n=2). In 26 cases of non-reassuring FHR monitoring, 23 repe-

ated traces were reassuring and in 3 cases inter-vention was needed: 2 women were referred to the antenatal clinic and were discharged after further evaluation (biophysical profile). 1 woman underwent urgent caesarean section due to placental abruption. All patients indicated the simplicity of use and the high level of comfort they felt.

CONCLUSIONS:

Self-nonstress home testing of pregnant women at high risk seems to be a reliable and accurate method of antepartum fetal heart rate testing which can be performed comfortably in the home setting and may prevent unnecessary hospital visits and by that may possible reduce the expense of in- or outpatient care. A further large-scale study is required to evaluate the cost effectiveness of this management.

L137

HOME CARE IN PERINATAL NURSING PRACTICE

Hülya Okumuş, *Dokuz Eylül University School of Nursing, Department of Gynecology and Obstetric Nursing, Izmir, Turkey*

Maternal and child health nurses practice at all levels of care and in a variety of settings from home, schools and outpatient clinics to the most sophisticated intensive care units.

Perinatal Nursing, focuses on the care of childbearing women and their families during pregnancy, childbirth and the first 4 weeks after birth. There have been significant changes in the practice of perinatal nursing over the past 25 years. Many of the changes have been positive for childbearing women, but there have been some negative trends in the care of women during labor and birth.

Improving the home care services in perinatal nursing is one of the positive changes. Home care services in perinatal nursing provide services to obstetrical patients and their newborns in their home.

Home visits are designed to assist with physical restoration, psychosocial adaptation and assisting the new mother and her family in adjusting to their new roles and responsibilities.

As the number of mothers, infants and children cared for in the home increased the number of agencies also increased to meet this need.

Thus, nursing care in the home is coming full circle.

L139 (Precongress Course)

FIRST TRIMESTER PREGNANCY RISK ASSESSMENT OF CHROMOSOMAL ABNORMALITIES

Ali Ergün, *GATA Obstetrics and Gynecology Department Ankara, Turkey*

It has become apparent from the results of several preliminary studies that screening for chromosomal abnormalities in the first trimester is possible but that the parameters used must be different from those in the second trimester.

The most promising parameters in the first trimester appear to be pregnancy associated plasma protein A (PAPP-A) and free β -hCG as serum biochemical agents. Using PAPP-A alone, 60 % of Down syndrome cases would be identified, for a false positive rate of 5 %. Using free β -hCG, instead of total hCG, in serum improves, 8 %-10 %, the detection rate of chromosomal abnormalities.

As a companion to the use of maternal serum analytes for predicting risk for chromosomal abnormalities, there are a characteristic set of ultrasound detectable anomalies that have been periodically found, which should heighten the suspicion when they are seen for the major aneuploidy conditions such as trisomies 21, 18 and 13. Enlarged nuchal membrane (or translucency) in the early first trimester weeks and may be important for the aneuploidy conditions.

Cerebral ventriculomegaly, holoprosencephaly, choroid plexus cysts, cranial posterior fossa cysts, nuchal cystic hygroma, nuchal edema, heart defects, hyperechoic bowel, small for gestational ages are the ultrasonographic findings in the late first trimester weeks. Although the odds of an aneuploid condition may be very high, none of the findings on ultrasound are alone pathognomonic of any particular aneuploid condition.

A number of studies have looked at parameter as PAPP-A, free β -hCG, nicked β , urinary gonadotropin protein, SP 1, dimeric inhibin and ultrasound. This has resulted in a state of condition about the most likely best combination of parameters. By specifying the demographic of the patient's age, ethnic background, maternal age a particular cocktail of parameters may be run

And finally, Chorion Villus Sampling, as a known invasive technic, may be used for the detection of chromosomal abnormalities in high risk groups isolated by biochemical analytes and ultrasound examination.

L140 (*Precongress Course*)

SONOGRAPHIC SCREENING FOR FETAL ANEUPLOIDIES

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First-trimester screening of fetal chromosomal abnormalities by chorionic villus sampling (CVS) was introduced at Szeged in 1982. The indication of the procedure was mainly the advanced maternal age (≥ 35 years) (85%). However, only a small proportion of children (7 % in Hungary, 17% in Finland, 12.9 % in USA) were born to women age 35 years or older (Ventura, 2000). Following the maternal age indication as a guideline to screen aneuploidies, we were able to identify only a quarter of Down syndrome pregnancies, even if all women older than 35 years requested invasive procedures (CVS, amniocentesis). Consequently, advanced maternal age was not too good selection criterion for efficient prenatal screening of fetal chromosomal (and other) abnormalities due to the well-known controversy, that younger women have the majority of pregnancies, and younger women give birth to the majority of children with Down syndrome.

This controversy represented a great need for offering "some prenatal screening/diagnostic measures" to the younger (<35 yrs) pregnant population and we decided to develop a method for "in utero finding" defected fetuses irrespective of maternal age. We kept an eye on two criteria: the method should be un-risky and should effectively select pregnancies with fetuses of normal and abnormal karyotype.

The idea came from practice, namely: if a pediatrician could suspect Down syndrome by looking at the affected neonate on the base of trisomic features caused by "extra" chromosome, a sonographer should do the same by looking at the first trimester embryo. Further speculation was that the "extra" chromosomal material express more pronounced features in the early pregnancy. So we hypothesized that trisomic features predictive for trisomy 21 could be ultrasonically recognized as early as the first trimester.

The development of high-resolution ultrasound technique in the mid-80ths gave an outstanding opportunity to approach the intrauterine first-trimester embryo for detailed examination (sonoembryology). Therefore, from 1986 we examined each pregnancy with trisomy 21 fetuses, for finding some sonographic "attitude" that can differentiate aneuploid fetuses from ones with normal karyotype. Reexamining the trisomic fetuses with ultrasound an increased fluid accumulation in the fetal occipital and neck region had been found irrespective of the maternal age in a significant proportion of the fetuses with abnormal karyotype. The increased nuchal edema, which we called first-trimester simple hygroma (FITSH), enlightened the possibility of a prospective screening in the general population.

L141 (*Precongress Course*)

INCREASED NT WITH NORMAL KARYOTYPE

J. Szabó, *Department of Medical Genetics, Faculty of Medicine, University of Szeged, Hungary*

Introduction: Increased nuchal translucency marks not only the pregnancies complicated with chromosomal anomalies, but may also be found in fetuses with normal karyotypes. These pregnancies with increased NT and euploid karyotype may apparently be normal or candidate for certain structural or single gene defects.

Nuchal edema (NT) may progress or undergo spontaneous resolution during the late first and early second trimester both in euploid and aneuploid pregnancies. According to recent sonographic observati-

ons there is an association between increased NT and second trimester cystic hygroma, NT being the predecessor of the latter. This phenomenon provides basis for comparison of the natural history of simple hygroma in the first trimester and cystic hygroma in the second trimester of pregnancy.

Pregnancies with increased NT and normal karyotype have a high chance (more than 80%) of spontaneous resolution of the hygroma. Prenatal and neonatal progress has been reported uneventful in 89% of the cases, indicating a very good prognosis. However, cardiac and other structural malformations may occur in at least 20 per cent of the surviving embryos and more than 40 genetic syndromes have been reported up to now.

Second trimester fetal cystic hygroma, regardless of the underlying cause, carries a very poor prognosis and is correlated with unfavourable perinatal outcome. By contrast, increased NT may represent a similarly high risk of aneuploidy and an overall better prognosis in euploid cases. The improved prognosis for euploid fetuses with posterior hygroma detected in the first trimester may be related to the very early spontaneous resolution, since early resolution prevents irreversible alterations.

FCO1

EFFECT OF ENTERAL ADMINISTRATION OF INSULIN ON ESTABLISHMENT FEEDING TOLERANCE IN PRETERM INFANTS***Vasiljevic B., *Antonovic O., **Radunovic N.,** **Department of Neonatology,****Department of Obstetrics, Institute of Gynecology and Obstetrics, University Clinical Centar, Belgrade, Yugoslavia*

Aim: To determine the effect of enteral administration of insulin on the establishment of enteral feeding in preterm infants <32 weeks gestation. Insulin is present in maternal milk at levels three to fourfold higher than in maternal blood. Insulin has been shown both in vitro and in vivo to accelerate a number of GI functions.

Methods: A prospective, double blind, randomised, placebo controlled study was conducted on 60 preterm infants (<32 weeks gestation, < 1500 g) consecutively admitted to our neonatal intensive care unit. 30 preterm infants were given 0,5U/kg every six hours insulin enterally from 4 to 28 days of age. Feed toleration and time taken to establish full enteral feeding compared between the two groups. Parenteral nutrition was used until the infants achieved complete enteral feeds, and was adjusted to provide a total intake (enteral and parenteral) of 120 kcal/kg/day. Gastric residuals (>50% of a three hour feeding volume) were determined by aspiration of the gastric contents every three hours in all infants. Doppler ultrasound blood flow velocity in the superior mesenteric artery (SMA) was determined before and after feeding. Serum glucose concentrations were measured at 0, 30, and 90 minutes after the first second and fifth doses of insulin.

Results: The times taken to establish full enteral feeding were significantly shorter (>30%) in the group receiving enteral insulin than in those receiving the placebo, fewer gastric residuals per infant and significantly increase in Doppler ultrasound blood flow velocity (>15%) in SMA after feeding. No adverse effects, such as hypoglycaemia, were observed after administration insulin.

Conclusions: The results suggest that enteral administration of insulin to preterm infants enhances GI function.

FCO2

EFFECTS OF MATERNAL WEIGHT GAIN DURING PREGNANCY AND PREGESTATIONAL WEIGHT IN AETIOLOGY OF LOW BIRTH WEIGHT**Kayrak Altuncu E., Kavuncuoğlu S., Özbek S., Gökmirza P., Albayrak Z.,** *SSK Bakırköy Maternity and Child Hospital, Neonatology Care Unit, İstanbul - Turkey*

Aim: The aim of this prospective study was to evaluate maternal weight gain and pregestational weight in aetiology of low birth weight (LBW).

Material - Method: 5000 live born babies were evaluated randomly between October 2000 - May 2001 in the Bakırköy Maternity and Child Hospital in İstanbul. LBW was defined as infant weight below 2500 gram and they formed study group. Babies with normal birth weight (NBW) chosen randomly in equal numbers from 5000 live born babies formed control group. Weight gain during pregnancy and pregestational weights of mother in both groups were recorded after an interview with mothers. To evaluate the maternal stature, body mass index (BMI), which was the division of weight by square of height (kg/m^2), was calculated for each mother.

Results: The rate of mother with a pregestational weight <50kg was 16.6% in LBW group and 8.3% in NBW group. In LBW and NBW groups, rates of mothers with a BMI less than 18.5 kg/m^2 were 10.5% and 5.7%, respectively. In LBW group, 27.8% of mothers had gained <10kg during pregnancy but this rate was 15.6% in NBW group.

Conclusion: These findings showed that, low pregestational weight, low BMI and low maternal weight gain during pregnancy have very significant effects on birth weight of infant.

FCO3

NEONATAL SEPSIS CAUSED BY ENTEROBACTER AMNIGENUS

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Isolation of *Enterobacter amnigenus* from a human source is extremely rare. We report for the first time in literature the isolation of *Enterobacter amnigenus* from the blood of 5 premature infants. Characteristics of the patients are presented in the table. First 4 patients were parts of quintuplets pregnancy, the fifth sibling was not symptomatic and her cultures were negative. All the infants had signs and symptoms of sepsis, which prompted comprehensive investigations and treatment with antibiotics and supportive measures, one of the quintuplets was asymptomatic. All had umbilical catheters and were on mechanical ventilation. *Enterobacter amnigenus* was isolated from both the aerobic and anaerobic blood culture bottles in 8 occasions. Repeated blood culture from three patients grew again *Enterobacter amnigenus* while they were on antibiotics. Cultures from other sites including urine, cerebrospinal fluid, stool and endotracheal tube were negative in all patients.

Patient	Gestation (w)	B.W. (Gm)	Age (day)	Symptoms	Antibiotics*	Blood transfusion
1	28	1000	11	yes	2, 3	yes
2	28	1100	9	yes	2, 3	no
			16	yes	2, 4	
3	28	1020	9	yes	2, 3	yes
4	28	1040	14	yes	2, 3	yes
			19	yes	2, 4	
5	29	880	47	yes	1	no
			49	yes	1, 2	

* Ampicillin (1), Amikacin (2), Cefotaxime (3), Imipenem (4).

After the cultures were taken, the patients were initially given cefotaxime and amikacin intravenously (n=4), and 1 patient ampicillin and amikacin. Three patients continued to be symptomatic and repeated blood cultures grew *Enterobacter amnigenus* again. Imipenem was given instead of cefotaxime (n=2) and repeated blood cultures were negative. MICs studies were performed on the isolates. All patients survived. In spite of extensive epidemiological investigations we could not identify the initial source of infection except that three of the patients had been transfused with packed RBCs taken from one blood bag. A sample of that blood was not available for culture. We conclude that *Enterobacter amnigenus* can cause neonatal sepsis, and aggressive treatment with the appropriate antibiotics and supportive measures are required.

FCO4

HIGH INCIDENCE OF LONG BONES DYSPLASIA IN NEWBORN INFANTS IN QATAR

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Background and Objectives: Dysplastic/ absent long bones (DALB) is a rare congenital anomaly. Absent radius and ulna incidence has been reported as 1/50,000 to 1/100,000 newborns. Several infants had been admitted to our newborn services in the last several years. We wanted to define the epidemiological characteristics of the newborns and their mothers with congenital missing long bones.

Setting: Women's Hospital, Doha, Qatar. The only women's hospital in Qatar where about 98% of all pregnancies are delivered.

Methods: We reviewed the records of birth and the Neonatal Intensive and Intermediate Care Units admission books in the last 6 years, 1988-1994 for infants who had documented DALB.

Results : Total number of live born infants in the study period was about 90,000 infants. We were able

to identify and review the medical records of 13 infants with DALB. Radius was dysplastic / absent in 9 cases (1/10,000), and ulna was dysplastic / absent in 5 cases (1/18,000), tibia and fibula both were absent in 2 patients (1/ 45,000), femur and humerus were absent in one patient each (1/90,000). Male to female ratio was 1:1. Birth weight mean 2614 ± 749 (SD) gm, gestational age mean 37 ± 3.1 (SD) weeks, 4 infants were <37 weeks. Mother age range between 20-35 years. History of a previous abortion was present in 38.55% of all mothers, and 53.8% of all mothers were diabetics. History of consanguinity was present in 61.5% of all cases. Chromosomal studies were normal in all cases studied (8). DALB were more common in the upper limbs than lower limbs (ratio 3.3:1), and in the left upper limb than the right upper limb (ratio 2.5:1). DALB in the upper limbs presented bilaterally in 36.4% of the cases, in the left side in 45.5% and in the right side in 18.1%. None of the infants had anemia, thrombocytopenia, fractures, hypophosphatemia or hypocalcemia. Seven patients had major congenital anomalies. Four infants had congenital heart disease. Two infants had esophageal atresia. One patient had multiple anomalies including diaphragmatic hernia, polycystic kidney and sacral agenesis. One patient had cleft lip and palate.

Conclusion: DALB in the population studied is more common than published literature. Major multiple congenital anomalies are present in more than half of the cases. Maternal diabetes and consanguinity are present in the majority of the cases.

FCO5

MOTHER TO CHILD TRANSMISSION (MTCT) OF HIV: WHERE ARE WE AT AND WHERE ARE WE GOING? PRELIMINARY RESULTS FROM THE PERINATAL HIV REGISTER IMPLEMENTED IN CAMPANIA REGION OF SOUTHERN ITALY

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Objective: Without specific interventions, the rate of HIV MTCT was estimated at 15-20% in Europe and USA, and 25-40% in African populations. As a combination of anti-retroviral therapy, elective C- section delivery and refraining from breastfeeding can substantially reduce the rate of MTCT, universal HIV testing of mothers to be is recommended. To monitor practices and outcome Public Health Department of Campania Region of Southern Italy implemented since 1997 a Register of infants exposed in utero to HIV. Material and Methods: All the live infants from seropositive delivering women entered a standardized work- up for prevention and diagnosis of MTCT and side- effects control. Risk factors for MTCT were carefully assessed near birth based on medical records and structured interview of mothers and personal gynecologist.

Results In the study period 108 infants were recruited; four of them were infected. Maternal category was A1 in 51, A2 in 35, B1 in 2, B2 in 5, B3 in 4, C1 in 1, C2 in 3, and C3 in 7. The 67% of the maternal infection were diagnosed before becoming pregnant and the 18% were diagnosed during gestation, while 15% of them were accomplished after delivery, based on the presence of risk factors such as a HIV positive partner and/or injecting drug abuse. A positive trend ($X^2 < 0.001$) over time was found in the number of infant reported in the register and in the proportion child exposed to antiretroviral therapy either as monotherapy (41%) either as multitherapy (30%), in utero and postnatally (70%) either only postnatally (19%). C- section was carried out in 79% of the mothers and formula feeding was adopted in 90% of the infants. The most of breast fed infants passed to formula feeding within 2 or 3 days of life. One infant died at 7 days of life because of severe heart disease. No serious side effects were found but mild anemia and prematurity (in 30% of the mothers submitted to multitherapy). At least one parent was immigrant from high prevalence locals such as sub- Saharan Africa and East Europe countries in 42 (39%) of the exposed infants and in 2/4 (50%) of the infected infants.

Conclusion: Campania region is considered a relatively protect geographic area, as estimates on 1997 were 3 to 5 exposed newborn on 70,000 birth rate, based on HIV antibody prevalence on newborn cards collected for other newborn screenings. Unpublished local data point out 45% of delivering women recorded an HIV test. Our data suggest there is an increasing number of infected women who become pregnant, an increasing number of infants exposed to ART in utero or in early life. Property of interven-

tions against HIV MTCT is increasing; furthermore there are opportunities to improve outcome by encouraging early in pregnancy testing especially in immigrants from epidemic areas. Low transmission rate suggests the rate of MTCT can be substantially reduced in our population even in advanced disease.

FCO6

CLINICAL-ULTRASONIC CORRELATIONS OF BRAIN'S HYPOXIC-ISCHEMIC INJURY IN NEWBORNS

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Among various harmful factors of newborn's brain the main place takes hypoxia which causes deep metabolic and cerebrovascular disorders and is due to different kinds and severity of clinical manifestation of central nervous system (CNS) injury.

The aim of our study was to determine the injurious affect of hypoxic-ischemic factors upon the newborns brain, prognosing the correlations of clinical and ultrasonic patterns and CNS disorders.

198 full-term newborns in the age from 1 to 10 days were investigated. The ultrasonic investigation was produced on the devices of "Siemens Sonoline Elegra" and "Logic 700". Along with neurosonography cerebral hemodynamic was examined by using Colour Flow Mapping which permitted measurement the resistive index (RI), pulsatility index (PI), systolic and diastolic velocity in the anterior, middle, posterior and basilar arteries. In neonatal period the investigation was produced once per 10 days, later –once per month. Katamnestic period covered 1,5-2 years.

By clinical manifestation of CNS injury the patients in neonatal period were divided into 3 groups according to the course of disorder: mild, moderate and severe. The decrease of PI preceded the development of neurosonographic patterns of brain injury and clinical manifestation. The increased parameters of RI was observed in patients with intracranial hypertension. In mild injuries clinical-dopplerographic disorders had transient character. In those newborns who were observed to have pathological findings of RI, PI and especially diastolic velocity of blood flow, subsequently developed brain leukomalacia and clinically was observed organic injury of CNS.

Conclusions:

1. The decreased parameter of PI presents the high risk of development of brain hypoxic-ischemic injury.
2. Stable dopplerographic pathological patterns indicate to severity of brain injury and poor prognosis.
3. Color Flow Mapping represents the high effective method for estimation the degree of brain's hypoxic-ischemic injury and prognosing the course of disease.

FCO8

HIGH RISK NEONATES AND REFERRAL PATTERN TO A SECONDARY LEVEL CARE RURAL BASED HOSPITAL IN SOUTH INDIA

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Background: The CMCH is situated south of Chennai, 55 Kms away from the capital city of Tamilnadu. CMCH caters to rural population from Kancheepuram district and Chengalpattu Taluk with a population of 10,78,190. High-risk cases are referred from 4 peripheral hospitals (1 Head Quarters & 3 Taluks), 24 Primary health care centers and also from home by the Traditional Birth Attendants.

Aim of the Study: To investigate into the reasons for referral from primary health centers and Taluk hospitals to the secondary care center and to study the high-risk deliveries and the perinatal outcome.

Methods: The study was carried out at CMCH from January 1st - December 31st 2000-2001. It was a retrospective study using the existing records in the labour room, and neonatal ward by trained persons under the supervision of the pediatrician in the neonatal unit. The information pertaining to the condition at the time of admission, mode of delivery, the place from where the cases are referred, the distance from home to the place of delivery, mode of delivery were recorded. The STATA version 5 was used

to analyze the results.

Results: 30% of the mother had to travel more than 10Kms to reach the PHC, and 36% had to travel more than 20 Kms from home. 68% come from linked villages. In this study 30-40% were high-risk mothers, and 7-8% had more than one complication. Nearly 40% of mothers had CPD or previous history of cesarean section. 20% had prolonged 2nd stage with fetal distress, 12% had premature rupture of membranes, 11% were non vertex presentation, and 11% arrived at a critical state with threatened rupture.

Conclusion: Neonatal care is not affordable to many developing nations, early referral to the center with adequate facilities can prevent perinatal deaths in developing nations.

FCO9

COMPARISON OF WEIGHT INCREASE IN INFANTS WITH BREASTFEEDING-FORMULA-MILK SUPPLY

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Introduction: Human milk is the most appropriate of all available milks for the human infant because it's uniquely adapted to his or her needs. Sometimes breastfeeding is incriminated for unsatisfying increase of weight without other parameters examined (illness, nutritional faults, negligence), it is interrupted, the profits of breast milk are lost and the problem still remain.

Aim: Study the increase of weight in healthy infants who are inclusively breastfed, fed with formula or they use milk supply to correlate the increase of weight with the kind of nutrition

Material-Method: For 4 years we studied the weight of 580 infants (228 males, 352 females)-BW2,3-4,2 Kgr (average 3,2 Kgr) in 2 phases; the time they stayed at the obstetric clinic and then until the age of 6 months. We trained mothers to feed their babies properly and we encouraged those who used milk supply to use breast milk inclusively. At the end of the study we had 116 infants breastfeeding, formula 290, milk supply 174

Results: Breastfed infants had the birth weight or few gr less the time they left the clinic without nutritional problems. 90% of them had 40gr/day increase of weight-first trimester, 25-30gr/day-2nd trimester. The rest had respectively 30-20gr/day. With milk supply had 3-5% loss of the birth weight the first days, the increase of weight was 15-35gr/day. Formula fed infants had normal range of growing (0,7-1,3 Kgr/month) but they had mainly nutritional faults, hypoglycemia (they weren't fed for 8-10h in the night), digestive problems (vomit, refluxes), the loss of birth weight when they left the clinic was 0-5%

Conclusions: All kinds of nutrition have good or excellent weight increase. Breastfed infants have more regular development with few divergences. With milk supply have smaller increase of weight because mothers give involuntarily less milk. Formula fed infants grow as well but they have digestive problems. Unsatisfying increase of weight is result of bad nutrition, other factors, not due to the kind of milk better with breastfeeding.

FCO10

OUTCOME PREDICTION IN CRITICALLY ILL NEWBORN USING TWO SCORING SYSTEMS

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Background: Beside Apgar Score (AS), the oldest scoring system used in neonatology, several scoring systems recently have been developed: Clinical Risk Index for Babies (CRIB), Score for Neonatal Acute Physiology (SNAP), Neonatal Therapeutic Intervention Scoring System (NTISS) etc.

Objective: To evaluate the ability of 2 scoring systems in predicting neonatal mortality in very low birth weight (VLBW) newborns.

Settings: Pediatric intensive care unit (PICU) at Institute for Child's and Youth's Healthcare, Novi Sad, Yugoslavia.

Material - Methods: Retrospective analysis of 120 records of VLBW newborns who were admitted to PICU within 13 months. Both score systems were applied on each child. The area under receiver operating characteristics (ROC) curves was used for comparison.

Results: Of 120 VLBW newborns, 88 (73.34 %) survived. Mean (SD) gestational age (GA) was 27.4 (2.5) weeks and BW was 1030g (351). Mean AS at 1. minute was 6,01 and at 5. minute 7,80. Significant difference couldn't be found between the areas under ROC curves of AS 1 (0,807) and of AS 5 (0,789). 5 point AS 1 value was optimal from the aspect of sensitivity (78.1) and specificity (70.5). 7 point AS 5 value was optimal from the aspect of sensitivity (68.7) and specificity (73.9). The CRIB had significantly greater the area under the ROC curve (0.972) than AS. 6 point CRIB value was optimal from the aspect of sensitivity (100.0) and specificity (87.5).

Conclusion: We found that CRIB has excellent predictive ability. CRIB predicted neonatal mortality significantly better than AS.

FCO11

THE USE OF SCORE FOR NEONATAL ACUTE PHYSIOLOGY (SNAP) AND BIRTH WEIGHT (BW) IN PREDICTION OF NEONATAL MORTALITY

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Background: SNAP was developed to assure a more accurate prediction of neonatal mortality then traditionally used means such as BW, gestational age etc.

Objective: We compared the ability of BW and SNAP as predictors of neonatal mortality.

Settings: Pediatric intensive care unit (PICU) at Institute for Healthcare of Child and Youth, Novi Sad, Vojvodina.

Material - Methods: Retrospective study based on medical records of 120 critically ill newborns who were admitted during 13-month period. SNAP was determined in the first 24 hours from admission to the PICU and calculated using an algorithm based on deviations from normal values of 26 physiologic parameters. The area under receiver operating characteristics (ROC) curves was used for comparison.

Results: Mean (SD) gestational age (GA) was 27.4 (2.5) weeks and BW was 1030g (351). 32 babies died (26.6%). The SNAP had the area under the ROC curve 0.846. 18 points SNAP value was optimal from the aspect of sensitivity (68.7) and specificity (92.0). BW had lower area under the ROC curve (0.732).

Conclusion: SNAP is useful predictive model, more accurate than BW in predicting of neonatal mortality.

FCO12

BILIRUBIN AND RETINOPATHY OF PREMATURITY

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Objective : Retinopathy of prematurity (ROP) is a proliferative vascular disease of retina. Many factors can influence its appearance, including free oxygen radicals. Recently there have been more and more studies which emphasises bilirubin antioxidative properties.

The aim of this paper is to check whether there is a connection between the level of bilirubin and the appearance of ROP.

Material - Methods : We have analysed medical data for 30 preterm newborns with ROP. Our control group also consisted of 30 preterm newborns with similar bodt and other parameters and other morbidity, with the exception that they didn't suffer of ROP.

Results : The average maximum bilirubin level in experimental group has reached 185 µmol/l on 6th day of life. The average maximum bilirubin level in control group was 204,45 µmol/l, also on 6th day of life. Different types of therapy had an influence on the bilirubin level and the appearance of ROP. The

average duration of oxygen therapy in experimental group was 37 days and in control group 27 days. Phototherapy lasted on the average 7 days in experimental group and 9 days in control. Vitamin E was administered longer in experimental than in control group.

Conclusion : According to our results, average maximum bilirubin level was lower in newborns with ROP, but this was not statistically significant. In our opinion, these kinds of studies deserve to be continued. This should bring the final proof of bilirubin antioxidative role in organism, as well as establish a protocol for hyperbilirubinemia treatment in prematurely born children.

FCO13

THE EFFECT OF NEONATAL RESUSCITATION TRAINING PROGRAM ON APGAR SCORE AS AN OUTCOME OF THE NEWBORN; A HOSPITAL BASED STUDY

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Background: Neonatal Resuscitation Training Program (NRP) based on American Association of Pediatric (AAP) has been introduced to pediatric resident in Padjadjaran University since 1998, to standardize knowledge and skills in order to reduce neonatal morbidity and mortality and increase successful resuscitation. The 5-minute Apgar score is the index of successful neonatal resuscitation and immediate post-natal outcome.

Objective: To evaluate the effect of NRP in Hasan Sadikin Hospital Bandung by examining Apgar score among the newborn.

Method: This is a retrospective two times period design (before training: year 1997 as group I, and after training: year 2000 as group II). The data was taken from hospital medical record and we include only newborn with normal birth weight and with abnormal presentation. We compared these two groups to find improvement on 5-minute Apgar score among severe asphyxiated newborns (1 minute Apgar score: 0-3) and we analyzed the data with X2 test, using SPSS 10.0 computer program.

Result: Group I had 84 subjects out of 1559 births, and group II had 107 subjects out of 2680 births. According to Apgar score, there was no significant difference in proportion of subjects between both groups ($p > 0.1$). From group I: there were 2 severe asphyxiated newborns and both of them showed improvement on 5-minute Apgar score (4-6). From group II: there were 7 severe asphyxiated newborns and 5-minute Apgar score are: 1 (14,3%) had low score (0-3), 3 (42,9%) had moderate score (4-6), and 3 (42,9%) had high score (7-10). All moderate asphyxiated subjects (group I, $n=23$; group II, $n=22$) improved on 5-minute Apgar score (7-10). These data showed no significant improvement on 5-minute Apgar score among severe asphyxiated subjects between both groups.

Conclusion: This study showed that training of NRP in our department did not improve the outcome of neonatal resuscitation yet. Evaluation on NRP should also be done in the Hospital outside the teaching Hospital.

FCO14

HOSPITAL NEONATAL HYPOTHERMIA: CHARACTERISTIC AND THE IMPACT OF NEONATAL RESUSCITATION TRAINING PROGRAM

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Background: The newborn who was not thermally protected in the first 10-20 minutes may lose body heat by 2-4°C, and the baby would develop hypothermia. Risk factors to neonatal hypothermia were low birth weight, prematurity, asphyxia, ill babies and babies delivered by mother with anesthetic drugs. It is assumed that proper and correct neonatal resuscitation will decrease the prevalence of neonatal hypothermia.

Objectives: To know the characteristic of neonatal hypothermia and to evaluate the impact of Neonatal

Resuscitation Training Program (NRP) on the prevalence neonatal hypothermia in Hasan Sadikin general hospital Bandung.

Methods: This was cross sectional study. The subjects were infant born in Hasan Sadikin hospital in January – February 2002. The axilla temperature were measured 10 minutes after delivery, body weight was measured by digital baby weighing and Dubowitz and Ballard score were used to estimate gestation age. The data was analyzed using chi-square test.

Results: From two hundred and four (204) newborn who delivered in Hasan Sadikin Hospital, only 112 newborn that were compared because babies delivered by cesarean section were excluded. Forty babies (35,4%) delivered by doctor who had NRP, 73 babies (64,6 %) delivered by doctors non NRP. Hypothermia babies whom were delivered by NRP 11 (35,5%) and by non NRP 20 (64,5%).

Conclusions: Low birth weight, prematurity, asphyxia tend to be the characteristic of hypothermia babies and the Neonatal Resuscitation Training Program give no impact hospital neonatal hypothermia in Hasan Sadikin General Hospital Bandung.

FCO15

CORD BLOOD IGF-1 AND IGFBP-3 LEVELS IN ASPHYXIATED NEWBORNS

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Objective: Determination and pathogenesis of perinatal asphyxia is still an important problem in NICU. Aim of this study was to evaluate relationship between serum IGF-1, IGFBP-3 levels and perinatal asphyxia.

Patients and Methods: Perinatal asphyxia was evaluated by means of APGAR scores in 1 and 5 minutes and umbilical cord artery gas analysis as pH, PO₂, PCO₂, HCO₃, ABE and lactate. According to these criteria 12 term-newborn infants were defined as asphyxiated and 11 newborns as normal. Umbilical cord blood IGF-1 and IGFBP-3 levels were detected and searched for correlation with Apgar scores and blood gas parameters.

Results: Serum IGF-1 levels were lower in asphyxiated group than control subjects (27.2 ± 26.1 , 60.5 ± 28.2 , $p < 0.01$). Serum IGFBP-3 levels were also lower in asphyxiated group (1107.7 ± 320.4 , 1682.5 ± 364.1 , $p < 0.001$). We demonstrated positive correlation between serum IGFBP-3 and Apgar scores (1 and 5 minute), pH, PCO₂, ABE, HCO₃, SO₂, ctO₂, and cord blood lactate levels. Cord blood IGF-1 levels were correlated with Apgar score at 1 minute, birth weight, and cord blood pH and HCO₃ levels. Cord blood IGF-1 levels were correlated with birth weight and cord blood IGFBP-3 levels were correlated with cord blood HCO₃ and ctO₂ with stepwise regression analysis.

Conclusion: Umbilical cord IGF-1 and IGFBP-3 levels decreased in asphyxiated newborns like in experimental studies. Correlation was found between IGF-1, IGFBP-3 levels and blood gas parameters. Because IGF-1 has neuroprotective effect in experimental models of hypoxia and ischemia, serum IGF-1 and IGFBP-3 levels can be used for determination of asphyxia and may have possible protective effects when used as therapeutic agents.

FCO16

OPTIMIZATION OF THE DIAGNOSIS AND TREATMENT OF CEREBRAL DISORDERS IN NEWBORNS

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Newly born children, at the age 23-28 weeks are under a high risk of mortality and disablement. The difficulties of a final diagnosis of such cases are connected to diversity of CNS dysfunctions, the generalization of cerebral reactions, the dynamism of the process, and the changes of symptoms within several hours with the additional stress of the childbirth period.

120 newborns (age 1- 30 day) were investigated, together with a clinical investigation we used neuro-

sonography, EEG, and in several cases cerebral MRI and an investigation of spinal liquor.

All the neurological syndromes were classified according to the severity of the damage and the age of the patients. All patients were receiving the medicament Plaferon (Locally Produced) together with the symptomatic treatment. The results were remarkable: all the patients that were treated with the plaferon during the first 4-6 days adapted easier to the first afterbirth stress.

There was observed a decrease of brain swelling and hypoxia, and there was an accelerated process of the mielinization. Also observed was an "awakening" effect of this medicament. The plaferon recommended itself as an anti hypoxic, anti toxic, immune corrective treatment.

The plaferon - type of interferon produced with viral induction by amniotic cells of human placenta- helps to create a positive influence for the newborns with trauma to adapt easier to their new environment.

FCO17

THE SURVEY OF NICU INFECTIONS AT CHILDREN GENERAL HOSPITAL

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Objectives: This study was done to evaluate the prevalence and major risk factors of neonatal septicemia and to identify the most common etiologic agents in our referral hospital.

Methods: In this retrospective study, 189 infants who were admitted with the symptoms of neonatal septicemia since 23 September 2000 up to 22 September 2001 to the neonatal ward of Tabriz Children General Hospital were studied. And all the information concerning the objectives of the project like the infant's age, birth weight, gestational age, sex and blood culture results and the patient health situation at the time of hospital discharge were evaluated. Finally, the results of our study were compared with the results of similar studies were performed in other foreign or native universities.

Results: From 189 infants who were admitted with the symptoms of neonatal septicemia, just in 61 infants the clinical features of neonatal septicemia were confirmed with positive blood culture results. From 61 infants, 36% were term infants and 64% were preterm infants and there was an obvious increased affection to early onset septicemia by preterm infants. The most common etiologic agent of neonatal sepsis was the coagulase negative staphylococci. And gram-negative enteric bacilli were the second most common etiologic agents.

Conclusion: Prematurity was the most important predisposing factor for affection and mortality. In spite of the results of western studies that present group A streptococci as the most common pathogenic agent, there were no evidences of affection by this microorganism in our study.

FCO18

MATERNAL MORTALITY RATE IN FOUR-YEARS PERIOD

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Background: Perinatal and maternal mortality are indicators of the quality of antenatal and perinatal care and such depend upon numerous factors. The economic status of the society is reflected directly upon the development of the health protection system, whose one of most precise indicators is maternal mortality. Aim of this study is to analyse rate and causes of maternal mortality in four-years period.

Methods: In retrospective study we analyzed completed pregnancies and maternal deaths in four-years period at OB/GYN Clinic in Tuzla with the particular review to causes of maternal deaths.

Results: In four years period at Clinic for Obstetrics and Gynaecology we were 19672 completed pregnancies. Out of 19672 deliveries we had 6 women which died in pregnancy and delivery by rate of 30 death per 100 000 deliveries. Analyzed causes of death we have concluded that the most frequent causes of maternal death are eclampsia. Out of six maternal deaths, five mothers died by eclampsia and one by

cardiac disease. In group which died by eclampsia all of them had suboptimal perinatal care with 0 – 3 controls during the pregnancy. Out of six maternal deaths we found that four pregnancies were terminated before 37 weeks of gestation, and five pregnancies (all in group of eclampsia) were terminated by cesarean section. One pregnancy by cardiac disease was terminated by vaginal way but she died seven days after because of cardiac decompensation.

Conclusion: Results given by this analysis confirms that maternal mortality directly depends on the development of a health care system, economic sustainability and quality of antenatal care. In order to come closure to the rates in developed countries it is necessary to improve quality of antenatal care at primary and secondary health care level.

FCO19

IS THE SEVERITY OF DYSPEPTIC SYMPTOMS AFTER 20 WEEKS' GESTATION RELATED TO HELICOBACTER PYLORI INFECTION?

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Objective: We set out this study to test the hypothesis whether there is an association between Helicobacter pylori and the severity of dyspeptic symptoms after 20 weeks' gestation in pregnant women.

Methods: Pregnant women (n=103) with gestational ages between 20-41 weeks and healthy non-pregnant women (control group, n=79) were prospectively enrolled in the study. Anti-H.pylori IgG serum antibody was tested to establish infection. The dyspeptic symptoms were evaluated by the Glasgow Dyspepsia Severity Score in the pregnant group and were classified as asymptomatic (Score 0), mild symptomatic (Score 1-5) and severe symptomatic (Score >5). The severity of dyspeptic symptoms was compared in pregnant women with H.pylori infection, and pregnant and non-pregnant women were compared for H.pylori seropositivity and prevalence of dyspeptic symptoms. The results were analyzed using Student's-T, Mann-Whitney-U and Chi-Square testing.

Results: The prevalence of H.pylori infection was not different among pregnant and non-pregnant women (73,8% and 67,1%, respectively). The median dyspeptic score was 5 and 4, respectively for anti-H.pylori IgG positive and negative pregnant women. Dyspeptic scores of the H.pylori infected pregnant women were not different from the non-infected pregnant women. The seropositivity of H.pylori did not differ among asymptomatic, mild and severe symptomatic pregnant women (69,2%; 73,1%; 76,3%, respectively). The non-pregnant women were more often asymptomatic, compared to pregnant women (54% versus 12,6%, respectively, p=0,001).

Conclusion: Our findings do not support any association between H.pylori infection and the severity of dyspeptic symptoms in late pregnancy. It seems unreasonable to screen pregnant women in late pregnancy for H.pylori infection, even if they suffer from severe dyspeptic symptoms.

FCO20

COMPARISON OF ABORTION, ECTOPIC PREGNANCY AND MALFORMATION RATES IN PREGNANCIES AFTER INTRACYTOPLASMIC SPERM INJECTION (ICSI) AND CONVENTIONAL IN VITRO FERTILIZATION (IVF)

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Objective: After the introduction of assisted reproductive technologies (ART) possible effects of these procedures on the obstetric outcome have been investigated. Particularly, after the common use of intracytoplasmic sperm injection (ICSI) safety of this procedure has been criticized. Micromanipulation of the gametes might result in some problems such as unnatural selection of spermatozoon, exposure to reactive oxygen species, meiotic spindle damage and/or introduction of toxic material into the oocyte. In the present study, we retrospectively compared abortion, ectopic pregnancy and malformation rates in

pregnancies after ICSI and conventional IVF.

Materials - Methods: Between January 1995 to January 2000, 448 ICSI and 112 IVF pregnancies were compared. All pregnancies included were fresh embryo transfer cycles. Only couples with normal sperm analysis underwent IVF. All couples with male factor (less than 5.000.000/ml total motile sperm) underwent ICSI cycle. Major malformation was defined as a condition requiring surgical correction or causing functional impairment.

Results: Mean maternal age of women were 32 ± 5.2 years for ICSI and 33.2 ± 4.2 years for IVF group. In the first trimester, 143 pregnancies in ICSI group and 31 pregnancies in IVF group were lost giving the abortion rate of 31.8% and 27.6%, consecutively. Preclinical and clinical abortion rates were 15.4% and 16.5% in ICSI and 9.8% and 17.8% in IVF groups. Ectopic pregnancy was diagnosed in 15 patients (3.2%) in ICSI and 2 patients (2.6%) in IVF group. All newborns (384 neonates in ICSI group and 104 neonates in IVF group) were examined by an experienced Pediatrician immediately after birth. Fourteen major congenital malformations were diagnosed in ICSI group (5 prenatally and 9 postnatally). In 3 pregnancies malformations (Down's Syndrome, Omphalocele, Hydrocephalus) were diagnosed in the second trimester by ultrasound and/or karyotyping and labor was induced. Three congenital malformations were diagnosed in IVF group after birth. Congenital malformation rate was similar in both groups (3.6% in ICSI and 2.8% in IVF group).

Conclusion: Abortion, ectopic pregnancy and congenital malformation rates in ICSI pregnancies did not differ from those obtained in conventional IVF pregnancies.

FCO21

DIFFERENCES IN OBSTETRIC OUTCOME BETWEEN NULLIPAROUS AND MULTIPAROUS (PARA-1, PARA-2) WOMEN AFTER ELECTIVE LABOR INDUCTION

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Objective: To determine the differences between nulliparous and multiparous (para-1, para-2) women in fetomaternal outcome after elective labor induction.

Methods: The women of the study were selected according to the following criteria: singleton pregnancy, cephalic presentation, gestational age at the time of delivery of 274 to 287 days, birthweight between 3000 and 4000 gr., and maternal hematocrit $>33\%$.

The women were divided in two groups. Group A consisted of 136 nulliparous women and group B consisted of 136 multiparous women (68 para-1 and 68 para-2).

The study period was from January 1999 to December 2001.

Results: Cesarean delivery rate was 17,64% in group A and 13,97% in group B, instrumental delivery rate was 13,23% in group A and 8,08% in group B, transfer rate of the baby to the Neonatal Intensive Care Unit was 3,67% in group A and 2,2% in group B.

Conclusion: Elective labor induction in nulliparous women is associated with significantly more operative deliveries.

FCO22

REDUCTION OF HYPOXIA-INDUCED PULMONARY HYPERTENSION (HIPH) BY $MgSO_4$ IN SHEEP

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Several drugs have been used to reduce HIPH. We investigated the effect of $MgSO_4$ on HIPH in 7 sheep anesthetized and paralyzed, ventilated with 0.85 or 0.1 FiO_2 and nitrogen. We monitored heart rate (HR), systemic and pulmonary arterial pressures, cardiac output (CO), end tidal CO_2 , arterial blood gases and serum Mg^{++} during hyperoxia and hypoxia before and after infusion of 0.9 saline (placebo) or $MgSO_4$ (200 mg/kg) into the right atrium during the steady state of hypoxia. The table shows the results for all animals ($X \pm SD$). $PaCO_2$ and pH were similar during hyperoxia & hypoxia. Serum Mg^{++} we-

re similar in all the states before infusion and increased from 0.88 ± 0.21 to 2.88 mmol/L after infusion.

State	H R	MBP	SPAP	DPAP	MPAP
Hyperoxia	115±13	109±23	20±4.1	9±3.7	16±2.8
Hypoxia	139±31	114±08	32±6.6	18±2.8	26±5.3
Hypoxia + placebo	138±11	119±11	32±6.9	19±4.0	27±5.7
Hypoxia	127±24	103±24	36±8.6	15±6.9	25±5.7
Hypoxia + MgSO ₄	087±12	082±23	23±6.4	10±5.8	17±5.6

SPAP, DPAP and MPAP increased significantly during hypoxia compared to hyperoxia ($p < 0.001$) with no change during placebo. Post MgSO₄ infusion; a significant decrease in SPAP and MPAP occurred ($p < 0.01$, < 0.001 respectively), DPAP showed a trend to decrease $p < 0.1$ while systemic MBP and SBP did not change and DBP decreased ($p < 0.1$, < 0.1 and < 0.01 respectively). CO did not change post Mg ($p < 0.6$) and HR decreased transiently ($p < 0.001$).

We conclude that MgSO₄ decreases pulmonary artery pressure significantly during HIPH without affecting significantly the BP and CO. Clinical applications in patients with hypoxia induced pulmonary hypertension require further studies.

FCO23

NEONATAL MORBIDITY AFTER FORCEPS DELIVERY IN TWO PERIODS

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Objective: The aim of this study was to compare neonatal morbidity after forceps delivery in two periods.

Methods: Retrospective comparative study was performed. We analysed neonatal morbidity after forceps delivery in two periods: I (1985-1988) and II (2000-2001). Obtained data was analysed by Student's t-test. **Results:** In I period there were 483 forceps deliveries out of total 35.086 deliveries (1.38%), in II period 88 forceps deliveries out of total 13.186 deliveries (0.67%), $t=7.52$; $p < 0.01$.

Cesarean section rate in our Institute was: I period 9.2%, II period 18.81, $t=-25.71$; $p < 0.01$.

Apgar score: I period 7.9, II period 7.6. Average birth weight in I period was 3542.42g, and in II 3422.43g.

Birth weight more than 3500g: I period 46.59%, II period 54.87%, $t=1.38$; $p > 0.05$. Neonatal morbidity:

Cephalhaematoma: I period 87 (18.01%), II period 3 (3.41%) $t=5.60$; $p < 0.01$.

Cerebral oedema: I period 49 (10.14%), II period 5 (5.68%) $t=1.58$; $p > 0.05$.

IVH: I period 37 (7.66%), II period 4 (4.55%) $t=1.23$; $p > 0.05$.

Fracture of the clavicle: I period 31 (6.42%), II period 1 (1.14%) $t=3.33$; $p < 0.01$.

Conclusion: No significant differences between Apgar score and birth weight between two period were noticed. Due to better judgement and rise in cesarean section rate, incidence of cephalhaematoma and fracture of the clavicle was significantly lower in second period.

FCO24

POSTPARTUM HEMORRHAGIA CONTROL BY UTERINE ARTERY LEGATION OR INTRAUTERINE-PELVIC PACKING

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Aim: of this research is concentrated on the first surgical interference by Obstetrician wan specialist to stop the bleeding

Study method: we start our study at daraltoulid hospital in period 1/5/96 until 1/5/2001 on 436 patients suffering from postpartum severe bleeding The bleeding was controlled by uterine artery legation

in abruptio placenta hypotonic uterine bleeding but intra uterine packing with hypogastric artery ligation in uterine rupture hysterectomy bleeding

Results: Rapid decision and efficient bleeding control 11 cases hysterectomy done. No bladder or urethra injury No maternal death

Conclusion: Simple and efficient method for postpartum bleeding control making obstetrician specialist to take optimal decision and respect the rule pregnancy is distinguished happening, while delivery is delighted achievement, let it be secure.

FCO25

THE YEARS EXPERIENCE OF INTRAVASCULAR FETAL TRANSFUSIONS

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Objectives : Due to Rh D prophylactics in pregnant woman incidence of Hemolytic Disease of Fetus has significantly decreased but some of most severe forms can still be noted. Since the first intrauterine intraperitoneal transfusion that was performed by Liley in 1963, up to today transfusion remains the only therapy in severe forms of disease. It is at the same time high risk procedure, regardless to advanced technical possibilities (ultrasound devices, high quality needles, professional education, and rigid criteria). At the Univ. Ob-Gin. Clinic "Narodni Front" in Belgrade, intrauterine intravascular transfusion was introduced in 1992 yr. And is a routine therapy today.

Aim of our presentation is to review ten years experience in intrauterine intravascular transfusion technique in treatment of Hemolytic disease of fetus.

Methods : In 156 cases of pregnancies with alloantibody to red blood cells present in circulation, Hemolytic disease of fetus was diagnosed according to present indications to prenatal diagnostics and criteria for evaluation of degree of fetal anemia. Data were statistically processed.

Results : According to obtained data, in 27 pregnant women 76 intravascular intrauterine transfusions were performed. Total fetal loss was 11,11% (3), all in most severe forms of disease with present fetal hydrops, and all in smallest gestational age of fetuses (19,20 and 21 week of gestation).

Conclusion : Regardless to the high risk of procedure and increased risk of sensibilisation, intrauterine intravascular transfusions remain the only method of treatment of Hemolytic disease of fetus. Indications for such treatment should be in accordance of present criteria and adequate selection of patients. Highly educated personal and adequate technical equipment give chance to most endangered fetuses and therefore high risk is acceptable.

FCO26

MATERNAL AGE AT FIRST PREGNANCY AS A RISK FACTORS FOR PREGNANCY COMPLICATIONS

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Objective : To assess maternal age at first pregnancy as a risk factor for pregnancy complications.

Methods : In a retrospective study records of all nulliparous women who delivered at Shariati University Hospital from March 1999 to Feb 2001 were reviewed. There were 95 nullipara with the age ≥ 35 year which were compared 632 nullipara with the age of 20-34 for pregnancy complications. Exclusion criteria were diabetes, chronic hypertension, multiple pregnancy and smoking. Both groups were compared with regard to preterm delivery, PIH, IUFD, mean birth weight, IUGR, abruptio placenta, placenta previa, cesarean section rate and Apgar score < 7 . For statistical analysis student t test and χ^2 were used.

Results : There was significant difference between two age groups in preterm delivery, PIH, IUFD, mean birth weight, IUGR, C/S and Apgar score < 7 ($p < 0.05$) but there was not significant difference in abruptio placenta and placenta previa.

Conclusions : Advanced maternal age at first pregnancy was a risk factor for maternal and perinatal

complications in this study. This risk factor should be value to practitioners counselling women older than 35.

FCO27

ST WAVEFORM OF THE FETAL INTRAPARTUM ELECTROCARDIOGRAM FOR THE DIAGNOSIS AND PREVENTION OF PERINATAL ASPHYXIA

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Intrapartum hypoxia is a recognized cause of fetal morbidity and mortality. However we recognize that the consequences of a severe lack of oxygen will vary from one fetus to another and the capacity of fetuses to handle hypoxia may differ greatly depending also on the situation prior to the actual hypoxic event. It is recognized that cardiotocography does not provide all the information we require to specifically interpret fetal reactions to labour stress. Fetal blood sampling can be used along with CTG monitoring to assess fetal acid-base status during labour and can reduce operative intervention but it requires additional expertise, is time consuming, gives only intermittent information and is therefore not widely used. Fetal pulse oximetry is focused on recording the actual level of fetal hypoxemia. However at present the ability of CTG plus pulse oximetry to provide diagnostic capacity on fetal metabolic acidosis have not yet been demonstrated. Extensive experimental work indicate that analysis of changes in ST waveform provide continuous information on metabolic events occurring within myocardial cells which allow cardiac function to be maintained during hypoxia. Clinical studies have shown that ST analysis of the fetal ECG provide useful information on fetal reaction to labour. Randomized controlled trials have provided conclusive evidence that ST waveform analysis can safely reduce the number of obstetric operative intervention with a parallel improvement in fetal outcome. In a European Commission supported project, involving ten European perinatal centres, the clinical introduction of ST waveform analysis has been accompanied by a specifically developed model of teaching, training and staff accreditation. The results of the project show a significant improvement in fetal outcome with the combined use of CTG and ST waveform analysis. These results show that, through the appropriate use of proven technology and specific models of training and management, a safe reduction in the risk of babies being affected by oxygen deficiency during labour can be achieved with a significant reduction in the need for operative interventions.

FCO28

MATERNAL MORTALITY DUE TO AMNIOTIC EMBOLISM

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The cause of sudden and unexpected death of mother in normal pregnancy, delivery and postnatal period is difficult to estimate. Among the possible causes the leading role belongs to death due to amniotic embolism.

To study pathogenesis and pathomorphological changes of amniotic embolism, had been investigated 9 cases of death due to amniotic embolism and 26 cases of death due to bleeding from uterus. Experimental study was performed on 55 adult healthy female rabbits. The animals had been divided into four groups: I – control group; II – with injection of filtrated amniotic fluid into the auricular marginal vein; III – with injection of not-filtrated but clear amniotic fluid; IV - with injection of not-filtrated and not-clear amniotic fluid.

The study of dissection and experimental material revealed that obstetrical coagulopathic bleedings in majority of cases are the complications of amniotic embolism. The experimental study showed different clinical variants of amniotic embolism: 1. Infusion of filtrated amniotic fluid with mild picture, causes the anaphylactic reaction, discirculatory and coagulopathic changes, and only rarely causes the death. 2. Infusion of not-filtrated but clear amniotic fluid causes embolic discirculatory processes in lungs together with allergic damages and intensive coagulopathic changes - equal to clinical obstetrical chock with col-

lapse and later afibrinogemical bleeding. 3. Embolism with contaminated amniotic fluid always causes the death and resembles to those clinical cases with true diagnosis "Amniotic Embolism", when the cause of death is allergic reaction complicated by embolic discirculatory processes in lungs.

FCO29

OXITOCINONE, INDUCING FETUS MATURATION

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Objectives: The aim of this study was to present the possibility of making earlier maturation of fetus lungs, by provoking the "stress phenomena".

Study Methods: In the last three months, we started an interesting study of provoking faster production of lecithin L and sphingomieline S in fetus lungs by giving mothers the infusions of sintocinone in the course of 7 days, in low doses, looking after cardiocography, ultrasound and doppler, and making the analysis of L/S ration after and before the experiment.

Results: We have tested 30 women between 35wg-37wg, with diabetes mellitus gestational in 24 of them and insulin dependent in 3 cases. The L/S ratio was 1,5/1 and they had 0,7-1,1 x10 cells. After 5-7 days of oxitocinone infusions at 6-8 hours intervals in 0,9%NaCl solutions we have checked their ansimes concentration and in 87% (26 cases) it was for planning delivery, L/S=2/1 and we had 1,2 to 2,1 x 10 cells. in 13% the L/S ratio was 1,75/1 and it is nearly enough for delivery.

Conclusions: We wanted to suggest a possible way of speeding fetus lung maturation, using oxitocinone infusions, and initiating stimulus to realise endogenous TRH and T3, by making fluctuations in fetus PO2. This is a pilot idea, but very successful, and needs more experience.

FCO30

DETERMINATION OF FETAL NUCHAL THICKNESS IN 2ND TRIMESTER OF PREGNANCY IN PREGNANT WOMEN RESIDE IN GEORGIA REGION

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Background: In earlier studies the high risk of chromosomal anomalies has been detected in fetuses with Fetal Nuchal Thickness (FNT) more than 6 mm and there are the appreciable peculiarities of FNT specified of local and ethnic difference. The aim of our study was to determine the FNT in Georgia resident pregnant women in 2nd trimester of pregnancy.

Methods: From 1994 to June 2002 the 4750 pregnant women at 15 to 27 weeks of pregnancy were prospectively studied by routine ultrasound and any abnormalities of fetuses were observed.

FNT measurement was obtained by standard ultrasound section in transverse plane of the fetal head. Under procedure of examination the 5th, 50th and 95th percentiles were determined.

Results: The mean index of FNT increased from 15 to 22 weeks of gestation ($M \pm 2SD$):

15 weeks - $3,0 \pm 0,27$ mm	19 weeks - $3,5 \pm 0,81$ mm
16 weeks - $3,0 \pm 0,19$ mm	20 weeks - $3,8 \pm 0,45$ mm
17 weeks - $3,3 \pm 0,90$ mm	21 weeks - $3,8 \pm 0,35$ mm
18 weeks - $3,5 \pm 1,90$ mm	22 weeks - $4,0 \pm 0,27$ mm

The mean index of FNT from 23 to 27 weeks of gestation varied ($M \pm 2SD$):

23 weeks - $4,0 \pm 0,20$ mm	26 weeks - $3,9 \pm 0,27$ mm
24 weeks - $3,8 \pm 1,0$ mm	27 weeks - $4,0 \pm 0,16$ mm
25 weeks - $3,9 \pm 0,14$ mm	

Conclusions: The mean measurement of FNT in our study varied but in all cases was not more then 5 mm in normal fetuses at 15 to 27 weeks of gestation. The obtained FNT mean index can be useful in routine ultrasound screening program to detect the genetic disorders as a selective test before the basic genetic examination.

FCO31

CONTINUOUS FETAL HEART RATE MONITORISATION VERSUS INTERMITTANT AUSCULTATION FOR INTRAPARTUM FOLLOW-UP

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Objective: To compare the perinatal outcomes of two different intrapartum fetal heart rate monitorisation technique

Materials - Method: During 1.1.1999-31.6.1999, 10323 women (group 1) in labour had 15 minutes cardi-otocography recording at the time of admission. If fetal heart rate monitorisation at the time of admission was non-reassuring or the patient is in a high risk group, intrapartum intermittent auscultation was performed with a hand held ultrasound doppler device every 15 minutes. Low risk group had intermittent auscultation every 30 minutes. During 1.7.1999-31.12.1999, 11144 women (group 2) had continuous cardiocotocography and monitorisation also evaluated through a central recording via network connection. **Results:** Cesarean section rate was lower in group 2 when compared with group 1 (21.4% versus 22.5% respectively; $p=0.05$). Operative delivery rates and neonatal intensive care unit admission was similar in the two groups. Intrapartum sudden fetal death occurred in four patients in group 1 and two patients in group 2 ($p=0.9$). Perinatal hypoxia was diagnosed in 22 fetuses in group 1 and 19 fetuses in group 2 ($p=0.8$). Mortality due to perinatal hypoxia occurred in seven newborns in group 1 and five newborns in group 2 ($p=0.9$).

Conclusion: Continuous fetal monitorisation causes an insignificant decrease in the occurrence of perinatal death and hypoxia.

FCO32

NW-NİTRO-L-ARGİNİNE METİL ESTER (L-NAME) İLE PREEKLAMPSİ MODELİ OLUŞTURULAN RATLARDA ENDOJEN ANTİOKSİDAN AKTİVİTESİ, KAN BASINCI DEĞİŞİKLİKLERİ İLE AYNI MODELDE EKZOJEN ANTİOKSİDAN KULLANIMININ KLİNİK VE NEONATAL SONUÇLARA OLAN ETKİSİ

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Amaç : Rat preeklampsisi modelinde lipid peroksidasyon ve antioksidan sistemin araştırılması ve ekzojen antioksidan kullanımı sonrası, preeklampsisi olgularında, klinik parametreler ile doğum sonu sonuçların değişiminin araştırılması.

Yöntem : Ağırlıkları 250-350 gr arası değişen Sprague-Dawley erişkin, beyaz, dişi ratlar çiftleştirildikten ve vajinal smear testi ile gebelikleri kesinleştikten sonra, gebeliğin 17. gününden itibaren 22. gebelik gününe kadar her gün uygulanan işleme göre, her grupta 10 ratın olduğu 4 gruba ayrıldı. I. Grup, serum fizyolojik enjekte edilen sham-operated, kontrol grubunu; II. grup, 50 mg/kg intraperitoneal L-NAME enjekte edilen grubu, III. Grup 50 mg/kg L-NAME+10 mg/kg quercetine grubunu; IV.grup ise, 50 mg/kg L-NAME + 60 mg/kg glutatyon grubunu oluşturdu. Bütün gruplardaki ratların kan basıncı değerleri (KB) cuff-tail device ile 30°C sabit sıcaklıkta ölçüldü. Ratlar metabolik kafes içinde tutularak idrar miktarı ve proteinüri derecesi ölçüldü. 22. günde intrakardiyak olarak kan alınarak, plazma malonildialdehid (MDA, nmol/ml) ile eritrosit hemolizatlarında süperoksit dismütaz (SOD, Ünite/Hb) ile katalaz (CAT, Ünite-Hb) ölçümleri yapıldı. Aynı gün, laparotomi ile doğurtulan yavru ratların doğum kilolarına ve canlılık oranına bakıldı. Paired-sample t test, tek yönlü ANOVA, Dunnett testi, ki-kare testi ve Pearson korelasyon analizi ile data analizi yapıldı. $P<0.05$ anlamlı olarak kabul edildi.

Bulgular : Gebeliğin 18. ve 22. gün KB yükselmeleri bütün gruplara göre yüksekti ($p<0.01$). MDA düzeyi II.grupta (7.3 ± 0.2), diğer gruplara göre yüksek bulundu ($p<0.001$). SOD düzeyi, L-NAME verilen gruplarda, sham grubuna göre yüksek iken, II. Grup (1505 ± 30.9)'ta yüksek SOD değerleri, IV.grup (1395.2 ± 14.7) anlamlı olarak azaldığı gözlemlendi ($p<0.001$). CAT düzeyi, II.grupta, diğer gruplara göre yük-

sek olarak ölçüldü. TA 20. gün değerleri ile SOD düzeyleri arasında lineer ($r_p:0.39, p<0.001$); proteinüri miktarı- SOD düzeyleri ($r_p:-0.39, p<0.001$) ile CAT-MDA düzeyleri arasında ters korelasyon ($r_p:-0.22, p=0.02$) mevcuttu. Fetal ağırlık açısından, grup I yavru rat doğum kilosu ağırlığı ($5.5\text{gr}\pm0.2$), diğer gruplara göre yüksek olarak saptandı. ($p<0.001$). İdrar miktarı açısından dört grup arasında istatistiksel olarak fark bulunmadı. Ölü yavru doğum yüzdeleri ise grup I,II,III ve IV'de sırasıyla, %4.2, %22.2,%15.1 ve %10.4 olarak bulundu ($c2\text{pearson: } 15.9, df:3, p<0.01$).

Sonuç : Preeklampside, ekzojen antioksidan kullanımı ile proteinüri azalmakta, endojen antioksidan seviyeleri düşmekte, canlı doğum oranı artmaktadır. Kan basıncı değerlerinde ve doğum kilosunda ise önemli bir değişiklik görülmemektedir.

FCO33

GEBELİK ESNASINDA SAPTANAN DİSSEKAN AORT ANEVİZMASI

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Üçüncü trimesterde akut dissekan aort anevrizması oldukça nadir görülen bir durumdur.

Bizim vakamızda 32 yaşında ilk gebeliği olan hastanın prenatal takiplerinde fetüste 24. haftada hipoplastik sol kalp sendromu saptanmıştır. Miadında ani başlayan göğüs ağrısı, dispne nedeniyle hastaneye başvuran gebeye acil olarak yapılan ekokardiyografide ascendan aortada dissekan - 8 cmlik anevrizma saptanmıştır. Acil olarak hemen sezaryen ve kalp operasyonuna alınmıştır. Assendan aortaya greft, aort kapak replasmanı ve iki koroner arter girişine by-pass yapılmıştır. Hastanın bebeği 5 gün sonra ex olmuştur. Operasyondan 20 gün sonra hastaneden çıkarılan hastaya oral antikoagülan tedavi başlanmıştır. Hasta 1.5 yıl sonra tekrar gebe kalmıştır. Yapılan ultrasonografilerinde fetal anatomi ve ense kalınlığı normal bulunmuştur. Gebeliğinin 18. haftasında sol hemiparezi yakınması ile gelmiştir. Ekokardiyografide aortada trombüs saptanmıştır. Progresyon olmaması üzerine geçici iskemik atak olarak değerlendirildi. İki haftada iyileşen hastanın halen gebeliği sürmektedir.

Aort disseksiyonu asıl sistemik hipertansiyonla ilişkilidir, ama atheroskleroz, endokrin hastalıklar, elastik doku hastalıkları (Marfan sendromu), travma ve gebelikte de görülebilir. Disseksiyonların yaklaşık olarak % 50 si 40 yaşın altındaki kadınlarda gebelikte görülür. Gebelik esnasında anevrizma rüptürü için en tehlikeli dönem üçüncü trimesterdir. Yapılan bir çalışmada 51 hastada rüptürlerin %6 sinin ilk trimesterde, %10 unun ikinci trimesterde ve %51 inin üçüncü trimesterde olduğu saptanmıştır. %14 ü doğum esnasında ve %20 sinin lohusalıkta görüldüğünü belirtmişlerdir. Eğer aort anevrizması gebelikte tanı konacak olursa potansiyel tehlike olan aort rüptürünü azaltmak için elektif sezaryen tercih edilen yaklaşım olmalıdır.

FCO34

ANTENATALLY DIAGNOSED NEWBORNS

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The aim of this study is to search the convenience of antenatal anomalies diagnosed by antenatal ultrasonography (USG) with postnatal USG and search the treatment modalities and surveys of these anomalies.

One hundred and thirty-six patients (96 male / 40 female) diagnosed between June 1995 and July 2002 were investigated retrospectively. The most common diagnosis in 108 patients with antenatal hydronephrosis is ureteropelvic junction (UPJ) obstruction (n=68). Other anomalies are 6 abdominal wall deformities, 6 cystic mass in the abdomen, 6 intestinal atresia, 1 annular pancreas, 1 duodenal atresia caused by annular pancreas, 3 congenital diaphragmatic hernias (CDH), 1 anorectal malformation, 1 meconium peritonitis, 1 oesophageal atresia, 1 urachal cyst and 1 sacrococcygeal teratoma. Among these 136 patients 45 are operated. Of operated 45 patients, the distribution of diagnosis is antenatally diagnosed hydronephrosis in 22 and other anomalies in 23 patients. Three patients in the hydronephrosis group and 5 patients in the other group died before definitive surgery after birth. In the second group, 9 patients di-

ed after the operation.

Antenatal USG is the best method to diagnose the congenital malformations during the fetal period. It is also beneficial to plan the follow up and to decide the treatment after birth.

FCO35

ABNORMAL FETAL HEART RATE PATTERN AND RELATIONSHIP WITH THE AMNIOTIC FLUID ERYTHROPOIETIN LEVELS

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Objective: The aim of the study was to evaluate the relation between abnormal fetal heart rate (FHR) pattern and erythropoietin (EPO) levels in amniotic fluid, umbilical cord, maternal plasma and 1 and 5 minutes Apgar scores

Study design: Twenty one patients with abnormal FHR pattern on the nonstress test were included to this study. All of the patients underwent cesarean section. Amniotic fluid, maternal and umbilical cord samples were obtained for measuring erythropoietin levels. We measured amniotic fluid EPO (A-EPO), maternal serum EPO (M-EPO) and umbilical cord blood erythropoietin (U-EPO) levels using by radioimmunoassay. Apgar scores of 1 and 5 minutes were recorded.

Results: U-EPO levels were found significantly higher than A-EPO levels ($p < .05$). There were no significant difference between the M-EPO, A-EPO, and between the U-EPO, M-EPO levels. Five of 21 patients had elevated U-EPO levels, but other 16 patients had normal levels of M-EPO, U-EPO and A-EPO. Four of 21 infants were low Apgar scores at 1 and 5 minutes. One of them had elevated U-EPO and normal M-EPO and A-EPO, whereas other three patients had normal A-EPO, M-EPO and U-EPO levels. On the other hand 17 infants showed normal Apgar score despite abnormal FHR pattern.

Conclusion: We conclude that abnormal FHR pattern may signal imminent fetal risk but dont confirm fetal hypoxia. We did not find any correlation between abnormal FHR patterns and A-EPO, M-EPO, U-EPO levels, and Apgar scores of 1 and 5 minutes.

FCO36

CEREBROSPINAL FLUID ADRENOMEDULLIN LEVELS IN PATIENTS WITH PREECLAMPSIA

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Purpose: The concentration of adrenomedullin (AM) in cerebrospinal fluid (CSF) is lower than that in plasma, and while plasma adrenomedullin increases in pregnancy, no change in CSF concentration is seen. To investigate the possibility that adrenomedullin is involved in the pathophysiology of preeclampsia, we measured its concentration in maternal CSF in normal pregnancies and in pregnancies complicated by preeclampsia.

Methods: We studied 12 normotensive pregnant women, and 12 patients with preeclampsia. In all subjects, CSF samples were collected during spinal anesthesia at cesarean section. Spinal anesthesia was performed to the patients in a seated position from the 4-5th lumbar space with 25 G Quincke needle. Before the administration of local anesthetic to the subdural space, 2 ml of CSF was taken from the patient. AM was assayed on CSF samples using a reverse-phase high-performance liquid chromatography (HPLC). Mann-Whitney U-test was used in the statistical analysis and $P < .05$ was considered as significant.

Results: Mean AM levels in patients with preeclampsia (28.51 ± 0.8 pg/L) were significantly higher than in patients with normotensive pregnancies (18.03 ± 0.4 pg/L; $P < 0.05$).

Conclusions: This first clinical in vivo study on CSF adrenomedullin levels showed that this peptide may be involved in pathophysiology of preeclampsia. Increased CSF-AM levels in patients with preeclampsia may indicate a compensatory defense response against increased in cerebral parenchymal microvessels

resistance or may reflect the degree of endothelial cell damage. The control of AM levels in CSF might be a target that could be considered in therapeutic strategies for preeclampsia.

FCO37

TERM ERKEN MEMBRAN RÜPTÜRÜ OLGULARINDA KORD KANI IL-6 DÜZEYİNİN İN UTERO ENFEKSİYON TANISINDAKİ YERİ

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Amaç: Term erken membran rüptürü (EMR) olgularında kord kanı IL-6 düzeyinin intrauterin enfeksiyon bulguları ile ilişkisi araştırıldı.

Materyal - Metod: Gebelik yaşı 37-42 hafta olan, antenatal dönemde düzenli olarak takip edilen ve komplike olmayan 70 olgu çalışmaya dahil edildi. EMR tanısı kesinleştirilen 40 olgu çalışma grubunu oluşturdu, amniyon akışı olmadığı kanıtlanan 30 olgu kontrol grubunu oluşturdu. Tüm olgularda doğum sırasında umbilikal kord kanından IL-6 düzeyi ölçüldü. Doğum sırasında fetal membran kültürü ve yenidoğandan kan kültürü alındı. Fetal membranların histolojik incelemesinde koryoamniyonit bulguları araştırıldı. Receiver Operator Curve (ROC) analizi ile plasenta ve fetal kanda mikroorganizma üremesini tahmin edebilecek kestirim değerleri araştırıldı.

Bulgular: Histolojik koryoamniyonit bulguları EMR olgularında kontrol grubundan anlamlı olarak fazlaydı (sırasıyla n=15, n=4, p=0.02). Yenidoğan kan kültüründe üremeyi tahmin etmede IL-6 seviyesinin ≥ 2.8 ng/ml olmasının sensitivitesi %91, spesifisitesi %67, negatif prediktif değeri %97 ve pozitif prediktif değeri %36 olarak bulundu. Fetal membrandan alınan kültürde üremeyi tahmin etmede IL-6 seviyesinin ≥ 2.4 ng/ml olmasının sensitivitesi %77, spesifisitesi %46, negatif prediktif değeri %76 ve pozitif prediktif değeri %47 olarak bulundu.

Sonuç: Umbilikal kord kanı IL-6 düzeyi ölçümü yenidoğan enfeksiyonunun tanısında sensitivitesi ve negatif prediktif değeri yüksek bir yöntemdir.

FCO38

ÇOĞUL GEBELİKLERDE YENİ KODLAMA SİSTEMİ

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Amaç: Günümüzde yardımcı üreme tekniğine bağlı olarak artan oranda görülen çoğul gebeliklerde yanlış anlamaya ve karmaşıklığa yol açmayacak bir nomenklatur oluşturmak.

Metod: İkiz ve daha yukarı sayıda fetus içeren gebeliklerde fetus sayısı, plasenta sayısı ve amnion kesesi sayısı üç rakamlı bir sayı kodu ile ifade edildi. Diğer Kadın Doğum ve IVF uzmanlarına sistem izah edilerek pratiğe uygulanabilirliği kontrol edildi.

Sonuç: Orijinal bir çalışma olarak bu sistemin uygulanabilir olduğu ve çoğul gebeliklerde uzun ve dolambaçlı tariflere çok daha iyi bir alternatif olduğu görüldü. Uluslararası alanda kabulü sağlandığında kalıcı bir nomenklatur olabileceğini düşünmekteyiz.

FCO39

EMBRİYOLARDA BETA THALASSEMİA YÖNÜNDEN PREİMLANTASYON GENETİK TANI HLA GENOTİPLEMESİ: TÜRKİYE'DE ELDE EDİLEN İLK GEBELİK VE DOĞUM SONRASI KORD KANI STEM CELL AYRIŞTIRILMASI

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Amaç: Beta Talasemi ülkemiz ve diğer Akdeniz ülkeleri için önemli bir sorundur. Bu çalışmanın amacı daha önce Thalassaemia major hastası olan 12 yaşında bir kızları bulunan bir çiftin yardımcı üreme teknikleri (YÜT) ve preimplantasyon genetik tanı (PGT) yardımı ile sağlıklı embriyo seçimi sonucu gebe kalması ve 18 loküsü içeren HLA genotipleme sonucu fetüs ve etkilenmiş ablası arasında tam uygunluğun saptanması ve doğumda elde edilen kordon kanından stem cell ayrıştırılarak talasemili çocukta kür sağlanabilmesi amacı ile dondurulması idi.

Yöntem: Kontrollü ovarian hiperstimülasyon sonucu 12 adet metafaz-II oosit elde edildi. Fertilizasyon oranı %75 olarak saptandı. Embriyo gelişiminin 3. gününde sadece 3 embriyo biyopsi için uygun bulundu. Infrared diode laser (1.48_μm) yardımı ile zona açılarak blastomer biyopsisi yapıldı. Nested PCR ve mini-sequencing yöntemleri kullanılarak ilgili mutasyonlar yönünden inceleme yapıldı. Sadece bir embriyo normal bulunarak transfer edildi ve 37 yaşındaki hastadan tek embriyo transferi ile gebelik elde edildi. Sağlıklı olarak doğurtulan bebekten elde edilen kord kanı örneği stem-cell ayrıştırması yapılarak donduruldu.

Bulgular: DNA mini-sequencing yöntemi normal IVS 1-110 (G-A) ve normal IVS II-1 (6± A) bulguları ile mutasyon-free blastomer tanımlandı.

HLA class I, II ve III antijenleri için 18 farklı loküs değerlendirilerek HLA genotipleme ile doğacak bebek ve talasemili ablası arasındaki doku uygunluğu tanımlandı. Aynı analiz daha önceden anne, baba ve hasta kardeşin kan, cilt biyopsisi ve fibroblast kültürlerinde de değerlendirildi. Doğum sonrası bebekten elde edilen kord kanından ayrıştırılan kök hücreleri dondurularak gelecekte hasta ablaya kür amacı transplante edilmek üzere saklandı.

Sonuç: Talasemi major gibi sık görülen ve kötü seyirli hemoglobinopatilerde gebelik oluşmadan önce embriyoda genetik tanımlama yapılması, oluşmuş ve etkilenmiş bir gebeliğin terminasyon riskini ortadan kaldırmaktadır. Ayrıca mini-sequencing yöntemi kullanılarak HLA genotipleme yapılması hasta kardeş için tedavi umudu oluşturmaktadır.

FCO40

TEKRARLAYAN ERKEN GEBELİK KAYIPLARINDA PREİMLANTASYON GENETİK TANI SONUÇLARI

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Amaç: Sekonder infertilite ve tekrarlayan erken gebelik kaybı olgularında diğer faktörler elimine edilerek preimplantasyon genetik tanı (PGT) uygulanan olgularda elde edilen sonuçların tartışılması ve embriyolarda kromozomal anomalilerin değerlendirilmesi

Yöntem: 20 olgu ve 23 yardımcı üreme tekniği (Y.Ü.T) siklusunda aynı zamanda preimplantasyon genetik tanı yapılarak anöploid embriyolar elimine edilmiş ve tek hücrede 13, 16, 18, 21, 22, X ve Y kromozomları FISH tekniği ile incelenmiştir. Ortalama kadın yaşı 33.3 ± 5.0 (min. 26, max. 46), ortalama infertilite süresi 9.43 ± 3.54 yıl olarak bulunmuştur. Ortalama abortus sayısı 3.13 ± 1.32 (min. 2 – max. 11) olmak üzere toplam 64 abortus, 12 biyokimyasal ve 52 klinik abortus öyküsü mevcuttur. 15 olguda şiddetli oligoastenoteratospermi, 2 olguda PCOS ve 5 olguda ise belirgin olarak azalmış over rezervi saptanmıştır. Periferik karyotip incelemesi yapılan çiftlerde 19 erkek ve 17 kadında sonuçlar normal olarak değerlendirildi.

dirilmiştir. Tekrarlayan abortuslara yol açabilecek endokrinolojik, hormonal ve anatomik bozukluğu bulunan çiftler çalışma dışı bırakılmıştır.

Bulgular: Toplam 164 embriyoya biyopsi uygulanmış ve embriyoların %49'u anormal, %51'i normal olarak bulunmuştur. Normal bulunup transfer edilen ortalama embriyo sayısı siklus başına 2.52, implantasyon oranı %13.2 ve elde edilen gebelik oranı olgu başına %40 olarak bulunmuştur. Elde edilen toplam 8 gebeliğin 3'ü biyokimyasal abort ile sonlanmış ve doğumla sonlanan gebelik oranı %25 olarak bulunmuştur.

Sonuç: Tekrarlayan erken gebelik kayıplarında preimplantasyon genetik tanı uygulanarak öploid embriyoların seçimi ile devam eden gebelik oranları arttırılmaktadır. Ancak preimplantasyon genetik tanı yapılmasına rağmen halen %15 oranında erken abortus oluşumu, tanımlanamayan diğer kromozomların da abortustan sorumlu olabileceğini veya mevcut tetkiklerle tanımlanamayan başka faktörlerin varlığını düşündürmektedir.

FCO41

ART TEDAVİSİ GÖREN 226 OLGUDA PREİMLANTASYON GENETİK TANİ SONUÇLARI VE ELDE EDİLEN GEBELİKLERİN ENDİKASYONLARA GÖRE PROGNOZLARI

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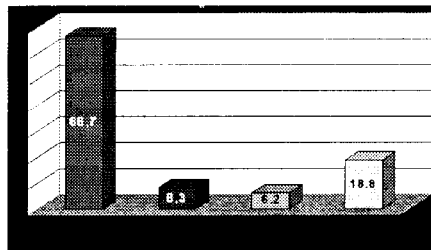
Amaç: İnfertilite tedavisi sırasında farklı endikasyonlar ile preimplantasyon genetik tanı (PGT) uygulanan olgularda elde edilen gebeliklerin, abortus, konjenital anomali ve gebelik prognozu yönünden değerlendirilmesi.

Yöntem: 2000 Temmuz ve 2001 Eylül döneminde infertilite nedeni ile yardımcı üreme teknikleri (YÜT) uygulanan 226 olguda endikasyonlar; ileri anne yaşı (38-45 yaş) (n=87), tekrarlayan implantasyon başarısızlığı (n=36), tekrarlayan erken gebelik kaybı (n=21), anormal gamet morfolojisi (n=34), translokasyon (n=12), kombine endikasyon (n=22), β-talasemi (n=1), ornitin transkarbomilaz eksikliği (n=1) ve marker kromozom (n=1) olarak dağılmakta idi.

Bulgular: 205 olguda 3. gün embriyosuna blastomer biyopsisi (%90.7), 21 olguda (%9.3) ise first ve second polar body biyopsisi yapıldı. 995 embriyoya biyopsi uygulandı. Kromozomal anomali oranı %42 olarak bulundu. En yüksek anomali oranı ileri anne yaşı olgularında izlendi (%47). Anormal embriyoların dağılımı Şekil 1'de gösterildi. Tablo 1'de ise PGT uygulanarak elde edilen gebelikler ve seyri gözlenmektedir.

Gebelik oranı %35.4 (218 embriyo transfer siklusunda toplam 75 gebelik elde edildi), abortus oranı ise %16 olarak değerlendirildi. Doğumla sonlanan 63 olgudan ikisinde ikinci düzey USG ile anomali saptandı (%3.1). İkiz olan ilk olguda fetuslardan birinde hipertrofik kardiyomyopati, gebeliğin termine edildiği ikinci olguda ise Fryns sendromu saptandı. Olguların amniosentez ile karyotipleri normal bulundu. Elde edilen gebeliklerin %57'si tek, %43'ü ikiz ve %3.3'ü ise üçüz gebelikti.

Sonuç: PGT, infertilite tedavisi uygulanan ve ilerlemiş anne yaşı, tekrarlayan erken gebelik kaybı, tekrarlayan implantasyon başarısızlığı ve anormal gamet morfolojisi bulunan olgularda artmış anöploid riskini



Şekil 1. Kromozomal olarak anormal bulunan embriyoların dağılımı.

elimine etmek, abortus insidansını azaltmak amacı ile başarılı olarak kullanılabilir. Çalışmamızda doğan bebeklerin hiçbirisinde incelenen kromozomlarla ilgili (13, 18, 16, 21, 22, X, Y) anomali bulgusuna rastlanmaması, yöntemin güvenilirliği açısından önemli bulunmuştur.

Tablo I. PGT sonuçları ve elde edilen gebeliklerin sayısı

No. of	n	%
Embryo transfer cycles	218	96.5
Cycles without normal embryos	8	3.5
Pregnancies	75	35.4
Abortions	12	16.0
Births	46	73.8
Ongoing pregnancies	17	14.3
Live births	61	
Singleton	29	57.0
Twins	13	43.0
Triplets	2	3.3

FCO42

ERKEN DOĞUM TEHDİDİ OLAN GEBELERDE SUBKLİNİK İNTRAUTERİN ENFEKSİYON TANISINDA MATERNAL SERUM İNTERLEUKİN-6 KONSANTRASYONUNUN ÖNEMİ

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Amaç: Erken doğum tehdidi olan gebelerde asemptomatik intrauterin enfeksiyonu saptamakta maternal serum interleukin-6 ölçümlerinin klinik önemini araştırmak.

Metod: 22-34 gebelik haftası arasında olan 61 gebede maternal serum IL-6 konsantrasyonları ölçülmüştür. Bunlardan 39'u erken doğum gösteren olgular, 22'si kontrol grubu idi. 1 hafta içerisinde doğum yapan ve tokolizin başarılı olmadığı 18 gebenin plasentaları histolojik koryoamnionit bulgularını araştırmak üzere patolojik analiz için gönderilmiştir.

Bulgular: 1 hafta içerisinde doğum yapan, tokolizin başarılı olmadığı ve pozitif histokoryoamnionit bulgular gösteren gruptaki ortalama maternal serum IL-6 konsantrasyonunun, tokolizin başarılı olduğu gruptan ve histokoryoamnionit bulguları olmayan fakat 1 hafta içinde doğum yapan diğer gruptan anlamlı derecede yüksek olduğu saptandı (sırasıyla 15 pg/ml'ye 2.88 pg/ml ve 6.40 pg/ml). Erken doğumu ve histolojik koryoamnioniti tahmin etmek için maternal serum IL-6 konsantrasyonlarının optimum sensitivite ve spesifite değerleri 5.9 pg/ml ve üzerinde saptanmıştır.

Sonuç: İntrauterin enfeksiyona bağlı preterm doğum yapan gebelerde maternal serum IL-6 konsantrasyonlarının çok yüksek olduğu saptanmıştır. Bu sitokinin ölçümü yüksek erken doğum riski olan gebelerin tanı ve tedavisinde faydalı olabilir.

FCO43

PREEKLAMPSİ VE HELLP SENDROMUNDA SPONTAN KARACİĞER RÜPTÜRÜ: DÖRT OLGU SUNUMU

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Amaç: Gebelikte nadir görülen spontan karaciğer rüptürü nedeni ile dört olgu retrospektif olarak incelendi.

Olgular: Kliniğimizde 1995 ile 2001 yılları arasında, yaşları 22, 27, 28 ve 35 olan dört olguda gebeliğin 35, 40, 37 ve 38. haftalarında karaciğer rüptürü saptandı. Tüm olgularda HELLP sendromu vardı, bir olguda eklampsi, üç olguda da preeklampsi eşlik ediyordu. İki olguda rüptür, sezaryen sırasında belirlen-

di. Bir olguda akut batın ve intraabdominal hemoraji tespit edilmesi üzerine laparotomi yapıldı, aynı se-
ansta sezaryen uygulandı. Bir olguda da sezaryenden 2 gün sonra intraabdominal hemoraji ve subkap-
suler hematoma saptanması üzerine relaparotomi yapıldı. İki olgu kaybedildi, bunlardan biri intraoperatif
masif kanama, diğeri postoperatif 6.gün DIC nedeniyle kaybedildi. Diğer iki olgudan birine hemostaz için
perihepatik sponjel, diğerine ise omentoplasti ve karaciğere primer sütür konuldu.

Sonuç: Spontan karaciğer rüptürü, geç gebelik döneminde nadir görülür, ancak olgularımızda olduğu gi-
bi anne ve fetus için mortalitesi yüksek olan bir komplikasyondur. En sık preeklampsi, eklampsi ve
HELLP sendromu zemininde gelişir. Tanısı geciken olgularda mortalite riski daha da artar. Preeklampsi,
eklampsi ve HELLP sendromu olgularında rutin karaciğer ultrasonografisi ile erken tanı konulabilir ve uy-
gun tedavi ile mortalite riski azaltılabilir.

FCO44

DİCLE ÜNİVERSİTESİ'NDE 10 YILLIK MATERNAL MORTALİTE

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Amaç: On yıllık sürede kliniğimizde tespit edilen maternal mortalite oranını ve ölüm nedenlerini belirle-
mektir.

Yöntem: Dicle Üniversitesi Tıp Fakültesi Kadın Hastalıkları ve Doğum Kliniğinde 1 Ocak 1993 ile 31 Ha-
ziran 2002 tarihleri arasında izlenen toplam 13481 gebede maternal mortalite oranı ile direkt ve indirekt
maternal mortalite nedenleri retrospektif olarak incelendi. Veriler klinik ve hastane kayıtlarından, hasta
dosyalarından ve ölüm tutanaklarından elde edildi.

Bulgular: Doğum kliniğinde takip edilen 11737 ve jinekoloji kliniğinde takip edilen 1744 gebeden 97'sin-
de maternal mortalite (yüzbinde 719) tespit edildi. Mortalite gelişen kadınlarda ortalama yaş 29.69±7.82
idi. Maternal mortalitenin %80'i direkt, %20'si indirekt nedenlerden oluşmaktaydı. Direkt nedenler içinde
en sık görülen sebep (%40) gebelikte hipertansif hastalık iken, ikinci sıklıkta gebelik kanamaları (%26),
üçüncü sıklıkta ise puerperal sepsis (%11) idi. İndirekt nedenler içinde en sık olarak kalp hastalığı (%6)
tespit edildi. Mortalitenin %98'ini komplike gebelikler oluşturmuyordu.

Sonuç: Maternal mortalite oranımız literatüre ve ülke geneline göre daha yüksektir. Hastanemizin refere
konumundan kaynaklanan bu durum, geçmiş yıllarla karşılaştırıldığında arada önemli bir farklılık gözlen-
memektedir. Birincil ve ikincil sağlık hizmetlerinin yetersizliği, acil olguların uygunsuz şartlarda ve geç
intikali, ayrıca yoğun bakım müdahale şartlarının yetersizliği maternal mortalite oranımızı artıran en
önemli sebeplerdir. Bölgenin sağlık sisteminin gözden geçirilmesi ve yeni sağlık politikalarının geliştiril-
mesi gerekmektedir.

FCO46

HEALTHY BABIES IN PREDICTABLE PREECLAMPSIA

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Objectives: Our aim was to predict extreme complications of Pregnancy Induced Hypertension (PIH) and
make adequate newborns.

Study Methods: In hard form of PIH we have made the test forms of day to day platelets, transaminases,
proteinuria, acidum uricum and precisely C reactive proteine (CRP) and fibronectine (FN). If terminati-
on of pregnancy is necessary, we have to made the artefital maturation of fetus lungs by giving dexa-
methasone directly to the fetus by interventional ultrasonography.

Results: From 75 women with PIH group, during last year, we have had 73% (55cases) of increased CRP
and decreased FN. All of these pregnancies were between 28. and 32. weeks of gestation. Blood preasu-
re was in upper optimal levels (120-140/75-80), ac uricum was high in 65%, and CRP and FN become

pathological before other parametres of preeclampsia. Looking after the doppler flow we have found high residual flow in arteria umbilicalis and intrauterine growth retardation in 80% cases. In 73% doppler shows higher cerebral resistance, and low biophysical profile (2-4)./ We have given dexamethason intramuscular to fetus directly in 3 acts, first, third and fifth day. We have made the positive effect of having alive neonatus in 70% (29-32 wg) from 850g to 1200g. Apgar score 2-5. In 25% we have had respiratory distress syndrome, and in approximately 5% we made earlier finishing of gestation, saving mothers life.

Conclusions: Using new test in predicting complication of PIH, PE, as FN and CRP are very usefull in combination of fetus therapy by dexamethason given directly to fetus.

FCO47

RESULTS AND CLINICAL OUTCOME OF PREGNANCIES AFTER PRECONCEPTION DIAGNOSIS IN 108 IVF CYCLES OF AMERICAN HOSPITAL

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Objective: Preimplantation genetic diagnosis (PGD) of aneuploidy was performed on embryos of 108 patients undergoing IVF with identification of either advanced maternal age, repeated implantation failures in IVF/ICSI or poor obstetric history usually in the form of recurrent abortion of no demonstrable cause or known genetic abnormality between April 2001 and June 2002.

Methods: For 108 ICSI/PGD/ET cycles, 586-day three embryos were biopsied and one blastomere from each was fixed for aneuploidy screening. MultiVysion PB (Vysis) hybridization kit was used for detection of chromosomes 13, 16, 18, 21, 22 and X, Y. Day five embryo transfer was performed for the embryos evaluated as normal.

Results: Of the 586 embryos 372 (65%) were found aneuploid and the remaining 205 (35%) embryos were evaluated as euploid, resulting in day five blastocyst transfer. The aneuploidy rates for chromosomes 13, 16, 18, 21, 22 and XY were as follows; 18%, 13%, 20%, 19%, 10%, 19%. A total of 141 embryos were transferred to 83 (77%) patients (mean 1.2; min: 1, max: 4). We achieved a positive pregnancy test on day 10 in 21 patients giving us a 19.4% pregnancy rate per cycle. Our clinical pregnancy rate per cycle and implantation rate per replaced embryo was 16.6% (18/108) and 12.7% (18/141) respectively. The ongoing pregnancy rate per PGD cycle was 11.9 (18/108) while five babies were delivered without any perinatal complications. All ongoing pregnancies were confirmed by prenatal diagnosis informing us that there was no misdiagnosis including the performed aneuploidy screening.

Conclusion: An increased pregnancy rate was achieved by PGD of aneuploidy in poor prognosis IVF patients and also this technique may be recommended to overcome the complications of multiple pregnancies of IVF treatment by selecting the euploid and good quality embryos, which enables to decrease the number of transferred embryos.

FCO48

EFFICACY OF MIPHIL®, AN ACIDIC VAGINAL GEL, ON pH AND IL-6 LEVELS IN PREGNANT WOMEN: A DOUBLE BLIND, PLACEBO-CONTROLLED TRIAL

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Background: Elevated vaginal Interleukin 6 levels (IL-6) and a vaginal pH >4,7 are associated with obstetric complications such as pre-term delivery and low birth weight. IL-6, an inflammatory cytokine, is a major mediator of the host response to inflammation and infection. High vaginal levels of IL-6 are detected during vaginal infections.

Study Aim: In a randomised, double blind, placebo-controlled trial, we evaluated the effects of Miphil®

(Mipharm, Milan, Italy), an acidic vaginal gel with high mucosal bioadhesivity, applied 2,5 g every three days, on vaginal pH and IL-6 levels in 70 "low-risk" pregnant (Ist trimester) women.

Methods: Vaginal pH and vaginal IL-6 were measured at baseline and after 12 weeks of treatment. Vaginal pH was measured in the lateral vaginal fornix using strip indicator papers. IL-6 was measured with a chemiluminescent immunometric assay. Vaginal pH at baseline was 4,6 and 4,4 in Miphil and placebo group, respectively.

Results: At week 12 vaginal pH was 4,3 in Miphil group and 4,3 in placebo group ($p=n.s$). Treatment with Miphil normalized vaginal pH (i.e. $pH < 4,5$) in three women in comparison with only one patient in placebo group. In comparison with placebo and baseline values, Miphil induced a significant ($p < 0,02$ Wilcoxon test) reduction of vaginal IL-6 levels (-61%).

Conclusions: The use of Miphil in "low-risk" pregnant women is able to maintain a "physiological" vaginal ecosystem and prevents the increases of vaginal IL-6. Prospective, large, and controlled trials are warranted to evaluate if this treatment can reduce obstetric complications linked to vaginal inflammatory and infective conditions.

FCO49

HELLP SYNDROME VERSUS SEVERE PREECLAMPSIA REMOTE FROM TERM

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Objective: We aimed to determine whether HELLP syndrome at ≤ 28 weeks of gestation is associated with an increased risk of maternal and fetal morbidity in comparison with the risk associated with severe preeclampsia without HELLP syndrome at a similar gestational age.

Material – Method: The medical records of 66 women being admitted to, High Risk Pregnancy Unit between 1996 – June 2001 with the diagnosis of either HELLP syndrome ($n=32$) or severe preeclampsia without HELLP syndrome ($n=34$) before ≤ 28 weeks of gestation have been evaluated retrospectively.

Results: The ultrasonographic gestational age at diagnosis, systolic blood pressure and hospitalization period were significantly different in two groups ($p < 0,05$). Nulliparity was more prevalent in HELLP syndrome group. The laboratory results were statistically different in two groups except for hemoglobin and fibrinogen results. There were no statistical difference in eclampsia complication, but the ratio of abruptio placenta and transfusion of blood products were significantly higher in HELLP syndrome group. The delivery weights and perinatal exitus were not statistically different in both groups.

Conclusion: It is recently shown in several reports that in the second trimester expectant management with aggressive monitoring of the status of both mother and fetus improves perinatal outcomes. On the basis of the data reported in the literature: given that the expectant management in women with severe preeclampsia without HELLP syndrome at < 32 weeks' gestation improves neonatal outcome, the results of this study raise the issue regarding expectant management in women with the HELLP syndrome developing before 28,0 weeks' gestation because perinatal and neonatal mortality and morbidity rates were statistically similar between the women with HELLP syndrome and those with severe preeclampsia.

FCO50

FETAL DUCTUS VENOSUS DOPPLER VELOCIMETRY IN INTRAUTERINE GROWTH RESTRICTION IN RELATION TO ADVERSE PERINATAL OUTCOME

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Objective : To investigate ductus venosus blood flow in growth restricted fetuses and to relate the Doppler results to perinatal outcome.

Methodology : A cohort study among 20 pregnant women clinically diagnosed as suffering from intrauterine growth restriction was conducted. Doppler velocity waveforms were recorded from fetal ductus

venous every two-week and the last results were evaluated in relation to mode of delivery, APGAR score, birth weight, fetal blood pH, length of hospitalization, NICU stay, and perinatal death.

Results : Doppler flow studies demonstrated evidence of reduced velocity in more than 90% of cases in terms of time average, peak systolic, peak diastolic, and A wave velocities among fetuses clinically diagnosed as intrauterine growth restriction. Reduced ductus venosus flow velocities were significantly correlated with low 1 minute APGAR scores, low birth weights, and fetal acidemia but were not significantly correlated with mode of delivery, length of hospitalization, and NICU stay. Lost and reversed A waves were recorded previously in two cases with perinatal death.

Conclusion : Reduced ductus venosus flow velocities are significantly correlate with the evidence of redistribution of oxygenated fetal blood flow and adverse perinatal outcome. Lost and reversed A wave are significantly correlate with high perinatal mortality rate.

FCO51

ANALYSIS OF 47145 DELIVERIES IN A TERTIARY CENTER: AN EPIDEMIOLOGICAL VIEW

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Objective: To evaluate the incidence of perinatal complication.

Material - Methods: Data of 47145 deliveries between 1 January 2000 and 1 January 2002 are presented in this retrospective study.

Results: Among the analysed population 2.7% were 18 years old or under and 6.4% were 35 years old or over; 46.8% women were nulliparous and 0.6% were grand multiparous. Abruptio of placenta was diagnosed in 0.3% of the patients. Preterm premature rupture of the membranes occurred in 1.2% and premature rupture of the membranes in 19.1%. Among the fetuses 5.6% were premature, 9.1% postmature and 7.2% intrauterine growth restricted. Induction of labor was performed by oxytocin in 8.8% and misoprostol in 2.7%. Maternal anemia (Hb<10g/dl) was detected in 11.4% and thrombocytopenia (<100000/mm³) in 1.1% of the women. Among the fetuses 96.5% were vertex and 3.5% were non-vertex presentation. Uterine rupture occurred in three cases. Spontaneous vaginal delivery was achieved in 77.3%; episiotomy was performed in 74.2%. The cesarean rate was 22.7% and 90.3% of the patients received spinal anesthesia. Third and fourth degree perineal tears occurred in 0.6% of the cases. Uterine atony was detected in 2.2%, 19 bilateral hypogastric artery ligation and 8 hysterectomies were performed. Analysis of the birth weight revealed that 1% were very low birth weight, 7.2% low birth weight, 4.8% macrosomic and 0.3% extreme macrosomic (≥4500g) fetuses. In 0.3% cases shoulder dystocia and in 0.1% cases clavicular fracture occurred. Analysis of the puerperal complication demonstrate 0.23% episiotomy sutures break-down, 0.1% post-cesarean sutures break-down and 0.1% retention of the placenta.

Conclusion: Steps to modernize obstetrics should be based on the analysis of the incidence and predisposing factors of complications in the target population.

FCO52

TWIN PREGNANCY COMPLICATED BY ACARDIAC FETUS: A CASE REPORT

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Background: Acardiac twinning (Twin reversed arterial perfusion sequence, TRAP) is a rare complication of multifetal gestation occurring 1% of monozygotic twin pregnancies or 1 in 35000 births. An abnormal vascular communication consisting of anastomoses between embryos leading to reversed flow of blood to the hemodynamically disadvantaged or recipient twin with the resulting secondary atrophy of the heart and dependent organs. Inadequate perfusion leads to characteristic anomalies including acardius and acephalus. The other twin "pump twin" is structurally normal but carries the risk of cardiac failure associated with a mortality rate of 50%. The larger the acardiac mass at birth, the greater was the

risk of adverse pregnancy outcome, particularly if the ratio of the weight of the acardiac twin to the pump twin exceeded 70%. In some cases a single umbilical artery or chromosomal anomaly in the acardiac twin may be present.

Case: We report acardiac twinning in a 12 weeks of multiple pregnancy. No fetal heart beat was recognized in one of the fetuses in a monochorionic diamniotic twin pregnancy. Absence of upper extremities and a small calvarium-like structure covered with massive edema in the same fetus provided the diagnosis. Termination of pregnancy was not approved by the patient. She is still under control for probable complications of this uncommon malformation of multiple gestation.

Conclusion: The diagnosis of acardius in multiple pregnancy with no fetal heart tone must be ruled out in every case so that proper counselling, management and avoidance of complications can be achieved. Elective termination, observation, (USG and cardiotocography), nonsurgical intervention for cardiac failure (Digoxin therapy), laser coagulation of the umbilical cord of acardiac fetus under sonoendoscopic control are presented to be therapeutic choices. Percutaneous umbilical cord ligation is another approach under trial. Another option of percutaneous intrafetal alcohol injection is found to be widely available, less invasive and simpler recently advocated endoscopic techniques.

FCO53

PRENATAL DIAGNOSIS OF GALEN VEIN ANEURYSMAL MALFORMATION:

A CASE REPORT

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Aneurysm of Galen vein is a congenital malformation diagnosed rarely representing less than 1% of cerebral arteriovenous malformations. Today with the advances in high resolution ultrasonography and color Doppler imaging, prenatal diagnosis is achieved easily. The perinatal prognosis seems to be invariably compromised when signs of cardiac decompensation develop prenatally. On the other hand fetuses with normal velocity waveforms and a low extent of the systemic shunt have a good extrauterine adaptation. In addition novel intravascular embolization techniques, placement of intraaneurysmal balloon and vascular microcoils provided a precise improvement in perinatal prognosis postnatally.

We report a case of Galen vein aneurysm detected at 33 weeks of pregnancy by color Doppler ultrasonography. Routine ultrasonographic examination demonstrated a large midline supratentorial cystic lesion associated with cardiomegaly first. A markedly turbulent flow pattern within the cerebral lesion detected by color Doppler ultrasonography revealed the diagnosis of Galen vein aneurysm. Fetal demise occurred at 35 weeks of pregnancy. Autopsy findings confirmed the diagnosis.

We suggest that color Doppler ultrasonography may assist in the diagnosis of Galen vein aneurysm and precisely delineate the complicated corresponding vasculature. This may guide the appropriate management and predict the fetal outcome accurately.

FCO54

MATERNAL MORTALITY IN LATVIA AND LITHUANIA

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Objective: Maternal mortality is an indicator of social backgrounds, economic status and quality of health care in the country. The aim of the study was to analyze maternal deaths in the Latvia and Lithuania and to look for the possibilities to reduce them.

Methods: Analysis based on the retrospective evaluation of all the maternal deaths during 1992-2001.

Results: Maternal death rate has decreased both in Latvia and Lithuania over the ten- year period: from 41.2 (in Latvia) and 44.4 (in Lithuania) per 100,000 births in 1992 till 25.4 and 11.4, respectively, in 2001. More than two thirds (65.5%) of maternal deaths in Latvia were due to direct reasons compared to 49.5% in Lithuania. The leading causes of maternal mortality were bleeding, abortion complications and embolism.

lism in Latvia compared to sepsis and pregnancy-induced hypertension in Lithuania. In both the countries advanced maternal age associated with chronic illnesses and increased parity were found to be risk factors for mortality.

Conclusion: Although maternal mortality rates have declined in Latvia and Lithuania during the past ten years, they are still higher than in the Western countries. The future improvements should focus on: 1) nationally established guidelines for diagnosis and management of obstetric emergencies, 2) organization of medical care in every obstetric unit including consultant availability, 3) increase in patient's responsibility for health, 4) education of medical staff.

FCO55

VITAMIN B12 AND FOLATE LEVELS OF PREGNANT WOMEN IN ŞANLIURFA

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Objective: Şanlıurfa is socioeconomically less developed city of Turkey and the dietary habits were different from the other geographic parts of the country. The aim of this study was to find out folic acid (FA) and vitamin B12 (B12) deficiency among pregnant women in this region.

Methods: Setting of the study was Department of Obstetrics and Gynecology of Harran University Hospital between June 2001 and June 2002. This study was prospectively designed. 243 pregnant women were studied during their first prenatal visit (average 20 weeks' gestation). The mean age of the pregnant was 26.7 (SD 4.7) years. The samples were analyzed for serum FA, B12 and Complete Blood Count (CBC). Serum levels of B12 and FA were assessed by RIA method. Pearson correlation analysis and SPSS 11.02 for Windows were used for statistical analyzes.

Results: Mean values for serum FA and B12 levels were 13.15 ng/ml and 246.90 pg/ml respectively. Among 243 cases, B12 deficiency (< 200 pg/ml) in 80 cases (35.9%), FA deficiency (< 3 ng/ml) in 1 case (0.4%) and intermediate FA (3-4 ng/ml) in 1 case (0.4%) was detected. There was a significant positive correlation found between Hemoglobin (Hb) and B12 ($r: 0.163$, $p=0.015$) and a highly significant positive correlation between Hb and Red blood cell Distribution Width (RDW) ($r=-0.388$, $p=0.000$).

Conclusion: The incidence of B12 and FA deficiency in Şanlıurfa is unknown. Recent evidence suggests that the deficiency of B12 but not for FA is commoner than we thought.

FCO56

BIOCHEMICAL ENVIRONMENT OF FETAL DEVELOPMENT IN THE MECONIUM STAINED AMNIOTIC FLUID. I-GLUCOSE, BILIRUBINE, OPTICAL DENSITY, H+ IONS, ESTROGENS AND PLACENTAL LACTOGEN

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Objective: The aim of the study was to evaluate the influence of the presence of meconium in amniotic fluid on the concentrations of chosen biochemical parameters: glucose, bilirubine, H⁺ ions, estrogens and placental lactogen. The optical density at 570 and at 650 nm was also estimated as a good clinical indicator of fetal's lungs maturity.

Methods: The study covered 82 pregnant women: 54 with the meconium stained amniotic fluid (the study group) and 28 with the clear (physiological) amniotic fluid (the control group). The women in both group were at the same gestational age : $39,1 \pm 2,48$ vs $39,2 \pm 2,37$ weeks (NS). There were similar percentages of various pathologies in both groups: diabetes 11% vs 13% (NS), intrahepatic cholestasis of pregnancy 25% vs 20% (NS), pregnancy induced hypertension (PIH) 21% vs 18% (NS) and healthy women 43% vs 49% (NS). The amniotic fluid was collected by the ultrasound guided abdominal amniocentesis.

The indications for the amniocentesis were: fetal death in anamnesis, the necessity of the evaluation of the fetal maturation and its condition before an elective cesarean section. The following biochemical parameters were evaluated: glucose, bilirubine, optical density at 570 and at 650 nm, H⁺ions (measured as titrate acidity of urine), total estrogens and placental lactogen.

Results: It was observed: 1) glucose 0,97 \pm 0,32 vs 1,91 \pm 0,83 mmol/l ($p < 0,001$); 2) bilirubine 8,55 \pm 6,55 vs 1,81 \pm 1,16 μ mol/l ($p < 0,001$); 3) optical density at 570nm – 0,788 \pm 0,389 vs 0,358 \pm 0,294 ($p < 0,001$); 4) optical density at 650 nm – 0,502 \pm 0,250 vs 0,228 \pm 0,163 ($p < 0,001$); 5) H⁺ions – 0,322 \pm 0,307 vs 0,264 \pm 0,201 (NS); 6) total estrogens 1754,7 \pm 682,3 vs 2367,9 \pm 381,4 mmol/l ($p < 0,0001$) and 7) placental lactogen 1282,0 \pm 695,4 vs 2688,5 \pm 616,1 ng/ml ($p < 0,0001$).

Conclusion: Low concentration of glucose, total estrogens and placental lactogen indicates the risk of intrauterine fetal death. H⁺ions concentration shows that the fetal's kidneys in pregnancies with the presence of meconium in amniotic fluid were as matured as the fetal's kidneys in the control group. Because of the presence of meconium in amniotic fluid it's impossible to evaluate the fetal's lungs maturity by using the optical density.

FCO57

RENAL FUNCTION IN WOMEN WITH ASYMPTOMATIC (ISOLATED) ROTEINURIA IN LATE PREGNANCY

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Objective: This study was conducted to analyze the renal function in women with asymptomatic (isolated) proteinuria in late pregnancy.

Methods: The study covered 45 women with asymptomatic proteinuria in late pregnancy (the study group) and 136 healthy women (the control group). Proteinuria was 2,02 \pm 1,95 vs 0,2 \pm 0,3 g/24 hours. Moreover, the women in both groups were at the same mean age: 27,6 \pm 6,17 vs 28,1 \pm 6,54 years (NS). The women in both group were also at the same gestational age: 37,6 \pm 2,62 vs 37,1 \pm 2,15 (NS). Body mass index (BMI) before pregnancy was 23,8 \pm 2,79 vs 22,5 \pm 2,60 ($p < 0,05$). BMI before labor was 29,9 \pm 3,8 vs 27,7 \pm 2,8 ($p < 0,01$). On average, BMI increased 24,5 \pm 9,7% vs 24,1 \pm 7,0 (NS). Mean arterial blood pressure was 123,0 \pm 15,4/76,1 \pm 12,0 mmHg vs 115 \pm 6,0/68,0 \pm 7,0 mmHg ($p < 0,01$ and $p < 0,01$). Three women in the study group presented lower extremities edema (6,67%). Moreover, all women included in the study had no urinal tract infection (no bacteriuria present, leucocyturia within normal limits). Laboratory tests revealed hypoproteinemia 58,0 \pm 5,0 vs 67,0 \pm 6,0 g/l ($p < 0,001$) and hypoalbuminemia 443,4 \pm 58,0 vs 522,0 \pm 87,0 μ mol/l ($p < 0,001$). All women included in the study have had measured their serum concentrations of: uric acid (UA), urea (U), creatinine (Cr), electrolytes Na⁺, K⁺, Cl⁻, and Fe⁺⁺, osmolality (which was measured also in urine), and blood morphology parameters.

Results: We observed - UA 26,7 \pm 7,9 vs 19,5 \pm 3,6 μ mol/l ($p < 0,001$), U 4,83 \pm 1,91 vs 3,32 \pm 0,83 mmol/l ($p < 0,001$), Cr 85,7 \pm 12,3 vs 66,3 \pm 4,42 μ mol/l ($p < 0,001$), Na⁺ 140 \pm 2,2 vs 138 \pm 5,0 ($p < 0,001$), K⁺ 4,37 \pm 0,37 vs 4,20 \pm 0,2 ($p < 0,01$), Cl⁻ 109,5 \pm 2,4 vs 105 \pm 4 mmol/l ($p < 0,001$), Fe⁺⁺ 22,0 \pm 6,1 vs 16,4 \pm 2,2 μ mol/l ($p < 0,001$), osmolality in serum 282,8 \pm 3,7 vs 282,1 \pm 3,4 (NS), in urine 650 \pm 185 vs 720 \pm 150 mOsm/kgH₂O (NS), Hb 7,41 \pm 0,7 vs 7,41 \pm 0,68 mmol/l (NS), erythrocytes 3,94 \pm 0,36 vs 4,0 \pm 0,35 $\times 10^9$ /l (NS), leucocytes 10,7 \pm 2,9 vs 10,8 \pm 2,0 $\times 10^9$ /l (NS), hematocrit 33,1 \pm 3,25 vs 35,0 \pm 3,0 % ($p < 0,01$), platelets 198,6 \pm 46,9 vs 210,0 \pm 5,0 $\times 10^9$ /l (NS).

Conclusion: We observed moderate pathological changes in renal function in women with asymptomatic (isolated) proteinuria in late pregnancy.

FCO58

PLACENTAL APOPTOSIS IN POSTTERM PREGNANCIES AND ITS IMPACT ON NEONATAL OUTCOME. PPRELIMINARY RESULTS

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Objective: To determine whether postterm pregnancy is associated with an increase in placental apoptosis and its impact on neonatal morbidity and mortality.

Methods: A prospective study was conducted among postterm singleton pregnancies without any maternal systemic disease from January 2000 to May 2002. Maternal age, gestational age at birth, mode of delivery, presence of meconium, 1st and 5th minute Apgar scores, neonatal birth weight, umbilical artery pH and neonatal outcome were evaluated.

Results: Out of 3622 deliveries, 51 (1.4%) of them were postterm. Mean maternal age was 22.5 ± 3.1 . Gestational age was 40 weeks 6 days in 20 patients, 41 weeks 6 days in 24, 42 weeks 6 days in 5 and 43 weeks 6 days in 2 patients. Out of 51 pregnancies, 37 (72.5%) had spontaneous and 14 (27.5%) had induced labor. Mode of delivery was vaginal in 40 (78.4%) patients. Eleven patients had cesarean section for intrapartum fetal distress. Mean neonatal weight was 3219.6g. Thin meconium was detected in 12 pregnancies. Neonatal morbidity and mortality were not detected.

Bax and Bcl-2 expressions were assessed as mild (+), moderate (++) and severe (+++) and were evaluated in 20 patients. Seven of these patients had 40 weeks 6 days of gestation, 7 had 41 weeks 6 days, 5 had 42 weeks 6 days and 1 patient had 43 weeks 6 days of gestation. Decreased Bcl-2 expression was detected as gestational age progress suggesting excessive placental aging.

Conclusion: Although Bcl-2 expression was continued to decrease as gestation progress, it might not have an adverse effect on neonatal outcome.

FCO59

PRIMARY UPJ-TYPE FETAL HYDRONEPHROSIS: PRENATAL APPROACH AND OUTCOME

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Objective: To determine the outcome of primary UPJ-type fetal hydronephrosis followed and/or managed antenatally and postnatally.

Methods: Thirty-four fetuses (51 kidneys) with antenatally diagnosed primary UPJ-type hydronephrosis between September 2000 and August 2002 were prospectively followed. Antenatal standard ultrasound (SUS) and diuretic Doppler US (DDUS) were used for diagnosis and follow-up of these patients. Prenatal intervention was performed in some of persistent grade 4 (SFU) hydronephrotic kidneys of renal pelvic AP diameter greater than 35 mm, with no improvement in serial antenatal SUS and/or DDUS, and with renal dysplasia findings in fetal urine sample, particularly bilateral ones.

Results: Boy/Girl: 26/8. Antenatal diagnosis was made at 28 gestational weeks. All had normal amniotic fluid including bilateral one. All delivered full term. The mean birth weight was significantly lower in patients with grade 4 compared to grade 3 or less patients. Forty-one kidneys were managed with non-operative approach. Surgery was required in 10 kidneys. The degree of hydronephrosis decreased in none of the kidney with grade 4 in antenatal and postnatal period. Prenatal renal pelvic needling in four kidneys and pelvianniotic shunting in three kidneys associated with persistent grade 4 hydronephrosis (AP diameter greater than 35 mm) were performed.

Conclusion: This series may help in describing the natural history of fetal hydronephrosis. Close follow-up with DDUS in antenatal period may help to identify the subgroup of children who develop obstruction and who need prenatal intervention. Oligohydramnios is likely to be a late complication of renal dysplasia. Therefore, it might not be used as a certain criteria for prenatal intervention. In fact, it may cause a delay in prompt management of severe obstruction.

FCO60

THE ROLE OF PRENATAL INTERVENTION IN OBSTRUCTIVE UROPATHIES

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Objective: To determine the benefits and risks of prenatal intervention in obstructive uropathies.

Methods: Seven fetuses who underwent 10 prenatal interventions because of a fetal obstructive uropathies between September 2000 and July 2002 were prospectively reviewed. In addition, 7 fetal anomaly cases who followed with no prenatal intervention were reviewed as a control group. The antenatal diagnosis of fetal anomalies was made using prenatal standard ultrasound and diuretic Doppler ultrasound.

Results: Of the 7 fetuses underwent prenatal intervention, 6 had grade 4 UPJ-type obstruction of pelvic diameter greater than 35 mm and one had PUV. Serial renal pelvic needling on 6 fetuses with UPJ-type obstruction and serial vesical needling on fetus with PUV were performed. Urinary system filled up in following day after serial needlings in all fetuses. None of these severe obstructive uropathies resolved/regressed either spontaneously or by needling. Pelviamniotic shunt was placed into three kidneys (one bilateral) with grade 4 UPJ-type obstructions of pelvic diameter greater than 35 mm. Six out of 7 fetuses who underwent prenatal intervention were delivered healthy at term by normal vaginal delivery. All of these patients underwent successful surgery postnatally. The fetus with PUV was terminated with the request of the family before 20 weeks' gestation.

Of the control fetuses, 4 had grade 4 UPJ-type obstruction, one PUV, one ureterocele, and one had complete prepuccial obstruction. Of these 7 control fetuses, 6 was delivered healthy at term by normal vaginal delivery, while one was terminated with the request of the family before 20 weeks' gestation. After delivery, although all of these 6 neonates underwent successful surgery early postnatally, three had differential renal function (GFR) less than 15 at the diseased kidney.

Conclusions: If not treated timely and properly, irreversible renal damage may develop in fetuses with severe obstructive uropathies. Prenatal needling seems not sufficient and may not be beneficial in such cases. Prompt prenatal shunting may be beneficial in fetuses with severe anatomic urinary obstruction. It may improve postnatal outcome of such cases by preventing irreversible damage prenatally. Such an approach, with experience, seems safe, minimally invasive and beneficial in preserving the growing kidneys in selected cases.

FCO61

CONGENITAL CYTOMEGALOVIRUS INFECTION: HEMATOLOGICAL EVOLUTION IN NEWBORN INFANTS TREATED WITH GANCICLOVIR

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Objective: To verify the hematological evolution of newborns with congenital cytomegalovirus infection treated with Ganciclovir and two type of regimens. **Methods:** From January 1998 to December 2000, we studied 24 neonates with symptomatic congenital cytomegalovirus infection (CMV) that were admitted to the Neonatal Intensive Care Unit (NICU). The newborns were classified into two groups: 14 neonates were given an initial treatment course of 7.5 mg/Kg twice daily for three weeks, then a maintenance course of 10 mg/Kg three times a week for 3 months (Nigro 1994) (group A) and 10 neonates received 7.5 mg/Kg twice daily for three weeks (group B). Criteria for eligibility were: signs and symptoms compatible with a congenital infection from whom a specimen of urine and blood could be taken in the first 21 days of life. **Results:** In group A the CMV cultures and CMV DNA of specimens from eleven infants (80%) became sterile. In group B, five infants (50%) had negative CMV culture and CMV DNA results. The clinical features in group A included hepatomegaly (92.8%), splenomegaly (64.2%), anemia (57.1%), jaundice (55%) and petachial rash (55%). Hematological results are shown below: table 1 and table 2.

Table 1 - Group A median values

Ganciclovir treatment	Before	During	After
Hemoglobin (g%)	12.5	10.7	12.1
Neutrophils (mm3)	4258.5	3378	3215*
Platelets (mm3)	63250	272000	175006

Table 2 - Group B median values

Ganciclovir treatment	Before	During	After
Hemoglobin (g%)	11.4	10.6	10.2
Neutrophils (mm3)	4700	4079	526*
Platelets (mm3)	72750	130233	18006

Conclusions: The authors concluded that the newborn infants that had been treated with Ganciclovir for a period of 3 months (group A) presented hematological evolution better than the group that was treated for a period of three weeks (group B) and the majority of newborn infants from group A showed CMV culture e CMV DNA negative shortly after the treatment. It is safe to assume that patients submitted to a prolonged treatment with Ganciclovir respond far better than the ones treated over a shurter period.

FCO62

INCIDENCE OF RESPIRATORY VIRUSES IN PRETERM INFANTS SUBMITTED TO MECHANICAL VENTILATION

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Objectives: 1.To verify the incidence of infection by respiratory viruses in preterm infants submitted to mechanical ventilation. 2.To evaluate the clinical, laboratorial and radiological patterns of viral infections among hospitalized children in the Neonatal Intensive Care Unit (NICU) with respiratory failure. Methods: Seventy preterm infants were studied prospectively from November 2000 through July 2002. All neonates had the following protocol investigations: clinical, radiological and laboratorial data, including specific exams for respiratory viral pathogens: indirect immunofluorescence assay (IFA) with monoclonal antibodies and viral culture from nasopharyngeal aspirates. The presence of respiratory viruses in children's nasopharyngeal was assessed at admission in the NICU and throughout the mechanical ventilation period. Blood culture was used for bacterial investigation. Results: Respiratory viruses were diagnosed in 20 preterm neonates (28.6%) with respiratory failure and that were submitted to mechanical ventilation. The most common admitting diagnose was hyaline membrane disease 18 (90.0%). Respiratory syncytial virus was detected in nine neonates (12.8%), Influenza A virus in eight (11.4%), Respiratory syncytial virus plus Influenza A virus in two (2.8%), and Influenza A virus plus Parainfluenza virus type 3 in one infant (1.4%). Most of the neonates with viral infection had the following characteristics: female 14 (70.0%), with average gestational age of 32.5 weeks (range 27.5-36.5 weeks) and with average birth weight of 1553 g (range 830-3050 g). The average age of hospital admission was 13 days of life (range 1-33 days). The main risk factors were: no breast feeding (p=0.022) and family history of respiratory infection (p=0.046). The most frequent clinical signs were: cyanosis in 17 cases (85.0%); fever in 10 (50.0%); rhinorrhea, wheezing and apnea in eight (40.0%); bradycardia in six (30.0%); and vomiting plus diarrhea in four neonates (20.0%). Eighteen neonates (90.0%) developed pneumonia during hospitalization while six infants (30.0%) presented sepsis. Respiratory viruses were associated to bacteria in six cases (30.0%). An alveolar infiltrate was present in 13 (72.2%), an interstitial infiltrate in five (27.8%) and atelectasis in 11 (61.1%) of the 18 patients with pneumonia. The average duration of mechanical ventilation was 17 days (range 1-96 days). From 20 preterm neonates with viral infection, only one unfortunately died. Conclusions: Although the majority of viral respiratory infections have a benign clinical co-

urser, some patients can present a serious clinical picture, mainly when the respiratory viruses involve preterm newborns. It is important to emphasize the need for early etiological diagnosis of these infections in order to choose the appropriate therapeutics and control the spread of the viral pathogens within the neonatal units.

FCO63

PRELIMINARY REPORT ON A NEW AND NONINVASIVE METHOD FOR THE ASSESSMENT OF FETAL LUNG MATURITY

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Object Several patterns of fetal breathing movements (FBMs) i.e., abdominal wall movements (AWm), thoracic wall movements (TWm), nasal fluid flow velocity waveforms (NFFVW) were investigated by ultrasound (US) technology and related to fetal pulmonary maturity and immaturity, i.e., fetal lung maturity (FLM) tests in order to validate the hypothesis that they may indicate that the fetal lung is mature or immature, regardless of gender, weight and gestational age.

Material and Methods We prospectively enrolled 143 high-risk pregnancies in which a complete US study of FBMs and FLM tests were performed. Among them 43 women satisfied the inclusion criteria. US-FLM was defined as the presence of regular NFFVW detected by pulsed Doppler and spectral analysis, or irregular NFFVW synchronous with TWm detected by M-mode. An US guided amniocentesis was performed in order to collect amniotic fluid (AF) and FLM was evaluated by L/S (lecithin/sphingomyelin) determination, presence phosphatidylglycerol (PG) and lamellar bodies (LBs) count. At the end of the study diagnostic accuracy of US-FLM was compared with that of FLM tests.

Results Diagnostic accuracy for US evaluation of FLM was as follow: sensitivity: 89,6%; specificity: 85,7%; PPV 92,8%; NPV: 80%. Diagnostic accuracy of FLM tests was as follow: sensitivity: 100%; specificity: 51,7%; PPV 100%; NPV: 50%. L/S determination predicted lung maturity with a sensitivity of 100%; specificity 93,1%; PPV 100%; NPV 87,5%.

Conclusion Presence of regular NFFVW or irregular NFFVW and TWm correlate accurately with conventional FLM tests.

We suggest that this noninvasive procedure may be helpful to assess FLM, particularly under certain circumstances, e.g., oligo-anhydramnios, laboratory logistic equipment difficulties or heavily stained AF samples, amniocentesis refusal, religious concerns.

FCO64

NONINVASIVE DIAGNOSIS BY DOPPLER ULTRASONOGRAPHY OF FETAL ANEMIA DUE TO PARVOVIRUS INFECTION

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Objective: To evaluate the feasibility of the middle cerebral artery peak systolic velocity in the detection of fetal anemia in pregnancies complicated by parvovirus B 19 infection.

Study design: Doppler measurements of the middle cerebral artery peak systolic velocity were weekly performed in 32 fetuses at risk for anemia because of maternal parvovirus infection documented by the presence of IgM. The values of middle cerebral artery peak systolic velocity and hemoglobin were expressed as multiples of the median. Middle cerebral artery values were scattered on reference ranges previously established. A cordocentesis was performed either in presence of fetal ascites or when the middle cerebral artery peak systolic velocity values suggested moderate/severe anemia (middle cerebral artery peak systolic velocity > 1.50 multiples of the median).

Results: Gestational age at study entry ranged from 15.1 to 37 weeks. In sixteen patients the middle cerebral artery peak systolic velocity was below 1.50 MoM and there was no sign of hydrops (Group 1). The fetuses of this group did not have any complications and did well at birth. Group 2 included thirteen fetuses that showed both, an elevated value of middle cerebral artery peak systolic velocity and ascites, and three fetuses who had an elevated value of middle cerebral artery peak systolic velocity. In Group 2, one fetus was mildly anemic, and 15 were severely anemic. The sensitivity of peak systolic velocity for the prediction of anemia because of parvovirus infection was 94.1 %; with a false negative rate of 5.8 %. There were no false positive cases and the positive and negative predictive values were 100% and 93.7%, respectively.

Conclusions: Fetal anemia due to parvovirus infection can be detected noninvasively by Doppler ultrasonography on the basis of an increase in the peak velocity of systolic blood flow in the middle cerebral artery.

FCO65

CHANGES IN SPIRAL ARTERY IN NORMAL PREGNANCIES: DOPPLER STUDY

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Objectives: The aim of the study was to determine the pulsatility and resistance index of spiral arteries during first and second trimester of pregnancy.

Design: Two-hundred and twenty-five normal pregnancies were included in this longitudinal study. Abdominal ultrasonography with colour doppler was performed at following gestational age periods: 10 to 14 weeks and 20 to 25 weeks. Pulsatility and resistance index of spiral arteries were obtained.

Results: In the spiral arteries pulsatility and resistance index did not change between the week 11, 12, 13, 14, and between the week 20, 21, 22, 23, 24, 25 but these index did change from the period of 10-14 weeks to 20-25 weeks. A significant decrease in mean pulsatility index with increasing gestational age was noted (0,63 to 0,48; $r=0,1817$; $p<0,001$) and also in mean resistance index significantly decrease with advancing gestational age (0,45 to 0,37; $r=0,2135$; $p<0,001$).

Conclusion: This study revealed a correlation between the pulsatility index or resistance index of spiral arteries and gestational age.

FCO66

ULTRASON BULGULARIYLA FETAL MATÜRASYONUN DEĞERLENDİRİLMESİ

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Ultrason ile gestasyonel yaşın belirlenme keskinliği ilk trimestrede 3- 5 günlük hata payı ile olurken 2. ve 3. trimestrede bu hata payı gittikçe artmakta ve biometrik ölçümlerden sınırlı klinik destek alınabilmektedir. Bu haftaların net olarak saptanmasında fetal biyometri yanısıra fetusun fonksiyonel değişimlerini inceleyerek özellikle 3. trimestrede saptanan fetal matürasyon bulguları araştırılmıştır. Ultrasonda bu parametrelerin değerlendirilmesi obstetrisyene ek bilgiler sağlayacaktır.

Dizde ossifikasyon merkezleri:

Distal Femoral Epifiz 28. haftadan önce görülmez, 34. haftadan sonra % 94 fetusta saptanır. PTE 34. haftadan önce görüntülenemez, 35. haftada %35, 37. haftada %80, 39. haftada %100 görülür.

Fetal Akciğer Matürasyon Bulguları:

Gelişiminin ultrasonografik değerlendirilmesinde karaciğer ile ekojenite farklılıklarına bakılır. Fetal akciğer daha ekojeniktir. Fetal akciğer histogramlarında matürasyonu gösterecek bulgular saptanmıştır.

İntestinal Matürasyon Bulguları:

Kolon ekosu gebelikteki değişiminde mekonyumun kolondaki miktarının artması ve su oranının azalması rol oynar.

Grade 1: Kolon içeriğinin ekosu mesane ve mideyle uyumludur.

Grade 2: Kolon ekosu mesane ve mideden fazla, karaciğerden azdır.

Grade 3: Kolon içeriğinin ekosu karaciğerinkiyile aynıdır.

29. haftadan öncekilerin % 82' sinde Grade 0,

39 haftadan sonraki fetusların %85' inde Grade 3 olarak görülür. Haustra 30. haftadan sonra görülmeye başlanır. Kolon kalınlığının 10 mm. den fazla olması akciğer matürasyonu ile korele bulunmuştur.

İnce Barsak Peristaltizmi:

Erken peristaltizm 3 saniyeden kısa geçici hareketlerdir. Miada yaklaştıkça artar ve süreklilik gösterir.

Grade 1 hareketler 29. haftadan önceki gebeliklerin % 88' inde, Grade 3 ise 37 haftadaki gebelerin % 80' inde görülür.

FCP1**THE EFFECT OF GLUCOCORTICOID THERAPY ON PREVENTION OF EARLY NEONATAL COMPLICATIONS IN PRETERM LABORS****Madarek E. O. S., Seidhejazie M., Najati N.,** *Tabriz University of Medical Sciences, Tabriz – Iran*

Objective: Premature birth is the single largest cause of perinatal mortality and morbidity in non anomalous infants in all developed nations. The aim of this study is to survey the role of glucocorticoid therapy in decreasing the early neonatal complications in preterm labors.

Methods : This case control study has been carried out on 300 preterm labors which half of them received one to four doses of dexametasone 6 mg every 6 hours depending on the interval between admission untill delivery. Neonatal complications were comparised in two groups.

Results: The most effectiveness of corton therapy on prevention of respiratory distress and neonatal mortality was observed in 29-34 gestational weeks and 700-1600 gr weights. There was a meaningful relation between corton doses and starting time with mortality of preterm neonates. Complications such as severe respiratory distress, sepsis, pnunomia, hyperbilirubinemia, were significantly lower in case group than control.

Conclusion: It is recommended that all women high risk for preterm labor before 35 gestational weeks should receive corton at least 48 hours before delivery to reduce remarkably neonatal mortality and morbidity.

FCP2**HERPES SIMPLEX VIRUS (HSV) INFECTION DIAGNOSIS, CLINIC AND OUTCOME IN NEWBORNS****Uberi E., Zhvania M., Uberi N.,** *Tbilisi State Medical University - Georgia*

A significant increase of frequency of congenital infections has been widely observed in these last decades. The rising process was due to development of the newest, sensitive diagnostic methods, widened scope of researched agents and increased number of infected fertile age woman, who may cause fetus congenital infection.

The aim of our research was to diagnose the HSV infection in newborns, to reveal clinical-immunological, echographic specifications and it's outcome. Screening on HSV infection was performed by detection of specific anti-HSV IgM antibodies by ELISA method. Positive ELISA results was considered to correspond to the primary HSV infection. 45 newborns 0-1 months of age with primary HSV infection were included in the study group. Among these infants 38 had generalized form, while 7 had CNS form of HSV infection. According to bacteriologic data patients were divided into two groups: first group included 19 infants with HSV mono-infection, while the second group included 26 infants with mixed infection. Associated bacterial pathogens were represented both by Gram-positive and Gram-negative bacteria and fungi. Almost all infants ((75%) with HSV infection had hepatomegaly with moderate hiperbilirubinemia, 17% of them diagnosed fetal hepatitis under prolonged and intensive jaundice of skin and mucose. 30% had splenomegaly. Respiratory system pathology as a pneumonia observed in 63% of patients. In majority of them pneumonia was prolonged and complicated, almost always developing disseminated blood clotting syndrome. Clinical symptoms of various stages CNS pathology were noted in all patients, posthypoxic-ischemic encephalopathy were diagnosed to all of them. All these symptoms and syndromes were much more severe and frequent in the group of mixed infection. All patients with HSV underwent polytherapy including antiviral treatment (Aciclovir) on the background of immune, wide spread antibiotic and symptomatic therapy.

FCP3

ETIOLOGICAL ASPECTS AND IMMEDIATE OUTCOME IN INFANTS OF BIRTH WEIGHT 500 TO 1499 g: A REGIONAL STUDY

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Prematurity is by far the most important problem in modern perinatal medicine. Preterm birth remains a leading cause of perinatal mortality and morbidity.

The aim of this research is to examine the etiological aspects and immediate outcome of 555 very low birth weight (VLBW) infants < 1500g delivered in the period of the three years, from the beginning of 1998 to the end of 2000, in Skopje. From the total number of 555 (100%) VLBW infants included in the study 201 (36.2%) had a birth weight of 500-999g and 349 (62.9%) had a birth weight of 1000-1499g. The remaining 5 (0.9%) were without response. The gestational age noted at 492 (100%) VLBW was as follows: 168 (34.2%) were born in 22-27 gestational week (GW), 190 (38.6%) in 28-32 GW, 53 (10.8%) in 33-36 GW, 16 (3.2%) in 37> GW and 65 (13.2%) unknown. The percentage of VLBW < 1500g was increased from 31.4% to 41.2% in relation to the total number of premature infants delivered in the same period. The most frequent etiological reason of preterm labor and pPROM was genital tract infection at 24.3% of the mothers; 1.2% were with eclampsia, 21.1% were without complications. Neonatal morbidity included: respiratory distress (RDS) 47.3%, perinatal asphyxia 19.1%, septicemia 16% and intraventricular hemorrhage (grade III) 18.7%. Survival was: 27.8% in 22-27 GW, 58.1% in 28-32 GW and 84.7% in 33-36 GW. Ventilator support and therapy with surfactant was undertaken in ICU, in Clinic for Child Diseases. According to the age of deceased infants the highest mortality was detected the first day 79.3%, whereas from 2-7 day 19.6%.

Challenges for the future include improvement in antenatal care and accurate documentation of antenatal disturbances. According to our data for the causes of VLBW infants delivery, as well as high mortality and morbidity and unpredictable prognosis, a national program for prematurity prevention should have highest priority in the future.

FCP4

NEUROSONOGRAPHIC RESEARCH DATA IN HEREDITARY DYSMETABOLIC DISORDERS OF THE CNS

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Proper and timely diagnosis of hereditary dysmetabolic disorders makes it possible to conduct pathogenic treatment and what is more important, provide medicogenetic consultation. 20 patients aged from 3 months to 1 year have been investigated.

Biochemical study is the most significant method, but here we pay more attention to brain disontogenesis, as in combination with primary biochemical defect it may cause mental deficiency, paralysis and epileptic seizures.

Results were divided into 3 groups. In first group (3 cases) neurosonographic data did not indicate any significant pathology. In group 2 (5 cases)-data pointed to chiefly perinatally conditioned pathologies. In group 3 (12 cases) was revealed varieties of brain disontogenesis: 2 patients with structure abnormalities of hippocampus convolutions and nucleus caudatus; 3 cases of Reil's island anomaly; 2 cases of septo-chiasmatic dysplasia; 2 patients with agenesis of corpus callosum; 1 cases of Dandy-Walker syndrome and 2 patients with hemimegalencephalia. In every patient of group 3 genetic dysmetabolism was diagnosed. Proving the supposition that brain disontogenesis is a frequent attendant to genetic enzymopathies, though is not obligatory for them.

FCP5

PHYSIOLOGICAL, HORMONAL AND METABOLIC RESPONSES TO A SINGLE MIDAZOLAM DOSE IN INTUBATED AND VENTILATED PRETERM NEONATES

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Objective: To determine the response of ventilated preterm neonates to a single dose of midazolam given before intubation.

Methods: In a prospective, randomized, placebo controlled trial 20 mechanically ventilated preterm neonates (<36 weeks) were studied before medication and intubation and 60 minutes after administration of midazolam or placebo. Patients were eligible if they required intubation and ventilatory support within 12 hours after birth. Exclusion criteria included major congenital anomalies, perinatal asphyxia and receiving analgesics and sedatives. Physiological responses recorded during each period were heart rate, arterial blood gases, ventilator settings. As metabolic and hormonal parameters, blood glucose and serum cortisol levels were measured before and 60 minutes after administration of midazolam as metabolic and hormonal parameters.

Results: In the study group, before intubation all patients had respiratory insufficiency measured in blood gases. Infants characteristics, blood glucose and serum cortisol levels were similar for the neonates who randomly were given midazolam and placebo. All infants presented high basal levels of cortisol before any medication, which indicated the presence of stress (in the midazolam group: 793.5 ± 857.6 , placebo group: 1956.9 ± 2026.1 nmol/L). In the midazolam group, patients had significantly lower levels of serum cortisol after administration of midazolam compared to the basal levels (740.8 ± 378.5 vs 793.5 ± 857.6 nmol/L). In the placebo group serum cortisol levels were higher than basal levels but the difference was not significant.

Conclusion: Before intubation and mechanical ventilation a single dose of midazolam reduces the serum cortisol levels in preterm infants.

FCP6

EXPERIENCE WITH NEONATAL EXCHANGE TRANSFUSION IN NORTHERN JORDAN

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A review was conducted at Princess Rahma Pediatric Teaching Hospital during the past 6 years. "386" Exchange Transfusion (ET) for neonatal hyperbilirubinemia were performed on "336" neonates.

- Only 25 babies (7.4%) were premature and the rest were full term. - (11.6%) required more than ET.
- ABO incompatibility with concomitant G6PD deficiency (19.3%).
- G6PD deficiency (18.8%).
- Rh. compatibility (11.9%).
- and Sepsis (8.6%) were major causes for ET.
- Complications occurred in (14.7%) as : anemia, bradycardia, sepsis, cardiorespiratory arrest.
- We conclude that G6PD deficiency is significant cause of ET in our neonates either alone or concomitant with ABO isoimmunization.
- We advocate the use of prophylactic phototherapy for neonates B.wt.<2000 gm.
- and we recommend the use of antibiotics post-exchange transfusion to reduce sepsis.

FCP7

EFFECTIVENESS OF KANGAROO CARE METHOD FOR LOW BIRTH WEIGHT NEWBORNS

Kherkheulidze M., Nemsadze K., Manjavidze N.*, Adamia N.*, Guramishvili Pediatric Clinic, *State Medical University, Tbilisi - Georgia

The mortality of low birth weight infants has one of the leading role in neonatal mortality structure. The reason of our study was comparing the alternative method of kangaroo care to traditional care. We studied 100 patients with low birth weight more then 2000 gr, who did not need intensive care and could breastfeed. The 50 patients with kangaroo care composed I group, II control group included 50 patients with traditional care. Infants spent 24 hours per day in an upright position, in skin-to-skin contact, and attached to the mother's chest. Both groups were followed during 6 months. The comparing indicators were infectious episodes, hospital stay after eligibility, and growth and feeding patterns. The results showed, that weight gain in the I group was greater but the differences in growth indices was not significant. The frequency of infections were significantly higher in the II group as well as hospital stay was shorter in kangaroo care group then in control. So we can conclude that kangaroo care method is quite effective and safe for the care of low birth weight, clinically stable babies.

FCP8

IMMUNOLOGY REACTIVITY AND MORPHOLOGICAL PECULIARITIES OF PERIPHERAL BLOOD NEUTROPHILS IN NEWBORN SEPSIS

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The immunologic status was studied in 250 prematures with sepsis during neonatal period. Ultrastructure of neutrophils in premature newborn was carried out in different phase of bacterial sepsis, neutrophils functional activity, phase of bacterial sepsis, neutrophils functional activity, peripheral blood neutrophils morphological peculiarities were studied by phagocytosis with transmission electronic microscopy. We've assessed the concentration of fibronectine (FN) in blood and nitro-blue-tetrazolium (NBT) test. FN was studied by hardphase immunoenzyme method with the use of affin antibodies and affinity chromatography.

Patients were divided into following groups. I group included 130 first degree premature, II group 80 patients with second degree of prematurity, III –40 patients with third degree of prematurity.

The results demonstrated structural transformation of phagocytic function of neutrophils corresponding to phases and activity of sepsis.

After Comparing our results in all groups, we conclude, that immune system of prematures with third degree of prematurity is more affected and it causes severe process of sepsis in these newborns. The results of the study showed correlation link between sepsis process, prognosis and immunologic changes. This gives the opportunity for early prognosis of sepsis and adequate management to prevent complications of the disease.

FCP9

NEONATAL RESUSCITATION PROGRAM ACTIVITIES IN GEORGIA - 3 YEARS EXPERIENCE

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Neonatal mortality rate, especially in early neonatal period has an increasing tendency in Georgia. Education courses, with the duration 18-24 hour, on Neonatal resuscitation Program (AHA, APA) and common neonatal problem management were offered for the staff (among them neonatologists, obstetricians, midwives, neonatal nurses) of maternity houses in various regions of Georgia (about 23 in 1999-2001). About 400 medical personal were trained. 2 national conferences on NRP were organized. Prin-

ted materials NRP Textbooks, Neonatal Transport guidelines and curriculum on common neonatal problems management (either translated or original) were produced and disseminated. Printed materials for women education education (signs of danger, feeding of the pregnant women, importance of medical supervision) was also worked out and disseminate.

RESULTS. Comparison of the amount of the survived patients after the resuscitation, rate of CNS and other complications in patients transferred in NICU, rate severe forms of bacterial infection, hypothermia were less in Trained maternity houses. The best dates were in maternity houses where the almost whole staff were trained. Even the implementation of new model is a difficult process but it proved the effectiveness comparing the statistical data. We conclude that implementation of the neonatal resuscitation in a complex with improvement of pregnant women care, medical supervision and women education will contribute reduction of the level of early neonatal mortality

FCP10

CASE REPORT: NEONATAL MENINGITIS IN TRIPLETS OF A MULTIPLE PREGNANCY COMPLICATED BY URINARY TRACT INFECTION

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Aim: Urinary tract infections are relatively common in pregnancy and may result in significant morbidity for the pregnant mother and fetus. Here we report a pregnant women with multiple gestations complicated by urinary tract infection (UTI) and effects of UTI on prognosis of pregnancy outcome.

Case: A 26 year-old mother with multiple gestations delivered triplets by cesarian section. The gestational ages of babies were 34 weeks and their birth weights were greater than 2000 gram. They were admitted to the neonatal care unit due to minimal tachypnea which was improved in the first few hours. At the third day of admission, symptoms of sepsis were observed in the third baby and by one by, clinical findings of other babies got worse. Meningitis was diagnosed in all of the three babies and two of them developed hydrocephalus later on. All three were externalized, unfortunately only second baby had no sequelae. At the time of occurrence of first symptoms of early sepsis in third baby, evaluation of mother showed untreated UTI with Gram (-) bacteria.

Conclusion: This case underscore the importance of antepartum urine screening to identify patients with UTI and treatment of maternal UTI by prenatal care providers.

FCP11

PROTOCOL FOR MONITORING OF NEWBORNS WITH INTRAUTERINE GROWTH RESTRICTION (IUGR)

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Intrauterine growth restriction (hereinafter: IUGR) is a foetal suffering which is clinically manifested in low antropometric parameters and typical problems after birth. The study group consisted of the newborns with IUGR born in Gynaecological and Obstetric Clinic in Tuzla in 2001. The control group consisted of the newborns with IUGR born in 1990 and 1994. This means that the study included three different socio-economic periods. The objective was to determine the incidence, morbidity and present the protocol for monitoring children with IUGR. The incidence of IUGR is 4,80 %, which is by far lower than the two previous periods. The authors emphasize that the share of pre-term newborns in the study group was reduced by one half compared to the two previous periods. The most frequent problems of newborns with IUGR are perinatal asphyxia (47%), thermal instability (38,70%), while metabolic and respiratory disorders are present in almost the same percentage (37,78%). The authors came to the conclusion that the existence of a protocol for monitoring of newborns with IUGR is the best method of early discovery of health problems and their timely treatment.

FCP12

COMPARATIVE STUDY OF SUCCESSFUL RATE IN EXCLUSIVELY BREAST FEEDING AMONG MOTHERS WITH NORMAL VAGINAL DELIVERY (NVD) AND CESAREAN SECTION (C/S)**Ahmadpour M., Mohammad Hanafi N., Babol University of Medical Sciences, Mazandaran - Iran**

Objective- Methods: In order to determine the relationship between exclusive breast feeding EBF and the kind of delivery (NVD or C/S) 150 women with 4-24 month old infants in BANDAR TORKMAN, IRAN interviewed (75 of them with NVD and case of C/S) and information regarding the kind of delivery and other factors 75 which may affect the breast feeding were collected. Then the data analyzed by spss software and a p-value less than 0.05 considered significant.

Results: Among all mothers were 72% which is higher than the percent EBF reported for whole the country, Iran (53o%). Mothers with NVD were more successful than those with C/S (89% VS 64%) p -value=0.045.

Conclusion: Mothers who had C/S should be considered high risk for failure to initiate and continue breast feeding and should be supported in the hospital and after hospital discharge.

FCP13

EFFECT OF TOPICAL APPLICATION OF HUMAN MILK , ETHYL ALCOHOL 96% AND SILVER SULFADIAZIN ON UMBILICAL CORD SEPARATION TIME IN NEWBORN INFANTS**Ahmadpour M., Zahedpasha Y., Haijan K., Javadi G., Talebian H., Babol University of Medical Sciences, Mazandaran - Iran**

Background: Several agents have been used for neonatal umbilical cord care but we did not find any study to evaluate the effect of human milk on umbilical cord separation time

Objective: To compare the effect of topical application of human milk, ethyl alcohol 96 %, and silver sulfadiazin on umbilical cord separation time in newborn infants.

Design: Primary-level newborn nursery at a university teaching hospital and a private hospital.

Participant: Of 479 singleton near-term to full-term newborn enrolled, 312 completed the study

Intervention: Newborns from birth were randomized to either 1) mother's milk group, 2) alcohol group, 3) silver sulfa group and 4) a control (no treatment) group. Mother's milk for group 1, ethyl alcohol for group 2 and silver sulfadiazin ointment fo group 3 were started to apply to the umbilical stump three hours after birth and cotinued every eight hours till two days after umbilical cord separation. The time of umbilical cord separation and any discomfort like infection, hemorrhage and granuloma formation were reported by mothers. Nothing is applied to the umbilical stump of the conroll group and they received just dry cord care.

Results: Mean \pm 1 SD cord separation time was statistically significantly different between four groups of study (breast milk group 124.64 ± 43 hr, ethyl alcohol group 154.58 ± 47 hr, silver sulfadiazin group 251.16 ± 87 hr and for control group 158.53 ± 52 hr (P = 0.001). No significant complication were observed in each group.

Conclusion: Breast milk could substitute the other topical agents for umbilical cord care, but a multicenter study is required to advise it for routine umbilical cord care.

FCP16

DOĞUMLARIN ANA-ÇOCUK SAĞLIĞI AÇISINDAN DEĞERLENDİRİLMESİ

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Amacımız; doğumların ana-çocuk sağlığı açısından değerlendirilmesidir.

Bu amaçla, doğum sonrası ulaşılabilen 502 anneye 24 sorudan oluşan bir anket yüz yüze uygulanmış ve böylece hem sosyo-demografik hem de ana-çocuk sağlığına yönelik bilgiler elde edilmiştir.

Annelerin yaş ortalamasının 25.6 ± 5.0 olduğu, %6.2'sinin adolesan, %5.6'sının 35 yaş ve üzerinde olduğu görüldü. Kadınların %53.9 ilkökul mezunu, %38.9'u ortaokul-lise mezunu, %5.4 yüksekokul mezunu ve %1.8'i okur yazar değildi. Ailelerin %52.2'si il merkezinde, %44.2'si ise ilçe merkezinde oturuyor ve kadınların %87.1'i ev hanımı idi. %16.3'ü akraba evliliği yapmıştı. Ortalama gebelik sayısı 2.1 ± 1.4 ve ortalama çocuk sayısı 1.6 ± 0.8 bulundu.

Kadınların %53.8'i gebelik süresince 6 kez ve daha sık, %41.8'si daha az sayıda kontrole gidebilmiş ve %4.4 takibe gitmemişti. %96.4'üne ultrason yapıldığı, %92.4'ünde normal sonuçlar elde edildiği, %30.2 üçlü tarama testi yapıldığı, %0.6'sında yüksek riskli sonuç elde edildiği, %57.4'ünde HBsAg incelemesi yapıldığı, %0.6'sında pozitif bulunduğu görüldü. Bunların yanı sıra, kadınların %5.0'inde gestasyonel DM ve %7.6'sında preeklampsisi gelişmişti.

Anne sütü hakkında kadınların bilgili olduğu, %95.8'inin doğumdan hemen sonra süt vermeye başlamak gerektiğini bildiği, sadece %6.0'sının en az 4-6 ay süre ile anne sütü vermek gerektiğini bilmediği görülmüştür.

Sonuç olarak, takipli gebe sayısının %95.4 gibi yüksek oranda bulunmasını referans hastanesi olmamız ve hastaların sosyal güvencelerinin bulunmasına bağlanmaktayız. Bunlar halen devam etmekte olan çalışmamızın ön sonuçlarıdır.

FCP17

AKRABA EVLİLİĞİNİN ANA-ÇOCUK SAĞLIĞI HİZMETLERİ ÜZERİNE ETKİLERİ

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Amacımız gerçekleşen doğumlar arasında akraba evliliği sıklığı ve alınan ana-çocuk sağlığı hizmetleri üzerine etkilerini incelemektir. 502 doğumla ilgili doğum yapan bütün annelere yüz yüze bir anket uygulanmış, bu ankette annenin kendisi ve eşine yönelik bilgiler ile genel obstetrik durumu hakkında bilgiler toplanmıştır. İstatistiksel analizde ki-kare ve t-testleri kullanılmıştır.

Araştırma sonucunda, kadınların %16.3'ü akraba evliliği yapmıştı. Annenin yaşı, eğitim durumu, yerleşim birimi, anne ve babanın mesleği yönünden akraba evliliği yapanlar ile yapmayanlar arasında anlamlı bir fark bulunmadı ($p > 0.05$). Ancak annenin eğitim durumuna bakıldığında anlamlı fark vardı. İlkokul mezunu veya eğitimsiz olan grupta akraba evliliği oranı %19.7 iken, orta okul ve üstü eğitim görmüş olanlarda akraba evliliği oranı %10.4 bulundu ve bu fark istatistiksel olarak anlamlıydı ($p = 0.004$).

Akraba evliliği yapmanın daha geri bir sosyal yapının parçası olması nedeniyle, sağlık hizmetlerinden yararlanma durumu ile akraba evliliği arasında bir ilişki olup olmayacağı araştırıldı ve akraba evliliği yapanlar ile yapmayanlar arasında son gebelikten bu yana geçen süre, gebelik süresince yapılan izlem sayısı, ultrason ve üçlü tarama testi incelemesinin yapıp yapılmamış olması bakımından anlamlı bir farklılık bulunmadı ($p > 0.05$).

Akraba evliliği yapmış olan grupta gebelik sayısının 2.4 ± 1.4 , akraba evliliği yapmamış olanlarda 2.0 ± 1.3 olup ve bu fark istatistiksel olarak anlamlıydı ($p = 0.027$), ayrıca, yaşayan çocuk sayısı akraba evliliği yapmış olan grupta 1.7 ± 0.9 , akraba evliliği yapmamış olanlarda ise 1.5 ± 0.8 bulundu ve bu fark da istatistiksel olarak anlamlıydı ($p = 0.043$), ancak, düşük sayısı bakımından iki grup arasında anlamlı bir farklılık ($p > 0.05$) bulunmadı.

Bu çalışmamızda, akraba evliliği oranının yüksek olduğu ve eğitim düzeyi yükseldikçe bu oranın azaldığı görülmektedir.

FCP18

MRI ESTIMATION OF PELVIS DIAMETER AFTER DIFFERENT PELVIC OSTEOTOMIES AND IMPORTANCE OF DIAMETER CHANGE AT NATURAL DELIVERY ESTIMATION

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Aim: Estimation of pelvis osteotomy influence on pelvis diameter.

Patients and Methods: In study is involved 127 patients with pelvic osteotomy because of hip disease in child period. With MRI pelvic diameter is performed for estimation should delivery be done by Cesa-rian section or on natural way. All patient are female, 18-21 years old. Follow up is 15 years, types of osteotomies, pelvic diameters and its repercussions are presented in sheets. Original statistic sheet and programs support are used.

Results: Triple pelvis osteotomy significantly influence on pelvis diameter.

Conclusion: Concerning that in this moment lot of pelvic osteotomy type are actual (most popular Ganz and Toniss), we point on importance of this problem in obstetrition.

FCP19

ANTEPARTUM RISK FACTORS ASSOCIATED WITH PERINATAL OUTCOME IN ABRUPTIO PLACENTAE

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Objective: To evaluate clinical and laboratory risk factors associated with perinatal outcome in placental abruption.

Materials - Methods: Records of 126 patients with abruptio placentae were analyzed retrospectively. Maternal ages, parity, gestational age at birth, maternal complications (vaginal bleeding, placenta previa, hypertension, hypofibrinogenemia, postpartum operative intervention, blood transfusion requirements), birth weights, stillbirths, Apgar scores, neonatal care unit admissions were reviewed. Multiple logistic regression analyses used to derive maximum likelihood estimates of the adjusted odds ratios (OR) and 95% confidence intervals were used as measures of the association between pregnancy and outcome and antepartum factors.

Results: Multiparity ($p=3$) and hypertension was associated with an increase in risk with low Apgar scores ($1'<4$) (OR=2.8 and OR=2.0 respectively). Hypofibrinogenemia was associated with an increase in risk with stillbirth (OR=5.8), maternal blood transfusion requirements (OR=5.3) and increased frequency of hysterectomy and/or hypogastric artery ligation (OR=6.6).

Conclusion: Gestational age at birth is the most important factor for fetal outcomes, where as maternal morbidity is dominated by maternal hypofibrinogenemia.

FCP20**FETAL GROWTH IN SINGLETON TERM BREECH DELIVERIES IN NULLIPAROUS WOMEN**

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Objective: The purpose of this study was to evaluate fetal growth of term breech deliveries born from nulliparous women.

Study Design: Records of 493 breech deliveries of nulliparous women, gestational ages between 36-43 weeks, were analyzed retrospectively. Maternal ages, parity, birthweight, gestational age at birth were analyzed. Birth weight percentile for gestational age by infant sex (categorized as <10, 10.1-50.0, 50.1-90.0, >90.1) was used in evaluating fetal growth.

Results: Mean maternal age was 23.8(±4.6) years. %33.3 (164/493) of the patients were in the 20-24 years old group. Mean gestational age at birth was 38.6(±1.4) weeks. The highest rate of delivery (30.4%) was at 39 weeks of gestation. Mean birth weight was 3175.8±(472) grams. 17.6% of the newborns were small for gestational age (< tenth percentile).

Conclusion: Premature delivery of the growth retarded fetus for fetal indications might be the possible explanation for the high rates of breech position in growth retarded fetuses. But, at term, breech presentation is the possible cause of growth retardation.

FCP21**FETAL SEX: A PREDICTOR OF PERINATAL OUTCOME IN ABRUPTIO PLACENTAE**

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Objective: To evaluate maternal and fetal outcome in abruptio placetae with regard to fetal sex.

Materials - Methods: Records of 126 patients with placental abruption were analyzed in two groups according to fetal sex. Maternal and neonatal medical records were reviewed for maternal age, parity, gestational age at delivery, antepartum complications, preterm birth, neonate gender, birthweight, Apgar score, neonatal care unit admissions. Independent samples t-test and Mann-Whitney U test were used in statistical analyses. Significance was set at $p < 0.05$.

Results: Rates of stillbirth was 35% for the male and 29% for the female fetus group. Neonatal care unit admission rates were statistically significantly higher for the male newborns ($p < 0.05$). Hypofibrinogenemia was seen in 19 patients of which 14 gave birth to a male infant.

Conclusion: Carrying a male fetus is not only associated with a modest increase in risk of placental abruption but it is also associated with adverse perinatal outcomes, increased rates of stillbirths and maternal morbidity.

FCP22**HIGH AND LOW DOSE INTRAVENOUS MAGNESIUM SULFATE FOR TOCOLYSIS: A COMPARATIVE STUDY**

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Objective: To compare the effects of a high dose protocol for magnesium sulphate tocolytic therapy with a low dose regimen with respect to time needed to achieve tocolysis, the effects on the biophysical profile and fetal heart rate.

Materials-Methods: Patients, between 28 and 34 weeks' gestation with preterm labor, were prospectively randomly assigned to receive two different protocols. For low dose regimen 2 g/h magnesium sulphate was administered to 25 patients and in high dose protocol 24 patients received 4 g loading dose follo-

wed by a continuous infusion of 2 g/h. Biophysical profile examinations were performed at admission and at 1 and 6 hours of tocolytic therapy. The fetal heart rate tracing for 30 minutes was used to determine fetal heart rate reactivity before each biophysical profile. Statistical analyses were performed and statistical significance was set at $p < 0.05$.

Results: Although, no statistical significant difference was found between the two regimens when compared for tocolytic effectiveness ($p = 0.463$), time needed to achieve tocolysis was significantly shorter in high dose regimen ($p = 0.006$). Significantly altered biophysical profile was observed in high dose regimen ($p < 0.05$) at first hour of tocolysis, different from low dose regimen. There was a significant reduction in total biophysical profile score ($p < 0.05$) and basal fetal heart rate ($p < 0.001$) at 6.h in fetuses exposed to both low and high dose magnesium sulphate. No statistically significant difference was found in short-term variability 6 hours after initiation of therapy when two regimens are compared ($p = 0.24$).

Conclusion: Low dose intravenous magnesium sulphate for tocolysis is recommended due to late-onset of adverse effects and equivalent tocolytic effect when compared to high dose protocol. However, obstetricians should bear in mind that magnesium sulphate alters biophysical profile and is associated with decreased basal fetal heart rate.

FCP23

ASSESSMENT OF FETAL ACIDOSIS IN INFANTS WITH MECONIUM-STAINED AMNIOTIC FLUID

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Objective: To determine the fetal acid-base status in patients with meconium-stained amniotic fluid in labor and to evaluate the differences in umbilical artery pH values with regard to the consistency of meconium.

Materials-Methods: One hundred and six pregnant women in spontaneous labor at term with meconium-stained amniotic fluid were included in the study. The attending physician determined the grade of meconium by visual examination at the bedside. Immediate umbilical artery blood was obtained at each delivery. PH value < 7.20 was defined as neonatal acidosis.

Results: The rate of neonates having pH values < 7.20 was %23.6. Analysis of cord arterial pH for grades of meconium yielded a significant acidotic shift for the thick-meconium group ($p = 0.001$) and also neonatal care unit admissions were significantly higher in the thick-meconium group ($p < 0.001$).

Conclusion: Thick meconium is a more ominous sign than is thin meconium and should alert the physician to a high risk fetal condition.

FCP24

CORRELATION OF NEONATAL ACID-BASE STATUS AND ABNORMAL FETAL HEART RATE PATTERNS WITH REGARD TO PHASE OF LABOR

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Objective: To determine the neonatal acid-base status in patients with abnormal fetal heart rate (FHR) tracing patterns in labor.

Materials - Methods: A prospective observational study was conducted with seventy pregnant women in labor at term with pathologic FHR patterns. Neonatal outcomes were compared in parturient whose FHR patterns were abnormal during the first stage of active labor with parturient who demonstrated abnormal FHR pattern in latent phase. Tracings were interpreted with the use of the National Institute of Child Health and Human Development FHR monitor guidelines. Fetal acidosis was defined as pH values < 7.20 . Results: The rate of fetal acidosis was 41%. Abnormal FHR patterns in latent phase of labor was statistically significantly associated with fetal acidosis when compared with abnormal FHR tracings present in first stage of labor ($p = 0.004$). The rate of fetal acidosis in patients with late and variable decelerations

were similar regarding to the phases of labor. However, early decelerations detected in latent phase of labor was associated with 63% fetal acidosis while only 5% of the newborns with early decelerations in the first stage of labor had fetal acidosis.

Conclusion: Prediction and diagnosis with intervention and delivery could prevent the progression of asphyxia so, obstetricians should bear in mind that, abnormal FHR patterns in the latent phase of labor is alerting for fetal asphyxia.

FCP25

TWIN BIRTH WEIGHT DISCORDANCE

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Objective: To determine the relationship between twin birth weight discordance and mode of delivery, preterm delivery, fetal presentations.

Materials - Methods: Records of one hundred and six twin pregnancies were evaluated for maternal age, parity, gestational age at birth, mode of delivery and fetal presentations retrospectively. The degree of discordance was computed using the larger twin as 100%. A twin was designated discordant if it was smaller by more than %15. The patients were analyzed in two groups according to discordancy. Statistical analyses were performed for the given parameters and statistical significance was set at $p < 0.05$.

Results: Mean maternal age was 26 years. 42% of the patients were nullipar. The highest rate of birth was recorded at 36. weeks of gestational age. No statistical difference was found when the two groups were compared for maternal ages, gestational age at birth ≤ 34 , presentations other than vertex-vertex and mode of delivery ($p > 0.05$)

Conclusion: Discordancy of %15 between twin pairs is not associated with mode of delivery, presentations other than vertex-vertex and premature deliveries before 34. gestational week.

FCP26

TRISOMY 13 AND FALLOT TETRALOGY . A CASE REPORT

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Background : We aim to present a case of Trisomy 13 syndrome with Tetralogy of Fallot which we could not meet in the English literature between 1966 and 2001 and to review the prenatal diagnosis of Trisomy 13 syndrome.

Case : A-23-year old primigravid woman who has 25 weeks pregnant women with morphometrics of Biparietal Diameter and Head Circumference below the fifth percentile. The sonographic abnormalities were 'strawberry-shaped head', cerebellar hypoplasia, hypotelorism, micrognathia, small thoracic diameter, tetralogy of Fallot abnormality in the heart, bilateral enlargement of kidneys, bilateral polydactyly in foot and clinodactyly in the fingers. Karyotypic examination was reported to be Trisomy 13. The findings on the autopsy were similar to sonographical findings.

Conclusion : We emphasized the role of fetal echocardiography in prenatal diagnosis of syndromes and in the routine antenatal screening program, since we observed tetralogy of Fallot abnormality in a patient with Trisomy 13, known as syndrome of multiple abnormalities.

FCP27

SERUM FIBRONECTIN AND NO LEVELS AS AN INDEX OF THE ENDOTHELIAL DAMAGE IN PREECLAMPSIA

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Objective: The aim of the study was to determine the presence and degree of endothelial injury by measuring plasma concentrations of cellular fibronectin (cFn) and circulating nitrate and total nitrite levels, end-products of Nitric Oxide, in pregnancies complicated by preeclampsia.

Study design: Circulating cellular fibronectin, nitrate and nitrite levels were compared between preeclamptic (n=20) and normotensive women (n=22). Two groups were similar at patients age, gestational age. Stored plasma, which had been obtained in the third trimester before labor, was assayed for cellular fibronectin by means of a sensitive and specific enzyme immunoassay, and serum nitrate, total nitrite levels measured by enzymatic Greiss reaction

Results: The values of cFn were significantly higher (47.4 ± 27.9 mg/dl) in the third trimester in the group of women with preeclampsia, as compared to normals (26.8 ± 12.2 mg/dl). Sera from women with pre-eclampsia had significantly lower nitrate concentrations (24.16 ± 3.12 vs 30.77 ± 3.41 , $p < 0.05$) compared with healthy pregnant women respectively controls, however, there were no significant differences at the serum total nitrite levels between two groups.

Conclusion: Pregnancies complicated by preeclampsia had significantly higher plasma cellular fibronectin concentrations, and significantly lower serum nitrate levels than did control pregnancies. We speculate that the combination of a deficiency of serum nitrate and an increase in cFn may directly or indirectly initiate the vast majority of physiological and serological changes associated with preeclampsia

FCP28

REVERSIBLE POSTERIOR LEUKOENCEPHALOPATHY SYNDROME ACCOMPANIED BY ECLAMPSIA AND MR SPECTROSCOPIC FINDINGS

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Posterior leukoencephalopathy syndrome (PLS) is a newly recognised brain disorder that predominantly affects the cerebral white matter. Oedematous lesions particularly involve the posterior parietal and occipital lobes, and may spread to basal ganglia, brain stem, and cerebellum. This rapidly evolving neurological condition is clinically characterised by headache, nausea and vomiting, seizures, visual disturbances, altered sensorium, and occasionally focal neurological deficit. PLS is often associated with an abrupt increase in blood pressure and is usually seen in patients with eclampsia, renal disease, and hypertensive encephalopathy. The lesions of posterior leukoencephalopathy are best visualised with magnetic resonance (MR) imaging. T2 weighted MR images, at the height of symptoms, characteristically show diffuse hyperintensity selectively involving the parieto-occipital white matter. MR spectroscopy (MRS) utilizes the same hardware as MR, but further provides information about the biochemical metabolism. Proton MRS has been used to measure proton-containing compounds, such as amino acids, organic acids and sugars in tissue specimens. There have been many reports of proton MRS of brain tumors, but this technique has not yet been reported in eclampsia. A 30-year-old woman complained of diminution of visual acuity, headache and nausea. We measured metabolites in occipital lobes, basal ganglia and posterior parietal lobes using single voxel MRS and evaluated the clinical significance of this method in eclampsia. Spectra were analyzed for the presence of choline, creatine, N-acetylaspartate (NAA), lipid, and lactate. This is the first clinical in vivo study that we report a case of reversible PLS accompanied by eclampsia, and spectral findings are described.

FCP29

THE IMPACT OF LOW-DOSE ASPIRIN THERAPY ON UMBILICAL AND MIDDLE CEREBRAL ARTERY BLOOD FLOW IN PREGNANCY COMPLICATED BY INTRAUTERINE GROWTH RESTRICTION

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Aim: Intrauterine growth restriction and its treatment still constitute a major clinical problem in perinatology. Since low doses of aspirin may improve the utero-placental circulation (by shifting the prostacyclin/tromboxan A2 balance), we have evaluated the impact of low-dose aspirin treatment of IUGR during pregnancy on umbilical (UA) and middle cerebral artery (MCA) blood flow.

Material - Methods: The study group comprised 25 pregnant women with fetal intrauterine growth restriction (IUGR) diagnosed during pregnancy on the basis of ultrasound examination of biometric parameters (BPD, AC, FL). All the patients were treated only by low-dose aspirin (75-100 mg) for 10 days. The following examinations were performed before and after treatment: fetal biometry and calculation of blood flow indices in the umbilical and middle cerebral artery (S/D, RI, PI), together with selected maternal blood clotting parameters (bleeding time, clotting time, fibrinogen, platelets, APTT).

Results: Mean values of all biometric parameters of the fetuses measured before and after treatment did not show statistically important differences except AC ($p < 0.1$). Umbilical artery blood flow indices calculated after the treatment were slightly lower and MCA indices slightly higher, as compared to those before the treatment. Cerebro-placental ratio changed from 1.30 to 1.50 (borderline significance). The low-dose aspirin treatment did not produce any adverse effects neither among mothers nor infants.

Conclusions:

1. IUGR treatment by low-dose aspirin had beneficial but non-significant impact on umbilical and middle cerebral artery blood flow.
2. Since the number of subjects in this study was relatively small, further clinical studies are necessary to evaluate the effectiveness of IUGR treatment by low dose aspirin.
3. Low-dose aspirin therapy in pregnant women did not produce any side effects for mothers or fetuses.

FCP30

THE VANISHING TWIN

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Women with twin pregnancies have some unique problems and some that occur more frequently than those seen in singleton pregnancies. Examples of the former are the 'vanishing' twin and death of one fetus. With the advent of sonography, a twin pregnancy may be diagnosed in early gestation. Serial sonographic examinations can show the disappearance of one of two twins.

A 30-year-old multipara, who had 7 weeks 2 days gestation according to last menses period, was admitted to our department for routine sonographic examination. She had previous 3 healthy term pregnancies but there were no history of curettage and abortion before. We observed twin pregnancies in woman, who had their ultrasound examination at the 8th week of pregnancy. Positive heartbeat and yolk sac were registered in both embryos. When a further sonographic examination took place at the 11th week for nuchal translucency, intrauterine death of one of the embryos was observed. Pregnancy continued as singleton pregnancy to uneventful term deliveries. After singleton term delivery a thickening of the membranes opposite to the main placenta showed degenerated chorionic villi embedded between one layer of amnion and chorion; no fetal parts were observed.

FCP31**HETEROTOPIC PREGNANCY WITH ANEMBRIONIC INTRAUTERIN COMPONENT**

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A 31 year-old woman gravida 3, para 0, abortion 2 applied to the clinic with secondary amenorrhea after ovulation induction with clomiphene citrate. Urine pregnancy test was performed and found positive. There was no history of pelvic inflammatory disease and pelvic surgical intervention. Although transvaginal sonographic examination revealed empty uterus, we detected an 18 mm ring-like thick-walled hyperechogenic structure within the left adnexial area which consist of fetal nod but no fetal cardiac activity, meanwhile she had a serum beta-hCG level of 198 mIU/mL. Beta-hCG level was measured every 2 days. The increase of hCG levels was found more than two fold. This condition suggested the presence of intrauterine pregnancy besides extrauterine pregnancy and transvaginal ultrasonographic (TV-US) examination revealed an intrauterine gestational sac without yolk sac and embryo. That time according to the last menstrual period pregnancy was compatible with 7 w + 2 d. Control TV-US was performed 1 week later and gestational sac was demonstrated but embryo and yolk sac were invisible. Due to the prediagnosis of anembrionic pregnancy, dilatation & curettage was performed and pathologic report showed early stage placentation and decidualisation without embryo. After D&C beta-hCG level significantly decreased. Due to this decrease at beta-hCG level and the stability of the hemodynamic status and low initial beta-hCG level patient was discharged and pursued for beta-hCG level weekly. Follow-up examination was made till beta-hCG level decreased to the normal values. The extrauterine gestational sac under expectant management had resolved spontaneously without further medical or surgical approaching.

FCP32**PREECLAMPSIA OF THE GESTATIONAL TROPHOBLASTIC NEOPLASIA**

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The frequency of gestational trophoblastic neoplasia, although may vary, is usually about 2 per 1000 pregnancies. In gestational trophoblastic neoplasia, preeclampsia may occur in earlier weeks compared to normal pregnancies. This pathology which is rare, but which may lead to serious conclusions, has been determined in a 18-year old patient in the 14th gestational week, and this case has been presented in this study accomponyng the related literature survey.

FCP33**A CASE OF CERVICAL RUPTURE IN A PATIENT WITH A CERVICAL CIRCULAGE**

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Cervical incontinance causes habituel abortion and it's treatment is cervical circulage. Cervical circulage has several complications. One of these complications is cervical rupture which is caused by preterm labor and it is seen very rarely. In this report, a case in which cervical rupture is developed as a result of cervical circulage is discussed.

FCP34

IUGR: PERINATAL RISK IN THE NEWBORNS

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Aim of the study: was to determine presence and incidence of perinatal risk in the newborns presenting with the signs of IUGR or hypotrophy <5% during a 3-year period, and in this way point to the significance of intrauterine diagnostics and special screening during the labor as to reduce the incidence of these factors.

Methods: There were 18412 deliveries at the Department of Obstetrics and Gynecology in Novi Sad during the 3-year period out of which number, 560 (3.04%) newborns with IUGR or intrauterine hypertrophy <5%.

Results: In the investigated population of 560 newborns with IUGR or hypertrophy<5%, the following factors of perinatal risk have been recorded: manifest pathological cerebral signs in 30 cases (5.35%), convulsive crises in 6 (1.07%), the crises of apnea and cyanosis in 10 (1.79%), intracranial hemorrhage in 17(3.03%), hyperbilirubinemia in 25 (4.46), hemolytic disease in 6 cases (1.07%),hypoglycemia in 1(0,18%), disorders of pulmonary ventilation in 16 cases (4.64%) whereas congenital anomalies were evidenced in 19 (3.39%) newborn infants. Exanguination transfusion was administered in 4(0.72%) and transfusion in 9 newborns with IUGR, i.e. intrauterine hypotrophy<5.

The signs of prematurity were recorded in 70(12.50%) newborn infants. Apgar Score 10-8 at 5 minutes was recorded in 452(80.72%) newborns; the signs of mild asphyxia in 75 (13.39%). Perinatal hypoxia - Apgar score below 5 was recorded in 33 (5.89%). Reanimation was administered in 54 (9.64%) newborn infants.

Conclusion: The results of investigation point to the significant presence of perinatal risk factors in the population of the newborns with IUGR leading to the increased morbidity in later periods of life. The right-time diagnosis and therapy as well as the right choice of time and conduct of the labor contribute to the future birth of healthy posterity.

FCP35

2000 AMNIOCENTESIS - RESULTS OF CHROMOSOME STUDIES

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Background: Amniocentesis is the most common invasive prenatal diagnostic technique in pregnant women at increased risk of chromosomal abnormalities and fetal anomalies.

The aim of this study was to present our experience from a material of 2000 amniocenteses.

Material - Methods: 2000 women with indication for amniocentesis were studied at the Aristotelian University of Thessaloniki, Greece and Iakentron medical center, during a five-year period.

Results: The most common indication for amniocentesis was advanced maternal age and positive Triple test for which we had 1806 patients (90,3%).

The mean age was 34.01 years (17-48 years).The prevalence of chromosomal abnormalities was 3 %.

Successful sampling of amniotic fluid in the first attempt for amniocentesis was done in 98% of the women.

Conclusion: Amniocentesis is a safe, reliable and relatively easy method, which must be performed by specialized obstetricians.

FCP36

DIAGNOSIS OF TWIN-TO-TWIN TRANSFUSION SYNDROME WITHOUT ANY INVASIVE TECHNIQUE: A CASE REPORT**Kumru S., Altıngül A., Parmaksız C.,** *Fırat Üniversitesi Kadın Hastalıkları ve Doğum Kliniği, Elazığ - Türkiye*

Objective: Twin twin transfusion syndrome occurs in multiple gestations and involves the chronic flow from one twin to its co-twin. The diagnosis of twin-to- twin transfusion syndrome whether made antenatally or postnatally is problematic.

Case: A primigravida aged 17 years old was referred to our hospital at 22 weeks of gestation. She was pregnant with monochorionic- monoamniotic twins as detected by ultrasound (US) in the second trimester. Female twins were delivered, the recipient twin weighing 600gr. with hemoglobin 39.3 gr/dl, total bilirubine 1.9 gr/dl and the donor twin 360 gr, pale with hemoglobin 35.1 and total bilirubine 3.4 gr/dl as described by Okamura et al.

Conclusion: It is thought that when twin-to- twin transfusion syndrome is suspected the cordocentesis or any other invasive technique may not be cost effective and it is time consuming and risky for the pregnancy outcome and does not effect the outcome in some cases as thought to be so as in ours.

FCP37

CESAREAN SECTION AND BURCH COLPOSUSPENSION OPERATIONS**Sapmaz E., Çelik H., Tuğ N., Altıngül Çelik A.,** *Fırat University, School of Medicine, Department of *Obstetrics and Gynaecology, Elazığ - Türkiye*

Objective: Investigation of efficiency and safety of Burch operation at the time of low segment transverse Caesarean section procedure in the cases diagnosed as genuine anatomical urinary stress incontinence prior than pregnancy.

Material - Method: Four cases who were diagnosed as genuine anatomical urinary stress incontinence prior than pregnancy by means of previous investigations (history, Q tip, stress test and urodynamical examination) and underwent bilateral tubal ligation and Burch colposuspension procedures at the time of Caesarean section for macrosomic fetus were included in the descriptive type study program. For clinical parameters, the age, gravida, parity, macrosomic fetus history, preoperative stress incontinence duration, postoperative analgesic intake need, total operation duration, intraoperative blood loss, the amount of fluid discharge via hemovac catheter placed in Retzius space, day of hospitalization were recorded. For laboratory parameters, preoperative and postoperative hemoglobin values were identified. All patients were followed up on their postoperative 1, and 3rd days and at 1,5 ,6, and 12th months. Descriptive statistical analyses of the patients were executed with SPSS 9.0 software.

Findings: In all 4 patients were employed low segment During of Caesarean Section at term bilateral tubal ligation and Burch colposuspension operations. Age of the patients was calculated as 31.6 ± 3.5 year (mean \pm SD), urinary incontinence duration 33 ± 7.5 months, macrosomic fetus history 100%, pregnancy age 34.3 ± 0.6 weeks, total operation duration 37 ± 7 minutes, and blood loss 245 ± 23 ml, serosanguinous fluid discharge from Retzius 31 ± 3.6 ml, hospitalization duration 4 ± 0 days, newborn weight 4150 ± 218 g. Postoperative hemoglobin levels were measured 11 ± 0.4 g/dl.

Postoperative pain which may require extraroutine supplemental therapy or intraoperative, early or late postoperative complications did not develop in any patient. Q tip and stress tests were found normal in the patients whose urinary incontinence symptoms have improved by postoperative follow ups.

Results: Our approach is the first to be reported in the literature. Burch colposuspension employed during Cesarian Section does not increment the incidence of intraoperative morbidity and can be performed successfully, provided under the experienced hands. However future experiences on vast populations and long term results are yet needed.

FCP38

PLASMA HOMOCYSTEINE LEVELS IN WOMEN WITH PRE-TERM BIRTH HISTORY

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Background: In the previous studies, homocysteine levels were found to be high in such pregnancy complications as pre-eclampsia and placental abruption. However, homocysteine levels were not investigated in cases with recurrent pre-term birth history. This study aims at investigating plasma homocysteine levels in women with previous pre-term birth history.

Material - Method: Thirty non-pregnant women who had similar sociodemographical characteristics were divided into sub-groups according to the number of pre-term birth they previously had (G1, n=10, no pre-term birth, G2; n=12, one pre-term birth, G3, n=8, two pre-term 1 births). Plasma homocysteine levels were identified in all cases.

Results: Plasma homocysteine levels were found to be significantly higher in Group 3 cases when compared to cases in Groups 1 and 2 ($p < 0.05$, Mann Whitney U test).

Conclusion: We suggested that in women with history pre-term birth levels of homocysteine should be considered. Homocysteine levels may use as a beneficial marker to estimate risk of pre-term birth.

FCP39

IL-1 ALPHA, IL- 1 BETA, IL-6 AND IL-8 IN VAGINAL FLUID OF PREGNANT WOMEN WITH MYCOPLASMA HOMINIS AND UREAPLASMA UREALYTICUM INFECTION

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Aim: The purpose of this study was to determine the concentrations of the following cytokines: interleukin-1alpha (IL-1alpha), interleukin 1-beta (IL-1beta), interleukin 6 (IL-6), and interleukin 8 (IL-8) in vaginal fluid of pregnant women in relation to infection of genital mycoplasmas.

Material -Methods: Samples of vaginal fluid were collected from 40 pregnant women. The cytokines concentrations (pg/mL) were measured by standard enzyme-linked immunosorbent assay technique (ELISA).

Results: Among 15 women genital mycoplasmas infections was diagnosed. Vaginal levels of interleukin-1alpha, interleukin-1beta, and interleukin- 6 were found to be significant elevated in women with mycoplasmas infection (127,11 pg/mL; 56,14 pg/mL; 22,08 pg/mL) as compared with patients without infection (76,16 pg/mL; 32,87 pg/mL; 15,13 pg/mL).

Conclusions: These findings suggest that measurement of cervicovaginal concentrations of selected cytokines may constitute a clinically useful marker of genital mycoplasmas infection. Relation between cytokines levels and risk of perinatal complications should be evaluated in further studies.

FCP40

LEVELS OF NEOPTERIN, PROCALCYTONINE AND CRP LEVELS IN MATERNAL SERUM IN ABORTUS CASES

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Objective: To compare Neopterin, Procalcitonine and CRP levels in maternal serum in abortus imminens and missed abortus cases both among themselves and with those of healthy pregnant women in a similar week of pregnancy.

Material - Method: Seventy five pregnant women who came to our clinic between the dates of October 1, 2000 and April 1, 2001 and who were diagnosed as abortus imminens (G1, n=25), missed abortus (G2,

n=25) and healthy women (G3, n=25) were included in a randomised block design, cross-sectional prospective study program. Neopterin, Procalcitonine and CRP levels in the maternal serum were examined. Kruskal Wallis variance analysis was made to compare continuous and ordinal data. Mann Whitney U test was conducted for those values $p < 0.05$. And $p < 0.05$ was considered significant.

Results: In the healthy pregnant cases group, both neopterin and procalcitonine levels were high, while CRP level was low ($p < 0.05$, Mann Whitney U test). CRP level was found to be higher in abortus imminens group than in missed abortus group, though insignificantly ($p > 0.05$, Mann Whitney U test).

Conclusion: In the healthy expectant cases group neopterin and procalcitonine were high, while in the abortus cases, the increase was in the CRP level. CRP may be more significant in the identification of abortus cases.

FCP41

EXAMINATION OF TNF- α , IL-6 AND IL-8 LEVELS IN MATERNAL SERUM IN PIH CASES:

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Objective: To compare TNF- α , IL-6 and IL-8 levels in maternal serum in pregnancy induced hypertension (PIH) cases both among themselves and with those of healthy pregnant women in a similar week of pregnancy.

Material - Method: Fifty six expectant women who came to our clinic between October 1, 2000 and December 1, 2001 and who were diagnosed as PIH (G1= mild pre-eclampsia, n=7; G2= severe pre-eclampsia, n=14; G3=eclampsia, n=7) and healthy pregnant women (G4= control of G1, n=7; G5= control of G2, n=14; G6= control of G4, n=7) who were in similar weeks of pregnancy and who comprise the control group were included in a randomised block design, cross-sectional prospective study program. TNF- α , IL-6 and IL-8 levels in maternal serum were investigated. Each PIH group was compared with its own control group (G1-G4, G2-G5, G3-G6) and then, among each other (G1-G2, G1-G3, G2-G3).

Mann Whitney U test was used to compare continuous and ordinal data.

Results: In all PIH groups, TNF- α , IL-6 and IL-8 levels were found to be higher than in their own control groups ($p < 0.05$, Mann Whitney U test). However, the comparison of PIH groups among themselves did not reveal any statistically significant difference ($p > 0.03$, Mann Whitney U test).

Conclusion: TNF- α , IL-6 and IL-8 levels in maternal serum in the pre-eclamptic and eclamptic cases increase in comparison to those in healthy pregnant cases. These levels do not show significant differences among themselves.

FCP42

THE CORRELATION BETWEEN LIPIDS, HORMONS AND PROTEINURIA IN WOMEN WITH ASYMPTOMATIC (ISOLATED) PROTEINURIA IN LATE PREGNANCY

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Objective: The aim of the study was to evaluate the correlation between protein concentration in urine and the serum concentrations of lipids and chosen hormones in women with asymptomatic (isolated) proteinuria in late pregnancy.

Methods: The study covered 45 women with asymptomatic proteinuria. The women were at the mean age of 27.6 ± 6.17 years and at 37.6 ± 2.62 weeks of gestational age. Their mean arterial blood pressure was $123.0 \pm 15.4/76.1 \pm 12.0$ mmHg, proteinuria – 2.02 ± 1.95 g/24 hours, body mass index (BMI) before pregnancy – 23.8 ± 2.79 , BMI before labor – 29.9 ± 3.8 . On average, BMI increased $24.5 \pm 9.7\%$. Three women presented lower extremities edema (6.67%). All women included in the study have had measured renal function biochemical parameters (uric acid, urea, osmolality, creatinine, electrolytes, acid base

balance) and they have had done blood morphology parameters. Moreover, women included in the study had no urinal tract infection (no bacteriuria present, leucocyturia within normal limits). Laboratory tests revealed hypoproteinemia $58,0 \pm 5,0$ g/l and hypoalbuminemia $443,4 \pm 58,0$ μ mol/l. All women included in the study have had measured their serum concentrations of: total lipids (TL), total LDL fraction (TLDL), total cholesterol (TCh), free cholesterol (fCh), phospholipids (PhL), triglycerides (TG), HDL-cholesterol (HDL-cholesterol) and LDL-cholesterol (LDL-Ch), total estrogens (TE) and human placental lactogen (HPL). Moreover, fCh/TCh ratio, TCh/PhL and LDL/HDL-Ch ratios were calculated. Their Pearson's correlation coefficient between proteinuria and above stated parameters was evaluated.

Results: The positive correlation was observed between proteinuria and: TL ($r=0,43$, $p<0,003$), TLDL ($r=0,47$, $p<0,001$), TCh ($r=0,37$, $p<0,01$), fCh ($r=0,68$, $p<0,001$), PhL ($r=0,45$, $p<0,001$), TG ($r=0,50$, $p<0,001$), HDL-Ch ($r=0,34$, $p<0,002$), fCh/TCh ratio ($r=0,42$, $p<0,004$). Moreover, the negative correlation was detected between proteinuria and: TE ($r=0,31$, $p<0,05$) and HPL ($r=0,34$, $p<0,04$)

Conclusion: In women with asymptomatic (isolated) proteinuria, the observed increase in lipid parameters levels and decrease in TE and HPL serum concentrations with the degree of proteinuria.

FCP43

PERINATAL OUTCOME IN WOMEN WITH ASYMPTOMATIC (ISOLATED) PROTEINURIA IN LATE PREGNANCY

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Objective: The aim of the study was to evaluate the influence of the asymptomatic (isolated) proteinuria in late pregnancy for the perinatal outcome.

Methods: The study covered 45 women with asymptomatic proteinuria in late pregnancy (the study group) and 136 healthy women (the control group). Proteinuria was $2,02 \pm 1,95$ vs $0,2 \pm 0,3$ g/24hours. Moreover, the women in both groups were at the same mean age: $27,6 \pm 6,17$ vs $28,1 \pm 6,54$ years (NS). The women in both group were at the same gestational age: $37,6 \pm 2,62$ vs $37,1 \pm 2,15$ (NS). Body mass index (BMI) before pregnancy was $23,8 \pm 2,79$ vs $22,5 \pm 2,60$ ($p<0,05$). BMI before labor was $29,9 \pm 3,8$ vs $27,7 \pm 2,8$ ($p<0,01$). On average, BMI increased $24,5 \pm 9,7\%$ vs $24,1 \pm 7,0$ (NS). Mean arterial blood pressure was $123,0 \pm 15,4/76,1 \pm 12,0$ mmHg vs $115 \pm 6,0/68,0 \pm 7,0$ mmHg ($p<0,01$ and $p<0,01$). Three women in the study group presented lower extremities edema (6,67%). All women included in the study have had measured renal function biochemical parameters (uric acid, urea, osmolality, creatinine, electrolytes, acid base balance) and they have had done blood morphology parameters. Moreover, all women included in the study had no urinal tract infection (no bacteriuria present, leucocyturia within normal limits). Laboratory tests revealed hypoproteinemia $58,0 \pm 5,0$ vs $67,0 \pm 6,0$ g/l ($p<0,001$) and hypoalbuminemia $443,4 \pm 58,0$ vs $522,0 \pm 87,0$ μ mol/l ($p<0,001$). We compare in both groups percentage of primigravidas, weight and length of the newborn, ponderal index, Apgar score measured in 1 minute, percentage of caesarean sections.

Results: There was 61,1 % primigravidas in the study group vs 48,5% in control group (NS). The mean weight of the newborn was $3596,8 \pm 664,7$ vs $3356,8 \pm 597,8$ g (NS). The mean length of the newborn was $54,1 \pm 3,09$ vs $53,3 \pm 3,31$ cm (NS). The ponderal index was $22,57 \pm 2,07$ vs $22,21 \pm 2,78$ (NS). The 1- minute Apgar score was $9,8 \pm 0,77$ vs $9,7 \pm 1,1$ (NS). 22,2% patients in the study group had caesarean sections compared with 23,5% of patients in the control group (NS).

Conclusion: We conducted that asymptomatic (isolated) proteinuria in late pregnancy does not effect perinatal outcome.

FCP44**SEROLOGICAL ASSAY OF RUBELLA, LISTERIOSIS, TOXOPLASMOSIS AND SYPHILIS IN PREGNANT WOMEN****Maderek E.O.S., Najati N.,** *Tabriz University of Medical Science, Tabriz - Iran*

Objective: Considering the serious effects of infectious diseases such as rubella, listeriosis, toxoplasmosis and syphilis on fetus and due to getting more information about the immunity condition of pregnant women serological study was performed.

Methods: 265 pregnant women who referred to university clinic for prenatal care were searched for IgG and IgM antibodies of rubella, toxoplasmosis, listeriosis and syphilis.

Results: From 265 tested women IgG positive cases for rubella, toxoplasmosis, listeriosis and syphilis were 193 (72.8%), 65(24.52%), 15 (5.66%) and zero respectively. In both rubella and toxoplasmosis IgG positive groups only 5 women (1.88%) were IgM positive. The highest rate of antibody positive women was observed in 21-29 years age group. All sensitive and non immune women for rubella (27.16%) were first gravida.

Conclusion: With respect to high percentage of non immune women for rubella in first pregnancy and severe teratogenicity of this virus in first trimester, it is recommended to vaccinate teenager girls in high school or during marriage. Pre pregnancy consultation and TORCH analysis can lead to early diagnosis and treatment which may substantially lower the associated morbidity and mortality of the fetus and mother.

FCP45**THE ASSOCIATION BETWEEN BACTERIAL VAGINOSIS AT EARLY PREGNANCY AND THREATENED PRETERM LABOR**

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Aim: Bacterial vaginosis (BV) in pregnancy may complicate its course and harm the fetus after vertical transmission. The main aim of this prospective study was to determine the association between bacterial vaginosis at early pregnancy and threatened preterm labor (TPL).

Material - Methods: The study population comprised 179 randomly chosen pregnant women from Lodz region, Central Poland at I trimester. Cervicovaginal samples were obtained between 8 and 16 weeks of gestation. On the basis on Spiegel's criteria Gram-stained vaginal smears were examined for diagnosis of bacterial vaginosis (BV). The odds ratios (OR) and their CI were calculated using EPI INFO software.

Results: Threatened preterm labor (TPL) was diagnosed among 23 (12.8%) pregnant women. Bacterial vaginosis were diagnosed more frequently in women with TPL than in group of women with uncomplicated course of pregnancy (39.1% vs 26%). BV was significantly associated with increased risk of TPL (OR=2,14).

Conclusions: The results of this study have shown that bacterial vaginosis is associated with increased risk of threatened preterm labor. Early pregnancy bacteriological monitoring and treatment may reduce complications during the course of pregnancy.

FCP46

NEONATAL SCREENING OF TOXOPLASMOSIS: A PROSPECTIVE STUDY OF 138 OBSTETRICS PATIENTS

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Objective: It is difficult to find the best method for prevention of congenital toxoplasmosis. The aim of this study was find out the results of neonatal screening in Şanlıurfa.

Methods: This prospective study consisted of 138 pregnant women and their infants who delivered between May 2001 and June 2002 at Obstetrics and Gynecology Department of Harran University Hospital. Blood samples were analyzed for the presence of Toxoplasma-specific immunoglobulin M (IgM) and G antibodies (IgG) by ELISA method. Blood samples of the newborns were collected by the first and the fifth days of their lives. SPSS 11.02 for Windows was used for statistical analyzes.

Results: The serologic test results of this study were demonstrated that at infants group 84 (60.9%) cases were IgG-positive and IgM-negative and 54 (39.1%) cases both IgG and IgM were negative. At mothers group 89 (64%) cases were IgG-positive, IgM-negative and 3 (2.2%) cases were found as IgG-negative and IgM-positive.

Conclusion: All newborns from mothers with antibody have passively acquired maternal IgG antibody whether the newborn is infected or not. IgM antibodies are not transferred across the placenta. Therefore demonstration of IgM antibodies in the newborn usually is sufficient to indicate active antenatal infection. Although we did not identify IgM by newborn screening, previous studies show that neonatal detection of Toxoplasma-specific IgM antibodies is a feasible and practical method.

FCP47

EARLY POSTPARTUM DETECTION OF HEPATITIS B SURFACE ANTIGEN

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Objective: Neonates of women positive for Hepatitis B surface Antigen (HBsAg) are at risk of becoming chronically infected, which can lead to significant future health disorders such as hepatocellular carcinoma. Without treatment 65% to 90% of these newborns will become chronic carriers. The purpose of this study was to find out the carriers at early postpartum period who were not detected for Hepatitis B during pregnancy and to prevent the newborns.

Methods: A prospective study was developed at Department of Obstetrics and Gynecology of Harran University Hospital between June 2001 and June 2002. 136 pregnant women who attended to the delivery room and their newborns included to the study. The mean age of the cases was 27.4(SD 4.9) years. Blood samples of mothers and newborns were collected at the first 2 hours of the birth. The samples were analyzed for HbsAg and Hepatitis B Antibodies (HbsAb). SPSS 11.02 for Windows was used for statistical analyzes.

Results: A total of 10 (7.3%) HBsAg-positive mother were identified. Fifty-six mothers (41.1%) had HbsAb. Forty-three (31.6%) of the newborns had HbsAb but all were negative for HbsAg and 95 (68.4%) newborns were seronegative. Infants born to HbsAg-positive mothers hepatitis B-specific immune globulin (HBIG) and hepatitis vaccine were used.

Conclusion: This study was pointed out the screening of the HbsAg-positive mothers at early postpartum period can help to prevent the neonates from hepatitis B infection.

FCP48

INTESTINAL PARASITES IN PREGNANT WOMEN IN ŞANLIURFA

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Objective: The aims of the study were to investigate the prevalence of parasitic disease and to identify the most frequent types of intestinal parasites during pregnancy.

Methods: Between May 2002 and July 2002, stool specimens were collected from 89 pregnant women (mean 21.3 weeks' gestation). The mean age of pregnant was 26.3 (SD 4.5) years who attended Obstetrics and Gynecology Department of Harran University Hospital. Stool specimens were evaluated by direct microscopical analyzes of wet mounts. There were two patient groups; infected and non -infected. Also maternal anemia was evaluated in each group. SPSS 11.02 for Windows was used for statistical analyzes.

Results: Of the 89 patients studied 42 (47.2%) were infected with at least one parasite. Five different types of parasites were identified. The incidence rates for Giardia lamblia, Ascaris lumbricoides and Entamoeba histolytica were demonstrated as 33.3%, 30.5% and 26.1% respectively. Chilomastix meslini was found as the fourth most common parasite (7.1%) in this study. The mean Hemoglobin (Hb) was 12.2 g/dL. There was no significant difference in maternal anemia between the two groups.

Conclusion: Parasitic disease is the most common infectious disease complication of pregnancy worldwide. This study was find out high incidence of parasitic infection in pregnant in Şanlıurfa. Health education programmes should be considered.

FCP49

GESTATIONAL DIABETES SCREENING BEFORE THE 28th WEEK

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Objective: The aim of the study was to determine the high risk group through 50-g, 1-hour glucose challenge before the 28th week and early diagnosis of Gestational Diabetes Mellitus (GDM).

Methods: As the result of 50-g, 1-hour oral glucose challenge test applied to 206 pregnant women who had a gestational period of 27 weeks and less, 100-g, 3-hour oral glucose tolerance test (100-g OGTT) was applied to 71 of the above mentioned having high values

(>140 mg/dl) in the risk group. After 50-g, 1-hour oral glucose challenge to 139 pregnant women in the control group that had a gestational period of 28 or more weeks, 100-g OGTT was employed on 54 of them in the risk group. Results were evaluated using National Diabetes Data Group (NDGG) criteria and because of at least two high values in 100-g OGTT, GDM was diagnosed. Blood glucose levels were measured in venous plasma by hexokinase method. GDM ratios were compared in both groups. In the analysis of the findings of randomized prospective study, t test and chi 2 test were employed, $p < 0.05$ was found statistically significant.

Findings: There was no statistically significant difference between study and control groups in age, gravidity, parity and abortus. To the pregnant women in the study group, an average of 22.5 (8-27) per week, to those in the control group an average of 31.5 (28-40) per week 50-g, 1-hour glucose challenge test was used. Out of 206 in the study group, 12 (5.82 %) GDM, out of 139 in the control group 7 (5.03 %) GDM were diagnosed and no statistically significant difference was found between them ($p > 0.05$).

Results: There is no need to wait for the 28th week in order to practise 50-g, 1-hour glucose challenge test to determine the risk group in terms of GDM in pregnancy. This test may very well be used safely in an earlier pregnancy period.

FCP50**EPIDEMIOLOGIC FINDINGS OF 1162 PREGNANT WOMEN FOR HBV IN ŞANLIURFA**

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Objective: The aim of this study was to evaluate the prevalence of Hepatitis B surface Antigen (HBsAg) carriers during the pregnancy and prevention of their infants by immunization.

Methods: Between June 1998 and June 2002 databases of 1162 pregnant women were retrospectively recruited from Obstetrics and Gynecology Department of Harran University Hospital. All of them were screened for HBsAg and antibody (HBsAb) during their pregnancy (mean 20 weeks' gestation). Mean age of the cases was 27.4 (SD 4.9) years. Blood samples were analyzed by ELISA method. SPSS 11.02 for Windows was used for statistical analyzes.

Results: A total of 59 (5.1%) HBsAg-positive pregnant women were identified. In 415 (35.7%) cases had HBsAb. Infants born to HBsAg-positive mothers were immunized with Hepatitis B-specific immune globulin (HBIG) and hepatitis vaccine.

Conclusion: This study found that with the detection of HBsAg in pregnant women can prevent hepatitis infection of the newborn.

FCP51**DETECTION OF TOXOPLASMOSIS INFECTION IN PREGNANT WOMEN IN ŞANLIURFA**

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Objective: Geographic variation and eating undercooked meat effects the seroprevalence of Toxoplasmosis. Şanlıurfa is at the hot region of Turkey and eating raw meat is traditional. The aim of this study was to evaluate the prevalence of Toxoplasmosis infection and potential benefits of identification of affected pregnancies.

Methods: This retrospective study consisted of 1149 pregnant women who had their first prenatal visit (mean 20 weeks' gestation) between June 1998 and June 2002 at Obstetrics and Gynecology Department of Harran University Hospital. Blood samples were analyzed for the presence of Toxoplasma-specific immunoglobulin M (IgM) and G antibodies (IgG) by ELISA method. The mean age of the cases was 26.9 (SD 5.3) years. SPSS 11.02 for Windows was used for statistical analyzes.

Results: In 455 (60.4%) cases the samples were IgG-positive which indicates previous maternal infection and the samples of 35 (3%) cases were IgM-positive which indicates the current or recent infection and 448 (38.9%) cases were found as seronegative.

Conclusion: Many cases of Congenital Toxoplasmosis can be prevented. This study was found that preventive choice based on serologic screening in pregnancy was effective.

FCP52**SCREENING FOR ANEMIA OF PREGNANT WOMEN IN ŞANLIURFA**

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Objective: Şanlıurfa is one of the developing city at the southeast part of Turkey. The purpose of this study was to obtain baseline data on the Hemoglobin (Hb), Hemotocrit (Hct) and Mean Corpuscular Volume (MCV) status among low-income pregnant women and prevalence of maternal anemia.

Methods: Setting of the study was Department of Obstetrics and Gynecology of Harran University Hospital between June 1998 and June 2002. Blood samples were collected from 1003 pregnant women during the first prenatal visit (mean 20 weeks' gestation). The mean age of pregnant was 27.16 (SD 5.5)

years. The samples were analysed for Hb, Hct and MCV. Diagnosis of anemia is based on the World Health Organization definition: Hb less than 11 g/dL for pregnant women. Pearson correlation analysis and SPSS 11.02 for Windows were used for statistical analyzes.

Results: The mean levels of Hb, Hct and MCV at the first prenatal visit were found 12.06 g/dL, 35.6 % and 84.89 mm³ respectively. In 215 (21.4%) cases Hb less than 11g/dL which indicates anemia. In 21 (2.09%) of the cases Hb were less than 9 g/dL which indicates deep anemia.

Conclusion: The results of this study was pointed out the high prevalence of the prenatal anemia in Şanlıurfa. Screening for anemia remains an essential part of the first prenatal visit. Nutrition education programmes should be considered.

FCP53

GENITAL MYCOPLASMAS VAGINAL INFECTION AMONG POLISH PREGNANT WOMEN AT EARLY PREGNANCY AND THE RISK OF PRETERM DELIVERY

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Aim: This prospective study was conducted to assess the prevalence of maternal colonization by genital mycoplasmas at early pregnancy and its association with preterm delivery (PD).

Material - Methods: The high vaginal swabs from 179 randomly chosen pregnant women from Lodz region, Central Poland were cultured for *Mycoplasma hominis* and *Ureaplasma urealyticum*. The swabs were taken between 8 and 16 week of pregnancy. The course and pregnancy outcome in this cohort group was analyzed. The odds ratios (OR) and their CI were calculated using EPI INFO software.

Results: 68 (38,0%) of analyzed women were positive for genital mycoplasmas: 30(16,7%) for *M. hominis* and 38 (21,3%) for *U. urealyticum*. 21 (11,7%) women delivered before 37th completed week of pregnancy. Women with preterm delivery were more likely to be culture-positive for genital mycoplasmas ($p=0,05$) than those who delivered at term. Colonization of the lower genital tract by *M. hominis* and *U. urealyticum* was associated with increased risk of PD (OR=2,22 and OR=2,14; respectively)

Conclusions: The results of this study have shown that cervicovaginal infection of *M. hominis* and *U. urealyticum* at early pregnancy is associated with increased risk of preterm delivery. There is a need for detailed microbiological monitoring of all pregnant women at early pregnancy due to prematurity reduction in Poland.

FCP54

PSEUDOCYST OF THE UMBILICAL CORD WITH MUCOID DEGENERATION OF WHARTON'S JELLY : A CASE REPORT

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The perinatal findings of a pregnancy complicated by an umbilical cord abnormality associated with mucoid degenerataion of Wharton's jelly are presented. Serial ultrasound examinations were not performed to the patient, because she didn't visit our outpatient department regularly. The umbilical cord cyst was not detected on ultrasound until delivery.

FCP55

THE EFFECT OF DIFFERENT IRON SUPPLEMENTS ON BLOOD PARAMETERS IN PREGNANCY POPULATION LIVING AT 1869 M ALTITUDE

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Aim: The aim of this study was to determine the effect of different iron supplements on Hb, hematocrit, erythrocytes indices and the other parameters in pregnancy population living at 1869 m altitude.

Materials - Methods: 153 women between 18th and 23rd week of pregnancy were randomly divided into four groups. Women in the first, second and third groups were administered orally once per day: the preperation multivitamin; (=60 mg ferrous, 0.8 mg folic acide, 125 mg calcium, 100 mg magnesium, 100 mg vitamine-C); Fe+3 (Ferro III hydroxyde polymaltose 100 mg+0.35 mg folic acide); Fe+2 (ferroglycin sulphate 225 mg) respectively. Women in the fourth group, control group, did not receive any medication. The results were compared in the groups (variance analysis with repeated measure) and inter groups (Anova).

Results: Means Hb levels of 153 pregnant women before treatment was 12.47 ± 1.2 (9.4-16.4) g/dl. Hb levels of 17 (%11.11) pregnant women were lower than 11 g/dl. In postpartal period, Hb concentration was significantly higher in the first and third group than basal levels [$p < 0.001$ (1.group), $p < 0.001$ (3.group)]. Hb concentration in postpartal period was lower in the second and fourth group than basal levels in period before treatment [$p < 0.001$ (2.group), $p < 0.001$ (4.group)]. After delivery, concentrations of Hb were higher in the supplemented groups than control group [$p < 0.001$ (1-4.groups), $p = 0.04$ (2-4.groups), $p < 0.001$ (3-4.groups)]. Serum iron level was lower in the between 36 and 40.week of pregnancy than basal levels, in every four groups [$p < 0.001$ (1.group), $p < 0.001$ (2.group), $p < 0.001$ (3.group), $p < 0.001$ (4.group)]. But in postpartal period, serum iron levels in supplemented groups were higher than between 36-40.weeks [$p = 0.03$ (1.group), $p < 0.001$ (2.group), $p = 0.02$ (3.group)]. After delivery, serum iron levels in supplemented groups were higher than in control group [$p < 0.001$ (1-4.groups), $p < 0.001$ (2-4.groups), $p < 0.001$ (3-4.groups)]. Serum ferritin level was higher in the first and third group than in control group [$p = 0.002$ (1-4.groups), $p = 0.003$ (3-4.groups)], and it was not significant difference between 2 and 4.groups ($p > 0.05$), in postpartal period.

Conclusion: After delivery, all hematological indices in supplemented groups were better than in control group. This, pregnant women need iron supplementation during pregnancy. On account of all hematological indices, there was no significant difference between the first group receiving multivitamine and other two groups receiving iron (2. and 3.groups). Ferrous sulphate and multivitamine+Fe are the better supplementation regimen in pregnancy.

FCP56

MODIFICATION OF AN OLD TECHNIQUE CAN RESULT IN FAVORABLE OUTCOME: EPCURA

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Objective: The aim of the study is to compare the characteristics of patients and neonatal outcomes of deliveries with transperitoneal versus extraperitoneal cesarean section under regional anesthesia (EPCURA).

Materials and Methods: 179 cesarean section deliveries under regional anesthesia via transperitoneal and extraperitoneal technique in Osmangazi University School of Medicine Department of Obstetrics and Gynecology from May 1996 were evaluated retrospectively in terms of characteristics of patients and neonatal outcomes. Statistical analysis was performed with use of student-t test.

Results: Age, parity, duration of pregnancy and indications for cesarean section were similar between two groups. The most common indication was cephalopelvic disproportion in both groups. Mean first minute and fifth minute apgar scores for transperitoneal group were 8.66, 9.72 and for extraperitoneal group

they were 8.71, 9.71, respectively ($p>0.05$). Mean birth weights were 3418 gr for transperitoneal and 3453 gr for extraperitoneal group ($p>0.05$). The only surgical complication for extraperitoneal technique was one case of urinary bladder laceration which was corrected without any problem.

Conclusion: Although extraperitoneal cesarean section is an old technique, use of it under regional anesthesia in proper cases result in good neonatal outcome and favorable maternal morbidity.

FCP57

ABRUPTIO PLACENTAE AND SEPSIS WITH DISSEMINATED INTRAVASCULAR COAGULOPATHY IN THE SECOND TRIMESTER OF PREGNANCY

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Disseminated intravascular coagulopathy (DIC) is an uncommon but serious complication of pregnancy. Causes of DIC in pregnancy include abruptio placentae, intrauterine fetal death, sepsis, amniotic fluid embolism, preeclampsia, eclampsia, induced abortion, and massive hemorrhage. DIC can occur at any time during the pregnancy but more often is seen in the third trimester of gestation.

We report a case of DIC on the 19th weeks of gestation caused by placental abruption and sepsis who had one previous delivery with cesarian section. The fetus was alive. But persistent heavy vaginal bleeding with the onset of uterine contractions necessitated urgent termination of pregnancy. Hysterotomy was inevitable, since the attempt inducing abortion with vaginal misoprostol failed and heavy vaginal bleeding continued. The patient made good progress and was discharged on the 6th day of operation. Maternal recovery is the rule with prompt and adequate treatment but fetal death is common. Therapy includes treating the underlying cause, maintenance of blood volume, replacement of depleted clotting factors, and often delivery of the fetus and placenta. DIC is seen more often in the third trimester of pregnancy and there are few cases in the literature, about midtrimester abruptio placentae and DIC that finalized with fetal survival. The patients had been observed with cautious conservative management as long as the fetus was alive. In our case, termination of pregnancy was inevitable for maternal well-being.

FCP58

EVALUATION OF THE CESAREAN SECTION CASES

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Objectives: It is aimed to evaluate the cesarean section ratios, indications, parities, sex, birth weight and Apgar scores of the newborns, and the maternal and fetal mortalities in our clinic.

Materials- Methods: From 11780 cases of deliveries performed in 8.5 years in 3rd Obstetrics and Gynecology Department, 2009 cesarean section cases were evaluated retrospectively.

Results: The cesarean section ratio was determined as 17.1 %. This ratio was 12.0 % in 1994, 21.35 % in 2001 and 23.8 % in the first six months period of 2002. We found that, 47.8 % of the cases were between 25-35 ages. Primary cesarean section ratio of the cases was 71.3 % and repeat cesarean section ratio was 28.7 %. When the indications of the cesarean sections were reviewed, 25.3 % were found to be repeat cesarean sections, 22.7 % were fetal distress, 12.1 % were CPD, and 11.4 % were presentation anomalies. 47.9 % of the babies were female, 52.1 % were male. Within the babies who had fetal distress, male sex was significantly high ($p<0.001$). In 9.2 % of the babies 1' Apgar scores, and in 10.7 % of the babies 5' Apgar scores were ≤ 6 . Birth weights of the babies were <2500 grams in 20.0 % of the cases, ≥ 4000 grams in 11.0 % of the cases and between 2500-3999 grams in 69.0 % of the cases. The stillbirth ratio was 3.52 % (n:73). Apgar scores were 0 at 5' minute in 3.76 % (n:78) of the cases. Fetal mortality was mostly seen in abruptio placenta and placenta previa cases (n:69).

Conclusions: It is seen that, cesarean section ratios increased in years. Although our hospital is a reference hospital and this leads to an increase in the cesarean section ratios, the ratio was 23.8 % in the last

6 months period, when the biggest increase was seen. But nowadays cesarean section ratios increase, as cesarean sections are preferred in private hospitals. When the complications and the obligation of the following deliveries to be cesarean section are concerned, it is seen that their pregnancy and labor chances decrease. When our country's socioeconomic status is concerned, it is obviously seen that cesarean section ratios should be decreased because of their economic cost.

FCP59

EVALUATION OF THYROID FUNCTION CHANGES IN SPONTANEOUS ABORTION

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Objectives: In this study we aimed to research thyroid functions in healthy gravidas up to 20th Gestational age in cases which resulted by spontaneous abortion and to compare the relation of thyroid hormone concentration with spontaneous abortion.

Material - Methods: This research was performed in Sisli Etfal Training and Research Hospital 3rd Obstetrics and Gynecology Department between March 2000 and August 2001. Thyroid functions of 40 gravidas whose gestations were normal until 6.-20th gestational weeks and 60 cases whose gestation resulted in spontaneous abortion were compared. Detailed history of patient of all gravidas was taken; systemic physical examinations and thyroid gland examinations were completed. Hemoglobine, hematocrite, blood group types, Total T3 (Triiodothyronine), Total T4 (Thyroxine), Free T3, Free T4, TSH (Thyroid Stimulating Hormone) levels were determined.

Results: 100 cases were included in the study. Thyroid function tests of spontaneous abortion group (60/100) and the control group whose gestations were normal (40/100), were compared. Total T3, Total T4, Free T3, Free T4 levels were lower in the spontaneous abortion group and this was statistically significant ($p < 0.001$). TSH levels were found to be high and it was statistically significant ($p < 0.01$).

Conclusions: Disorders in thyroid functions have an important place in spontaneous abortion reasons. Examinations carried out carefully and detailed laboratory tests (TSH, Free and total thyroid hormones) of gravidas who have symptoms and signs of thyroid function defects, should be performed cases whose thyroid function defects are proved should be treated and followed as euthyroid for better maternal and fetal results

FCP60

SECOND-TRIMESTER GENETIC AMNIOCENTESIS : DOES IT WORTH ? FIVE YEAR EXPERIENCE

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Objective: The purpose of this study is to evaluate the data related to the genetic amniocentesis performed in a single university hospital.

Methods: Medical records were used to analyze indications of amniocentesis, the results of chromosome analysis, complications and pregnancy outcomes from 1998 through 2002. Anomaly screening and triple screen were performed to all of these patients attending to our Obstetrics and Gynecology Department between 16 and 20 weeks of pregnancy. Patients were referred to second-trimester genetic amniocentesis in cases of advanced maternal age, suspicion of a genetic abnormality on ultrasound or abnormal triple screen result. All of the second-trimester genetic amniocentesis were performed by a group of general obstetricians-gynecologists.

Results: Totally 2686 patients attended to our department between 16-20 weeks of pregnancy during the index period. 159 patients were suggested genetic amniocentesis due to advanced maternal age, suspicion of genetic abnormality on ultrasound or abnormal triple screen. A total of 131 genetic amniocentesis were performed. The indications were advanced maternal age in 24, suspicion of genetic abnormality on ultrasound in 15, history of siblings with Down syndrome in 2 and abnormal triple screen in 90

patients respectively. Two pregnancies were terminated after the diagnosis of Down syndrome by genetic analysis. Four pregnancies were terminated because of Corpus callosum agenesis, gastroschisis, omphalocele and choroid plexus cyst detected on ultrasound. Two pregnancy losses due to the procedure were detected; revealed a 1.5% complication rate of the overall second-trimester genetic amniocentesis performed. One of the fetal loss happened 10 days after the procedure during which sudden fetal bradycardia was observed. No membrane rupture was recorded. Down syndrome or other chromosomal abnormalities were not recorded after birth among patients that triple screen were already normal.

Comment: Although the size of this study is limited, our complication rates are similar that estimated in the literature (1.5%). Being one of the most performed invasive techniques for prenatal diagnose; the complication rates of genetic amniocentesis are in acceptable ranges.

FCP61

FETAL AND NEONATAL MORTALITY DURING ONE YEAR PERIOD AT DICLE UNIVERSITY

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Objective: To determine the mortality ratios of fetal, early and late neonatal periods during one year period, and to investigate their relationship with the birth weight.

Methods: Between April 2001 and March 2002, all newborns delivered in the Obstetrics clinic after 20th week of pregnancy were followed prospectively. Clinical findings of the newborns including birth weight and timing of the mortality were recorded. Each family of the newborns was interviewed by telephone call at the end of the 4th postpartum week, to learn late neonatal prognosis.

Results: The ratio of fetal mortality was 44.9‰, and early neonatal mortality was 73.1‰ (perinatal mortality: 114.7‰). Of the 1103 deliveries, 955 mothers (86%) that took home alive baby responded phone call at the end of the 4th postpartum week. Late neonatal mortality was 9.2‰ (N: 11), and total neonatal mortality was 82.3‰. Seventy-four percent of the early neonatal mortality was occurred in the first postpartum day. Neonatal life expectancy was 10% for babies weighing less than 1000g and 41% for those ranging between 1001-1300g. Between 1301-2000g, this expectancy rose only to 75%, reaching 98% at the term.

Conclusion: Perinatal and neonatal mortality was unacceptably high in our institution. It may originate from social and economical reasons as well as from inadequate neonatal intensive care unit. All trials for the reorganization of the neonatal intensive care unit were started. We are able now to offer a life expectancy to the parents and also the chance of "intrauterine transport" to the fetuses that the "estimated birth weight" lesser than 1300g.

FCP62

PERINATAL MORTALITY IN A REFERRAL CENTER AT SOUTH EASTERN TURKEY

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Objective: To evaluate the perinatal mortality of the Obstetrics clinic during one year period.

Methods: All newborns delivered after 24th gestational week during the period April 1, 2001 - March 31, 2002 at Dicle University Medical Faculty Obstetrics clinic were evaluated prospectively for clinical aspects and the causes of mortality according to Wigglesworth classification.

Results: Total number of deliveries was 1246 and the perinatal mortality was 109 ‰. Distribution of the causes of perinatal mortality was stillbirths 36%, prematurity 33%, malformations 11%, special causes 8%, perinatal hypoxia 5%, infections 1%, other causes 4%.

Conclusion: Prematurity and stillbirth were the main causes concerning 70% of the perinatal mortality in our Obstetrics clinic.

FCP63

EVALUATION OF THE FETUS AND THE RISK FACTORS IN THE ETIOLOGY OF STILLBIRTHS IN MALATYA

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Objective: To determine the risk factors in the etiology of stillbirths and to investigate the fetal anomalies in these cases.

Methods: A prospective study was performed to investigate the risk factors and fetal anomalies in 257 stillbirths out of 7200 deliveries occurred in our clinic between November 1992-July 2002. Evaluation was made according to the Wigglesworth classification.

Results: Two hundred fifty seven stillbirths (3.5%) were detected out of 7200 deliveries in our clinic during a 10-year period. The mean maternal age was 29.3 ± 3.1 years, mean parity was 2.53 ± 0.8 and mean gestational age was 30.73 ± 4.8 weeks. Hypertension was the most common obstetrical complication detected in 17.5% of the patients. The rate of the other complications were; 5.4% antenatal bleeding, 2.7% Rh isoimmunisation, 1.5% diabetes mellitus. No obstetrical complications were detected in 30.3% of patients. Forty-nine percent of the stillbirths were male and 42.3% were female. Autopsy was performed in 17.6% of the fetuses. Central nervous system anomalies were the most common anomaly detected by autopsy (10.6%). No identifiable cause was detected in 61.8% of the fetuses by autopsy.

Maternal TORCH infections were not detected in these patients.

Conclusion: The rate of unexplained stillbirths can be reduced by adding special tests like karyotyping and anticoagulants to the investigation protocol. Parents must be persuaded for the autopsy permission.

FCP64

EVALUATION OF MATERNAL, FETAL AND NEONATAL OUTCOME IN AN UNIVERSITY CLINIC

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Objective: Evaluation of maternal, fetal and neonatal outcome in our clinic during last 5 years.

Methods: Two thousand out of 7200 delivery occurred in İnönü University Faculty of Medicine Department of Obstetric and Gynecology between January 1997 and July 2002 were retrieved with 40% sampling and maternal, fetal and neonatal features were evaluated.

Results: The maternal mean age was 28.2 ± 6.12 . Mean parity was 3.45 ± 1.2 . Antenatal care rate was %62 and cesarean section rate of our clinic was 35%. Completion of high school or university education rate was 52% and only 9% of pregnant women were illiterate.

When we evaluated pregnancy related complications; 12.9% were hypertensive, 8.4% had preterm labor, 4.3% had antenatal hemorrhage and 5% had premature rupture of membranes. The rate of hypertension was lower in higher education levels ($p < 0.001$) and was higher among nulliparous pregnant. Incidence of preterm delivery was increasing with parity ($p < 0.001$). The rate of small for gestational age (SGA) was 10 % and the rate of macrosomia was 6.2 %. Incidence of macrosomia was increasing with parity and birth weight of the previous neonate ($p < 0.001$, $p < 0.001$). Maternal mortality rate was 400 per 100000 live birth and intrauterine exitus rate was 2.7%.

Conclusions: Regular antenatal follow-up may lower both pregnancy related complications and maternal - fetal mortality significantly. Effective antenatal care can be achieved by increasing the education level.

FCP65

THE IMPORTANCE OF PRENATAL DIAGNOSIS IN FETAL ANOMALIES

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Objective: To evaluate fetal anomalies subject of pediatric surgery, diagnosed at second trimester of pregnancy or later.

Methods: Of the 207 fetuses with anomalies from 3891 labor or abortion, 69 fetuses associated with pediatric surgical anomalies between January 2000 and August 2002 were retrospectively evaluated.

Results: Median delivery time was 37 weeks. Of the 69 fetuses, 38 underwent normal vaginal delivery, 17 cesarean section, and 14 medical abortions before 20 weeks' gestation. Forty-seven fetuses were male and 22 were female. Fifty-six fetuses had diagnosis of at least one anomaly prenatally, while the remaining 13 fetuses all associated with gastrointestinal or genital anomaly had diagnosis postnatally. Of the 69 fetuses, 61% had urinary anomaly, 19% gastrointestinal, 9% genital, 7% thoracic anomaly, and 4% had sacrococcygeal teratoma. The median birth weight was 3548gr (range, 1320-3750gr) in viable births, while it was 762gr (range, 467-1330gr) for non-viable fetuses. Prenatal ultrasound had 98% accuracy and 81% sensitivity in diagnosing detectable fetal organ system anomaly.

Conclusions: Thirty-four percent of fetal anomalies were subject of pediatric surgery in our institution. Urinary anomalies cover nearly two-third of pediatric surgical anomalies. Certain prenatal diagnosis of genital anomalies is quite difficult. If gastrointestinal anomalies are not diagnosed prenatally, postnatal management may delay, which may cause unfavorable outcome in neonates. Antenatal diagnosis of fetal anomalies and prompt prenatal and/or early postnatal treatment in selected patients may significantly decrease neonatal morbidity and mortality. Multidisciplinary team effort is essential in the management and follow-up of fetal anomalies.

FCP66

CHORANGIOMA AND CHORANGIOSIS: AN IMPORTANT PLACENTAL SIGN OF CHRONIC FETAL HYPOXIA. A CASE REPORT

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Chorangioma and chorangiosis are incompletely understood and overlapping villous capillary lesions believed by some to be related to hypoxia. The incidence of both pathologies are significantly higher in congenital malformations, preeclampsia, IUGR, premature delivery and gestation at high altitudes. Chorangioma, one of the most frequent tumors is seen %1 of the fullterm pregnancy. In histopathological examination of placentas with chorangiomas are found chorangiosis in neighbor villous. %5 of the newborns hospitalized in neonatal intensive care unit, have chorangiosis.

We presented a 27 years old primigravid with placental mass, placentomegaly and IUGR at 27 th gestational weeks by prenatal ultrasound screening. Color Doppler imaging was revealed 7x9cm avascular solid placental mass, probably chorangioma, and without any anomalies in the fetus. Chorangioma resolved during pregnancy and occurred fetal hypoxia. In this reason, at 38 weeks of gestation, Caesarean section was performed, baby was 2100g weight. Histopathological examination of placenta was chorangioma, chorangiosis and hemorrhagic infarct.

We suggest that placental examination are important for diagnosis and following up of villous capillary lesions and their unpredictable outcomes.

FCP67**PRENATAL DIAGNOSIS OF FETAL HEMIVERTEBRAE: A CASE REPORT**

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Hemivertebrae is a congenital anomaly of the spine in which one half of the vertebral body develops. It is the most common anomaly causing congenital scoliosis. The incidence of hemivertebrae is around 5-10:10 000 birth. It affected more frequently female. The causes and the mode of inheritance of hemivertebrae are unknown. Isolated fetal hemivertebrae carry a good prognosis but the presence of associated anomalies including musculoskeletal, cardiac, intestinal, renal and intracranial; reduces the survival. We presented a case of thoracic hemivertebrae in a 23 years old primigravid woman at 21 weeks gestational age. In ultrasonographic examination was found thoracic kyphoscoliosis due to hemivertebrae formation between 10th and 11th thoracic vertebrae. There wasn't any other associated anomalies. Amniocentesis was made and fetal chromosomal analysis was normal karyotyp. Prenatal diagnosis of hemivertebrae was confirmed by postpartum radiologic detecting.

FCP69**PREGNANCY COMPLICATED BY SIPPLE'S SYNDROME**

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Background: Sipple's Syndrome is a form of multiple endocrine neoplasia which has an autosomal dominant genetic condition and has two main symptoms, medullary thyroid and a tumor of the adrenal gland medulla.

Case: A 28- year-old primigravid woman with Sipple's Syndrome was seen at 33 weeks with preterm labor. After the tocolytic therapy labor was stopped. At 38 week' gestation spontaneous vaginal delivery resulted with a 3800gr. female infant with 1- and 5- minute Apgar scores of 9 and 9. Postpartum period was uneventful. Her mother, 3 sisters, one aunt, 3 cousins and her first child also have the same syndrome.

Conclusion: Genetic consultation must be done to the patients with this syndrome before pregnancy.

FCP70**IS CESAREAN HYSTERECTOMY JUSTIFIED IN THE MANAGEMENT OF UTERINE PROLAPSE COMPLICATING PREGNANCY AT TERM? A CASE REPORT**

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Background: Uterine prolapse complicating pregnancy is very rare.

Case report: A 30-year-old woman, gravida 6, para 5, presented with subtotal uterine prolapse and uterine contractions on the 36th week of gestation. Sonography revealed a single fetus with vertex presentation with an estimated fetal body weight of 2400 g. Collum uteri was totally prolapsed and edematous. A cardiotocography revealed regular uterine contractions and a normal fetal heart rate pattern. As the labor was obstructed, a cesarean delivery was decided. The woman gave an informed consent, and a cesarean hysterectomy was performed. The postoperative period was uneventful.

Conclusion: Cesarean hysterectomy might be a therapeutic option for women undesiring fertility with uterine prolapse complicating pregnancy at term.

FCP71

PRENATAL DIAGNOSIS OF DOWN SYNDROME IN A TWIN PREGNANCY: THE ROLE OF SECOND TRIMESTER ULTRASONOGRAPHY**Müngen E., Tütüncü L., Yergök Y.Z., DüNDAR Ö., Gülbana Military Medical Academy, Haydarpaşa Hospital, Istanbul - Turkey**

Background: Multiple gestations are at increased risk for congenital abnormalities. The role of second trimester maternal serum biochemical screening for chromosomal abnormalities in multiple gestations is limited. For these reasons, prenatal identification of fetuses with structural and/or chromosomal abnormalities in multifetal pregnancies is a diagnostic challenge. The aim of this case report is to emphasize the role of second trimester targeted ultrasonography in the prenatal diagnosis of fetal abnormalities in multiple gestations.

Case: Detailed fetal ultrasonographic examination in a 27-year-old woman with twin pregnancy at 16 weeks' gestation revealed thickened nuchal fold (8 mm) in one of the fetuses. The other was normal. Amniocentesis was performed with two separate needle insertions into the two gestational sacs. The karyotype of the fetus with thickened nuchal fold was 47, XY, +21 (Down syndrome) and that of the other was normal. The parents were counselled regarding the possibility of selective termination because dichorionic placentation and opted to terminate the affected twin. Selective termination of the fetus with Down syndrome was performed by intracardiac potassium chloride injection at 19 weeks of gestation. The remainder of pregnancy was uneventful and the healthy baby was delivered by cesarean section at 39 weeks of gestation.

Conclusion: Second trimester targeted ultrasonography has an important place in fetal anomaly screening in multiple pregnancies.

Key words: Multiple gestation, Down syndrome, selective termination.

FCP72

THE DIAGNOSTIC OF FOETUS PATHOLOGY AT THE PREGNANT WOMAN WITH ANEMIA AND CHRONIC PYELONEPHRITIS**Karimov A.H., Tashkent Second State Medical Institute - Uzbekistan**

Objective. Ultrasound diagnostic of foetus pathology at the pregnant woman with anemia and chronic pyelonephritis.

Methods: Ultrasound scanning, Dopplerography of uterine-fetus-placental bloodstream. It was examined 60 pregnant woman with anemia and chronic pyelonephritis in 22-24 and 28-32 weeks. The Fetometry, biophisic foetus data, velocity blood in uterine vessels, umbilical arteria, foetus aorta and foetus vessels were investigated.

Results: Pregnant woman didn't have any pathology in 22-24 weeks. Pregnant woman with anemia in 28-32 weeks had nonsymmetry hypotrophy (12%) and symmetry hypotrophy (4%); pregnant woman with chronic pyelonephritis had nonsymmetry hypotrophy (16%) and symmetry hypotrophy (8%). 24% of pregnant woman with anemia and 36% with chronic pyelonephritis had infringements of uterine-fetus-placental bloodstream. The more hard infringements have been detected at the pregnant woman with combination of anemia with chronic pyelonephritis.

Conclusion. The pregnant woman with anemia and chronic pyelonephritis had hypoxia and hypotrophy in 28-32 weeks. The more hard infringements have been detected at the pregnant woman with combination of anemia with chronic pyelonephritis. According with received information the earlier diagnostic of foetus pathology was started in 22-24 weeks. The treatment of foetus hypoxia and hypotrophy was also started in 22-24 weeks.

FCP73

THE IMPORTANCE OF MATERNAL SERUM INTERLEUKIN-6 CONCENTRATIONS IN DIAGNOSIS OF SUBCLINICAL INTRAUTERINE INFECTIONS IN PREGNANT WOMEN WITH PRETERM LABOR

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Aim: to investigate the clinical importance of maternal serum interleukin-6 (il-6) measurements for diagnosis of asymptomatic intrauterine infection in women with preterm delivery.

Methods: maternal serum il-6 concentrations have been measured in 61 pregnant women between 22. - 34. Weeks of gestation. 39 were in preterm labor; 22 were in the control group. The placentas of 18 women who delivered in one week where tocolyses was not successful were sent to pathological analysis to investigate histological chorioamnionitis signs.

Results: average maternal serum il-6 concentrations of the group 1 with positive histochorioamnionitis and failing tocolyses who delivered in one week had been found significantly higher than in group 2 with successful tocolyses and positive histochorioamnionitis and in group 3 with failing tocolyses, who delivered in one week but had no signs of histochorioamnionitis (15 pg/ml versus 2.88 pg/ml and 6.40 pg/ml). In order to predict preterm labor and histological chorioamnionitis during delivery, optimum sensitivity and specificity values of maternal serum il-6 concentrations have been found 5.9 pg/ml and above.

Discussion: it has been seen that maternal serum il-6 concentrations of pregnant women with preterm labor associated with intrauterine infections were very high. The measurement of this cytokine may be beneficial for diagnosis and treatment of pregnant women who are high at preterm labor risks.

FCP74

UTERINE RUPTURE ASSOCIATED WITH MISOPROSTOL LABOR INDUCTION IN WOMEN WITH PREVIOUS CESAREAN DELIVERY

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Objective: To review our experience with uterine rupture in patients undergoing a trial of labor with a history of previous cesarean delivery in which labor was induced with misoprostol.

Methods: A retrospective chart review was used to select patients who underwent induction of labor with misoprostol during the period from February 1999 to June 2002. Women with a history of cesarean delivery were retrospectively compared with those without uterine scarring. Criteria for patients receiving misoprostol included intrauterine fetal death and a Bishop score <6. Unexplained vaginal bleeding, history of prior classic cesarean delivery or major uterine surgery, and fetal malpresentation were the exclusion criteria. Fifty micrograms of misoprostol was placed in the posterior vaginal fornix. If after 4 hours the patient still met the inclusion criteria, second dose of vaginal misoprostol was given. An oral dose of 100 µg was repeated every four hours for a total of six doses.

Results: Uterine rupture occurred in 4 of 41 patients with previous cesarean delivery who had labor induced with misoprostol. The rate of uterine rupture (9.7%) was significantly higher in patients with a previous cesarean delivery ($p < .001$). No uterine rupture occurred in patients without uterine scarring. Women with a history of cesarean delivery were more likely to have oxytocin augmentation than those without uterine scarring (41% vs 20%; $p = .037$).

Conclusion: Misoprostol induction of labor increases the risk of uterine rupture in women with a history of cesarean delivery.

FCP75

PRENATAL DIAGNOSIS OF WOLF-HIRSCHHORN SYNDROME (4P-) IN ASSOCIATION WITH CONGENITAL HYPOSPADIAS AND CLUBFOOT

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Case:

A 31-year-old gravida 2 partus 1 woman was referred at 29 weeks' gestation with suspicion of intrauterine growth restriction. Sonographic examination revealed a single live fetus. Fetal biparietal diameter, abdominal circumference and femur length measurements were compatible with 25 weeks' gestation. Amniotic fluid index was 15 cm. Doppler velocimetry of umbilical artery was normal. A 7.3 cm placental thickness was measured.

Examination of the fetal anatomy revealed a deformity of the right lower limb and undescended testes with an irregular distal penis. The parents were informed and a cordocentesis was performed. The karyotype analysis revealed a deletion of the short arm of chromosome 4. After genetic counseling the family elected for termination of the pregnancy. Labor was induced and the woman delivered a stillborn male fetus weighing 900 g. The baby had prominent glabella, short philtrum, low-set ears, hypospadias, undescended testes and pes equinovagum deformity of the right foot. Except for a large hydropic placenta, no additional anomaly was noted at autopsy. Chromosomal analysis of the woman revealed a normal karyotype.

Conclusion:

The prenatal detection of intrauterine growth restriction, hypospadias and clubfoot should raise the suspicion of WHS particularly with a normal amniotic fluid.

FCP76

THE INCIDENCE OF FETAL LACERATION INJURY IN CESAREAN DELIVERY AT A TURKISH MATERNITY HOSPITAL

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Objective: To determine the incidence of fetal laceration injury in cesarean delivery.

Material and Methods: We reviewed medical records of all neonates delivered by cesarean between November 2001 and April 2002. All cesareans were performed by residents under staff supervision. A retrospective chart review was used to document fetal laceration injuries, admission and discharge notes by pediatricians. When a neonatal record indicated a fetal laceration injury, the maternal records including obstetric delivery note and postpartum daily progress notes were reviewed. Parameters including indication for cesarean, presentation, type and location of injury were evaluated.

Results: There were 2554 cesarean deliveries performed during the study period; of these 2545 neonatal records were available for review. Eleven fetal laceration injuries were detected (0.4%). The incidence of laceration showed no difference between cesarean deliveries with vertex and non-vertex presentation (6 versus 5 cases).

Conclusion: This study showed approximately a five times lesser incidence (0.4%) of fetal laceration injury at cesarean delivery than a previous study (1.9%) which; to best of our knowledge, was the only one to document the incidence.

FCP77**VAGINAL DELIVERY AFTER CAESAREAN SECTION**

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Introduction: Previous caesarian section without permanent indications is not unconditional reason for repeating cesarean section. Most of such births, either spontaneous or planned, would be finished as vaginal birth. Vaginal birth after caesarian section - VBAC – is lower traumatic for mother than repeated cesarean section. During last decade rate of VBAC have increasing trend.

Methodology: These report presents statistical data gathered through retrospective analyze of deliveries in one year period at Ob/ Gyn Clinic Tuzla.

Results: Out of 4480 deliveries completed at Clinic in one year period we had 249 or 5,56% with previous CS. The majorities (93,98%) of this number were women with two or three previous deliveries. Regarding the age most represented were patients between 19 and 34 years - 80,72%. On term deliveries had 91,57% patients. As indication for repeated CS pre-term rupture of membrane had 24,90% patients and meconial water had 19,68%. Most of patients (39,36%) had 4 - 7 control examinations during the pregnancy. There were 24,90% of births completed by Syntocinine stimulation and 4,82% by vacuum extraction. Out of 249 patients with previous SC repeated SC had 67,47% patients. We had 22 patients (8,84%) with two previous CS. Imminent uterine rupture had 6,80% patients and there were one incomplete rupture or 0,40%.

Conclusion: Repeated SC is complicated surgery with significant influence on further obstetrical complications. Vaginal delivery is safer and less complicated then repeated CS. Every Hospital equipped for obstetrical care should be able to offer women vaginal delivery after previous Caesarian section. Vaginal delivery has many benefits: medical, psychological and financial.

FCP78**THE TERMINATION OF DELIVERIES WITH LOW BIRTH NEONATES**

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Background: By definition low birth weigh (LBW) includes neonates regardless of gestational age who weigh less than 2500g at birth. Very low birth weight refers to neonates weighing less than 1500g at birth. It is associated with higher morbidity and mortality rate. It is a worldwide problem among all populations. The aim of this study was to relate low birth weigh neonates to the way of delivery and it outcome.

Methods: Retrospective and descriptive analysis was performed based on data obtained from a validated maternity database of our maternity unit. The information analyzed comprises clinical records from January 1st to December 31st 2001.

Results: Among 4480 newborns LBW was diagnosed in 218 (4,87%) of cases. Participation of primiparas, multiparas and pluriparas was approximately the same in both experimental and control group. Authors find higher frequency of older paras in experimental group (17,43% vs. 8,0%). In experimental group authors find higher incidence of preterm labor and deliveries (69,27% vs. 6,0%). Incidence of low, very low and extremely low birth weight was 86,25%, 12,08% and 1,67% respectively. Authors find lower APGAR scores in experimental group both in first and fifth minute. Frequency of operative deliveries in examination group was 52,75%. Out of that number there were 51,37% of cesarean section and 1,38% vaginal birth for breech presentation. Other significant risk factors were analyzed and authors find following incidence: premature rupture of membranes in 49,08%, oligohydramnion in 1,38% and placental ablation in 4,59% of cases vs. 16%, 2,0% and 1,0% respectively in the control group.

Conclusion: Labor and delivery of low birth weigh neonates implicates higher rate of operative deliveries to prevent morbidity and mortality but we still have a questionable outcome, especially in extremely low birth weigh.

FCP79

MULTIFETAL PREGNANCY AND PREMATURE LABOUR

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Introduction: A multifetal pregnancy is generally considered to be a high-risk one. One of reasons for that is prematurity. Near about 50% twins were born before 37 week of gestation. The aim of this study was to analyse the frequency of premature labour in multifetal pregnancy in one year period (year 2000) at OB/GYN Clinic in Tuzla.

Patients and Methods: In retrospective study we analyzed multifetal pregnancies in one year period. The total number of multifetal pregnancy were 74 – out of this number we had 73 twin pregnancy and one pregnancy with three fetuses. The twin pregnancy was divided in three groups: 26 to 30 weeks of gestation, 31 to 34 weeks of gestation and 35 to 37 weeks of gestation. The body mass of neonates at the birth was divided in three groups: less than 1499 g, 1500 to 2499 g, and 2500 g and more. In controlled group we analyzed 100 pregnancies with one fetus delivered preterm. We used test of proportion in statistical management of data.

Results: Out of 4748 deliveries there were 73 (1,53%) twin pregnancy and 1 (0,02%) triplet pregnancy. In the most number of twin pregnancies the delivery was performed preterm, in 34 cases or 46,57%. In control group the number of premature delivery was 11 (11%). We noticed the most number of termination in twin pregnancy in the period from 35 to 37 weeks of gestation, 18 or 52,94%. In period of 31 to 34 weeks we performed 11 or 32,35% pregnancy and in period 26 to 30 weeks we performed 5 twin pregnancy or 14,7%. In the pregnancy with three fetuses delivery was performed in 34 weeks of gestation. The body mass at the delivery in twin pregnancy was from 1500 to 2499 gr, in 15 cases or 44,11%. In controlled group we had 5 neonates or 45,45% with 2500 g. and more. We found statistical difference between the number of premature deliveries in twin pregnancy and single pregnancies. The value of test of proportion was 5,378 ($p < 0,05$).

Conclusion: Termination of multifetal pregnancies in most cases was before 37 weeks of gestation. This data determines us to consider multifetal pregnancies as high risk pregnancies.

FCP80

PREMATURE RUPTURE OF MEMBRANES AND RISK FOR DELIVERY AND NEWBORN

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Introduction: Premature rupture of membranes (PROM) is one of many risk factors for delivery. It is caused by infection of vagina, disproportion and low level of antenatal care.

Aim: To analyse influence of PROM to course of delivery, and to state of mother and newborn in delivery time.

Methods: In the retrospective study we analyzed 932 deliveries with PROM in one-year period at OB/GYN Clinic in Tuzla with the review of time of termination of pregnancy and state of newborn in time of delivery.

Results: Out of 4488 deliveries we found 932 or 20,76% with PROM. We found combination of two or more risk factors for pregnancy in group patients with PROM. Most frequent factors were: gestosis in 35,94%, urinary infections in 28,54%, and low level of antenatal care in 55,68% (Less than six examinations in pregnancy). Combination of two or more factors we found in 90,34% of PROM cases. In group of newborns we found higher incidence of newborn with small birth weight – 15,87%. In group with PROM we found quite high incidence of infection of mothers (Chorioamnionitis, uroinfection) – 3,0% and higher incidence of infection of newborns- 24,30%. In group with PROM we completed pregnancy by Cesarean section in 16,2% of cases and by stimulation of delivery with Oxytocine or Prostaglandines in 38,06% of cases.

Conclusion: The premature rupture of membranes is caused by many single risk factors or combination of these factors and makes risk for mothers and newborns in early neonatal period.

FCP81**TERMINATION OF THE BREECH PRESENTATION PREGNANCIES IN ONE YEAR PERIOD**

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Introduction: Breech presentation occurs 3 to 4% of all deliveries. The term pregnancy with breech presentation may be managed by cesarean section or a trial of vaginal delivery. In past, studies have shown an increase of perinatal mortality and morbidity with vaginal breech delivery. In many centers is dramatic increase in cesarean section rate for breech presentation, ranging from 80 to 100%. The aim of this study was to analyse termination of breech presentation pregnancies in one-year period, at OB/GYN Clinic in Tuzla.

Patients and Methods: In retrospective study we analyzed 222 deliveries with breech presentation performed in year 2000. Pregnant women with breech presentation of fetus were divided in two groups: primiparas and multiparas. Out of 222 deliveries we had 120 primiparas and 102 multiparas. The state of neonates we evaluated with the value of Apgar score at the birth. We used test of proportion in statistical management of datas.

Results: Out of 4748 deliveries there were 222 (4,67%) deliveries with breech presentation. Cesarean section was performed in 75 (62,5%) primiparas and in 55 (50,98%) multiparas. Vaginal delivery was performed in 45 (37,5%) primiparas and in 50 (49,01%) multiparas. We found statistical difference between the number of cesarean section in deliveries with breech presentation both in group of primiparas and multiparas, the value of test of proportion was 1,75 ($p < 0,05$). Apgar score 8-10 was in 66 (55%) neonates of all cases born with cesarean section in primiparas versus in 38 (37,25%) in multiparas. In the neonates wick were born with vaginal delivery Apgar score 8-10 was 35 (29,16%) in primiparas versus in 31 (30,39%) in multiparas.

Conclusion: The cesarean section was the method of choice for termination of breech presentation pregnancies especially in group of primiparas.

FCP82**TERMINATION OF TWIN PREGNANCIES**

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Background: Twin pregnancy is determined as a development of two or more fetuses in one uterus. It is count as a high risk pregnancy, followed by numerous complications. Malpresentation of one or both fetuses implicates more frequent operative delivery. Aim of this study was to determine frequency of multiple pregnancy in Tuzla Canton, development and it outcome.

Methods: Out of 4480 deliveries during 2001 there were 59 twin pregnancies that we analyse. Control group was 100 deliveries of singleton pregnancies.

Results: out of 59 pregnant woman who delivered twins, 3,39% have 18 years or less, 77,97% were between 19 and 34, and 18,64% were older than 35. In control group 86% were in the age group between 18 and 34, and 14% were older than 34. There were 38,98% primipara, 55,93% multiparas and 5,08% pluriipara in experimental group. In control group authors find 45% primiparas, 48% multiparas, and 7% pluriiparas. There were 64,41% preterm deliveries, 35,59% at term in experimental group. In control group authors find 5% preterm, 93% term and 2% postterm deliveries. EPH gestosis authors find in 22,03% cases, and 10% in control group. In the experimental group authors find 10,17% cases of ablation of placenta, but in control group there were no such cases. Premature rupture of membranes authors find in 32,20% of cases and 28% in control group. There were 44,07% of malpresentation of one or both twins in experimental group only 4% in control group. The way of delivery was vaginal in 40,68%, vaginal operative in 8,47% and cesarean section in 50,84% of cases. In control group 87% was conduct vaginally, 1% operative vaginally, and 12% with cesarean section. Average body weight in the experimental group was 2099,57g and 3388,50g in control group. Average gestational age in the experimental group was 30 we-

eks of gestation and 38 weeks of gestation in control group.

Conclusion: According to data of this study, twin pregnancy carry greater risk of EPH gestosis, preterm delivery, ablation of placenta and malpresentation of fetuses and delivery of the neonates of low birth weight. Deliveries were more frequently conduct operatively. Consequence is higher morbidity of the mothers and neonates. Because of that we have to pay more attention to pregnancy and delivery which should be done in hospital surrounding.

FCP83

THE ROLE OF ANTENATAL CARE IN PREVENTION OF LOW BIRTH'S WEIGH NEONATE

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Background: It is clear that there exists an optimal range of size at birth, within which complications are rare. The incidence of morbidity and mortality increases when there is a deviation from this optimal range. The term low birth weigh (LBW) describes infants with a weigh of less than 2500g, regardless of gestational age. The aim of this study was to put in correlation LBW, way of delivery and outcome.

Methods: A retrospective study was performed entering 4480 newborns randomly selected from live births of Ob&Gyn Clinic of University Clinical Center Tuzla whom were delivered in one year, 2001. The data were obtained from clinical records.

Results: Among 4480 newborns low birth weigh was diagnosed in 218 (4.87%) of cases. Participation of primiparas, multiparas and pluriparas was approximately the same in both experimental and control group. We had higher frequency of older paras in experimental group (17.43% vs. 8.0%). In experimental group we had higher incidence of preterm labor and deliveries (69.27% vs. 6.0%). Incidence of low, very low and extremely low birth weight was 86.25%, 12.08% and 1.67% respectively. Time of first visit differ only in the group after 8 month of pregnancy 6.63% vs. 1.0%. Considering the number of visits during pregnancy we have difference in the groups with no visits, 23.73% in experimental group vs. 8.0% in control and in the group with four to seven visits, 30.51% in experimental vs. 48% in control group. We have lower APGAR scores in experimental group both in fist and fifth minute. Frequency of operative deliveries in examination group was 52.75%. Other significant risk factors were analyzed and we find following incidence: premature rupture of membranes in 49.08%, oligohydramnion in 1.38% and placental ablation in 4.59% of cases vs. 16%, 2.0% and 1.0% respectively in the control group.

Conclusion: This study reveals that preterm labor is the most important and significant risk factor for LBW. Antenatal care plays an important role in the incidence and outcome of this kind of pregnancies. With improvement of antenatal care we could expect decrease of incidence and better outcome.

FCP84

WOUNDING OF PREGNANT WOMEN: CASE REPORT

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In this work we present female patients W.A. 21 years old in her 7th month of pregnancy wounded during the war in Bosnia. Shel in wounded patient in her apartment and she was transported on Clinic in hard hemorrhagic shock with traumatic amputation of femur and three transcllopetar wounds in lower abdomen. Urgent Cesaren section was done and finished amputation with ligature of arteria iliaca externa and sutures of bowel. Dead boy was extirped. According all operative measures during 5 hours of operative procedure, patient was died. Conclusion: In spite urgent surgical treatment, wounding of pregnant women in hard hemorrhagic shock is near to possibility of death.

FCP85**NURSING PROTOCOL ON THE USAGE OF OXYTOCIN DURING LABOR**

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Since using medicines in the prenatal / innatal periods can affect the health of both mother and the fetus, this matter should be regarded carefully. A study on intravenous administration of drugs has found an error rate of 47 %. The general causes of mistakes include: 31% neglecting of drug administration, 15% continuation of cancelled orders and 13% administration of wrong dosage. Correct and complete administration of drugs and reducing mistakes is responsibility of the institutes as well as that of the personnel. Institutes need the form drug policies, inform their staff regarding new developments in drugs and to establish mechanisms to immediately spot and report faults. With the use of oxytocin in the innatal period, complications such as hyperstimulation and rupture of the uterus, ablatio placenta and tears due to a fast birth in mother, and trauma, hypoxia and hyperbilirubinemia in fetus can occur.

The study was planned to analyze application of oxytocin which is widely used in the innatal period for regulating the contractions of the uterus and to develop a protocol to standardize applications in the light of the collected data. The study was started on May 2002 in the maternity clinic of Erdem Hospital and constituted of five steps. In the first stages of the study, the files of expectant mothers who had received oxytocin in the month of April were retrospectively analyzed from the aspects of care and follow up. In the second stage, a protocol was formed according to the collected data, literature findings and the facilities and policies of the clinic. Later, the midwives and nurses took a 2 day course to be introduced to the protocol and to be informed on how it was going to be used. The protocol was put the use in the fourth stage. Finally, the effects of the use of the protocol on applications will be assessed by retrospectively analyzing the files of the patients who are receiving oxytocin according to the protocol after two months.

FCP86**EFFECTS OF POST PARTUM DEPRESSION ON MATERNITY EXPERIENCE**

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Objective: Studies have reported consistly that 10-20 % of women who have given birth experience postpartum depression in Turkey. Postpartum depression can start any time during the 1st year after delivery, not only in the first few months after giving birth. It is characterized with anxiety, fatigue, feeling of loneliness and joy and even refusing her child. Our resource was conducted as a descriptive study to define postpartum depression and hopelessness postpartum women, to define women experiences who has highly postpartum depression score in the four month

Material and Methods: The study was performed between 1 February 2002-31 May 2002. Sample consist of 173 women that given birth to a child in Zeynep Kamil Women's and Children Hospital, in İstanbul. That were asked to fill 21 item Beck Depression Scale that translate and made validity and reliability study by Tegin (1980), and 10 item Beck Hopelessness Scale of that made validity and reliability study by Seber (1991), Durak (1994) and a questionnaire that was developed by researchers in the postpartum first three days. Than the both scale was scored and it was seen that mild (n:20), moderate (n:5) and severe depression (n.:2). Total 27 women who experiences postpartum depression are being evaluated from researchers by telephone. Researchers are inquiring presently about relationship mother who postpartum depression with her baby, family, husband and environmental in this interview.

Results: In our study we found women age $X:25.08 \pm 5.02$ years, number of pregnancy $X:2.48 \pm 2.05$, time of married $X:62.03 \pm 55.70$ month. Average Beck Depression Inventory Scores were 10.80 ± 8.88 , Beck Hopelessness Scale Scores were $X:4.40 \pm 3.38$ on first three days in postpartum. The mean Beck depression Inventory Scores for the first three days postpartum were weakly correlated with the Beck Hopelessness Inventory Scores at there days ($r:0.32$). Other variables studied (age, occupation, number of child) did not correlation the Beck Depression Scores and Beck Hopelessness Inventory Scores.

FCP87

A CALITATIVE STUDY ABOUT EXPERIENCES OF WOMEN IN INTRAPARTUM PERIOD**Arslan H., Ekşi Z., Gürkan Ö.C., Yiğit F.E.,** *Marmara University School of Nursing İstanbul - Turkey*

Labor is one of the most important life experience that women and her family look forward during pregnancy. It is remembered with all details being memorized with its physical, emotional and spiritual aspects in women's memory.

Perinatal women focused not only on a safe delivery, but also on experiencing a positive and satisfying delivery process. Although perception of delivery varies one person to another, a positive delivery experience is helpful in conducting successful and strong family relationship.

It is very important for nursing practice to know cultural and spiritual meaning for woman. Nurses learn first about labor by textbooks. When nurse researcher actively solicits women's views, they have more comprehensive knowledge understanding of labor process.

To provide nursing care during labor, it is necessary to understand the factors affecting labor progress, this factors powers, passageways and passenger(s).

To descriptive study was conducted to determine factors that effect labour experiences of women and developed a nursing care plan that will help them to have a better labour process.

The study was made on April in Zeynep Kamil Women's and Child Hospital, in İstanbul, and performed 30 primipara women who had a labour experience in those days and accepted to participate in to his sturdy. The researcher conducted in depth interviews using a convenience sample of women.

It was determined that manage of sampling group (n:30) included in the study was $X:21.04 \pm 3.06$, 50 %of them primary school graduated, 86.7% of them housewife. Women describes thinking about labourroom like this word "pains of childbirth, ache". We ask them "What did you to do after almost delivery?" We found, 50%of them wanted to touch/see their baby, 23.3% of them wanted to see their husband / family, 20% of them wanted to eat/drink.

FCP88

POST PARTUM WOMEN'S LEARNED RESOURCEFULNESS**Arslan H., Yiğit F. E., Ekşi Z., Gürkan Ö. C.,** *Marmara University School of Nursing İstanbul-Turkey*

Objective: Labour is one of the most important life experience that causes stress in women. Anxiety, uncertainty, loss of control, self confidence, patterns of coping, support systems, fatigue, optimism, fatalism, and aloneness are some of the psychosocial factors to consider when caring for a women in labour.

Learned Resourcefulness it is important that coping with post partum stress. Learned resourcefulness refers to a set of well-learned behaviors and skills by individuals self regulate or control their behavior. It is seen as a personality repertoire that includes mainly three functions for example, regressive self control helps the individual to regulate internal response, such as pain, emotions, and cognition that interfere with the smooth execution of an ongoing task. Reformative self control enables individuals to change their current behavior in the hope of achieving a greater reward in the future by using planning skills, problem-solving strategies, and the delay of immediate gratification. Experiential self-control enables individuals to experience and enjoy unknown and pleasurable activities to the fullest. This descriptive study was conducted to establish that labour experiences of women Learned resourcefulness.

Material - Methods: The study was between 1 February 2002- 31 May 2002 in Zeynep Kamil Women's and Child Hospital, in İstanbul. Sample consist of 226 women who had a labour experience in those days and accepted participate in to this study. That were asked to fill 36 item Rosenbaum Learned Resourcefulness Scale that translate and made validity and reliability study by Siva (1991), and a questionnaire that was developed by resources in the postpartum first three days. Rosenbaum Learned Resourcefulness covers a) the use of cognition and self instruction to cope with emotional and physiological responses b) application of problem-solving strategies c) ability to delay immediate gratification and d) a general belief in one's ability to self regulate internal events.

Results: It was determined that mean age of sampling group (n=226) included in the study was 25.36 ± 4 .

86 years, number of pregnancy 2.46 ± 1.89 , time of married 65.75 ± 55.16 month. Average Rosenbaum Learned Resourcefulness scale scores were 121.64 ± 17.33 on first three days in postpartum. In this scale is possible scores range from 36-180.

FCP89

THE EFFECT OF MINIDOSE BUPIVACAINE-FENTANYL SPINAL ANESTHESIA ON NAUSEA AND VOMITING IN CESAREAN SECTION

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Objective: Spinal anesthesia for cesarean section is associated with high incidence of nausea and vomiting. The synergism between intrathecal opioids and local anesthetics may make it possible to achieve reliable spinal anesthesia with minimal side effects.

Methods: 40 patients aged 17-35 which underwent cesarean section randomized into two groups. Half of them in group A received spinal anesthesia with Bupivacaine 6 miligram + Fentanyl 10 microgram and group b received only 12 miligram Bupivacaine. Hypotension was defined as a systolic pressure of less than 90 mmHg or 25% decrease in mean arterial pressure from baseline.

Results: All patients except one in group a had satisfactory anesthesia. The mean ratio of lowest systolic pressure to baseline systolic pressure was 0.75 for group A and 0.65 for group B. Nausea and vomiting was observed in 10% of group A and 20% of group B ($P < 0.05$).

Conclusion: Minidose Bupivacaine-Fentanyl provides good spinal anesthesia for cesarean section with less hypotension, nausea and vomiting.

FCP90

THE ASSOCIATION BETWEEN INDUCED ABORTION AND LOW BIRTHWEIGHT IN THE FOLLOWING PREGNANCY

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Objective: Our purpose was to examine whether first trimester induced abortion increases the risk of low birthweight in subsequent singleton live births.

Methods: We studied all the women that gave birth in our department between July 1996 and June 2002, and we divided them in three groups: Group A consisted of 496 women that had at least one induced abortion before the live birth delivery, Group B consisted of 239 women that had at least one spontaneous abortion before the live birth delivery and Group C consisted of 682 women that had never had an abortion before the live birth delivery. All the women of the study gave birth after the 259th day of pregnancy (using both LMP date and ultrasound estimation before the 56th day of pregnancy).

Results: In Group A low birthweight (LBW, < 2500 gr.) was found in 7,25% of term pregnancies [6% in first pregnancy (17), 8,3% in second pregnancy(16), 13,6% in third pregnancy(3)]. In Group B LBW was found in 5% of term pregnancies [3,7% in first pregnancy (4), 5,7% in second pregnancy (6), 7,1% in third pregnancy (2)]. In Group C LBW was found in 4,1% of term pregnancies [3,03% in first pregnancy (10), 4,96% in second pregnancy (14), 5,63% in third pregnancy (4)].

Conclusion: Our findings suggest that there is a possible relation between induced abortion and low birthweight in the subsequent singleton live births, but it is not statistically significant. Parity seems to be an independent factor for low birthweight.

FCP91

PERINATAL CARE IN THE MATERNITY OF "TZANEIO" HOSPITAL GREECE COMPARISON OF TWO PERIODS 1985-1989 AND 1995-1999

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Objective: To assess and compare two periods of consecutive births (1st period is 1985-1989 and 2nd period is 1995-1999) that has took place in the Maternity of "Tzaneio" Hospital. These two periods were before and after the political changes in the East Countries which caused a large immigrant wave.

Results: In the 1st period the total births were 2572 in 2555 deliveries and in the 2nd period were 3230 and 3194 respectively. The rate of the Greek mothers in the 1st period was 98% vs 1% of the non Greek.

The demographic characteristics of the reproductive population changed remarkably since 41% of the mothers were of non-Greek origin (mostly Albanians and other economic immigrants). The total caesarian section rate was 20,8% in the 1st period vs 28,6% in the second period. In the 1st period the total delivery rate before the 37th week of gestation was 2,15% vs 12,9% in the 2nd period. The perinatal mortality rate has been increased by almost half (9 o/oo vs 16 o/oo) and the birthweight <2.500gr was 2,3% vs 16,7.

Discussion: We believe that the great changes in the perinatal outcome are due to the changes in the reproductive population in our Maternity. The immigration rate in Greece from the former "East" Countries was significant high. The immigrants consist an isolate group in the community of EEC with poor living and health conditions and with great unemployment. There is little known about the utility of pre and peri-natal services. The increase in the perinatal Morbidity and Mortality in our Maternity can be attributed to the low social-economic profile and the poor follow-up of the immigrants pregnant.

FCP92

STEREOLOGICAL ANALYSIS OF CHORIONIC VILLI AND FIBRINOIDS IN MATURE HUMAN PLACENTAS OF PREGNANT WOMEN OF DIFFERENT AGE

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The normal placenta, regular pregnancies and delivery were structurally examined. The terminal and other chorionic villi and fibrinoid of the mature human placenta were morphologically and quantitatively examined in pregnant women of different ages. The aim of this research was to compare the results and to confirm if there is some difference in the structure of placenta related to the age of pregnant women. We examined 30 human placentas. The examined group of women were of age between 20 and 45 years, and they were divided into two groups: 1) pregnant women 20-35 years old; 2) pregnant women over 35 years old. Relative and absolute variables were stereologically examined and compared as follows: the surface density and absolute surface of terminal and other villi and fibrinoid. No significant differences in surface density of terminal villi and fibrinoids in older and younger pregnant women's placentas. Surface densities of the other placentas villi in younger pregnant women compared to older are significantly increased. Absolute surface of terminal villi and fibrinoid in these two examined groups of pregnant women are not significantly different. Absolute surface of the other placenta villi in younger pregnant women compared to older pregnant women is significantly increased.

FCP93**BETWEEN CADMIUM AND LOW BIRTH WEIGHT**

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Background: This project concerning Pb and Cd concentrations having influence on pregnancy progress and outcomes was done in cooperation with Columbia University of New York.

The area of Kosovska Mitrovica and Zvecan is well-known for its extra Pb and Cd air concentrations. These elements easily penetrate the placental membrane so the aim was the follow up of pregnant women within the population living near the lead smelter.

It has been suggested that accumulation of tobacco-derived cadmium (Cd) in the placenta is responsible for the adverse effect of cigarette smoking on low birth weight.

Methods: We chose to test this hypothesis; therefore, we studied a population of nonsmoking pregnant women who were exposed to low levels of smelter-derived Cd and group of nonexposed women.

Results: A higher mean placental Cd concentration ($p < 0.00007$) was found in the exposed women ($n=106$), compared with those who were non-exposed ($n=55$); the observed Cd concentrations were comparable to concentrations reported previously for smoking and nonsmoking women, respectively. Least squares multiple regression (controlling for potentially confounding variables) revealed no association between placental Cd and birthweight.

Conclusion: It was, therefore, concluded that the effect of smoking on birth weight was not mediated through Cd.

FCP94**EVALUATION OF THE CASES OF HYPER- AND HYPOTHYROIDISM DURING PREGNANCY REGISTERED IN THE FIVE-YEAR PERIOD**

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Background: In pregnancy, the incidence of hyperthyroidism has been estimated to be from 0.2 to 2.0% and that of hypothyroidism, about 0.3-0.7%. Hyperthyroidism during the pregnancy can have a various obstetrical outcomes: spontaneous abortion, still births and neonatal deaths, fetal/neonatal hyperthyroidism, IUGR, low birth weight infants. Hypothyroidism in pregnancy can be associated with: PIH, placenta abruptio, postpartum hemorrhage and low birth weight infants. There is a one pregnancy-specific condition, hyperemesis gravidarum, with underlying transient hyperthyroidism in more than 60% of patients, with no history of thyroid illness before pregnancy.

Methods: The analysis encompassed the cases of hyper- and hypothyroidism during pregnancy in the five years period (1997-2001) registered at the Department of Obstetrics and Gynecology in Novi Sad.

Results: During the analyzed period there were 11 cases of hyper- and 6 cases of hypothyroidism in pregnancy. The incidence is very low as there are about 6000 deliveries per year in the Department. All cases were diagnosed and treated before pregnancy. The causes were: Graves's disease in all hyperthyroid patients and Hashimoto thyroiditis and previous surgical treatment of hyperthyroidism in cases of hypothyroidism. All of patients have frequently visited the obstetrician and endocrinologist during the pregnancy. Serum hormones analyses were performed several times. Fetal condition was estimated by serial ultrasound examinations and frequent fetal heart rate testing (nonstress test). The mode of delivery depended on the obstetric indications. Blood samples of the newborn were assayed for thyroid hormones. In regard of medication four of hyperthyroid patients took propylthiouracil during the whole pregnancy and one took the same drug from 24th week of gestation because of worsening of the disease. The rest of patients were without the medication in respect of their hormonal status. On the other hand, all the hypothyroid patients were treated with levothyroxine. One of the hyperthyroid patients had the preterm delivery in the 33rd week. The newborns of the mothers with Graves disease weighted from

2200 and 2800 g (IUGR and low birth weight) to 3680 g. In the group of hypothyroid patients there were two cases of PIH and the birth weights varied from 2860 g (low birth weight) to 4050 g. In both groups, there were no newborn with hyper/hypothyroidism in the early neonatal period. It should be mentioned that the patients with hyperemesis gravidarum were much more numerous but routine control of their thyroid hormones level were not performed.

FCP95

MATERNAL MORBIDITY AFTER FORCEPS DELIVERY IN TWO PERIODS

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Objective: The aim of this study was to compare maternal morbidity after forceps delivery in two periods.

Methods: We analysed parity and maternal morbidity after forceps delivery in two periods: I (1985-1988) and II (2000-2001). Retrospective comparative study was performed. Obtained data was analysed by Student's t-test.

Results: In I period there were 483 forceps deliveries out of total 35.086 deliveries (1.38%), in II period 88 forceps deliveries out of total 13.186 deliveries (0,67%), $t=7.52$; $p<0,01$. Primiparous: I period 405 (83.85%), II 72 (81.18%) $t=0,46$; $p>0,05$.

Multiparous: I period 78 (16.15%), II 16 (18.82%) $t=-0,46$; $p>0,05$.

Maternal morbidity:

Cervical lacerations: I period 141 (29.19%), II period 25 (28.41%) $t=0.15$; $p>0,05$.

Vaginal lacerations: I period 80 (16.56%), II period 13 (14.77%) $t=0.43$; $p>0,05$.

Perineal lacerations (I/II degree): I period 19 (3.93%), II period 6 (6.82%) $t=1.02$; $p>0,05$.

Perineal lacerations (III degree): I period 5 (1.04%), II period 2 (2.27%) $t=0.75$; $p>0,05$.

Conclusion: No significant differences in parity were found. Due to the fact that forceps deliveries in both periods were performed by skilled obstetricians maternal morbidity did not differ significantly between compared periods.

FCP96

INDICATIONS FOR FORCEPS DELIVERY IN TWO PERIODS

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Objective: The aim of this study was to compare indications for forceps delivery in two periods.

Methods: Retrospective comparative study was performed. We analysed indications for forceps delivery in two periods: I (1985-1988) and II (2000-2001). Obtained data was analysed by Student's t-test.

Results: In I period there were 483 forceps deliveries out of total 35.086 deliveries (1.38%), in II period 88 forceps deliveries out of total 13.186 deliveries (0,67%), $t=7.52$; $p<0,01$. Cesarean section rate in our Institute was: I period 9.2%, II period 18.81, $t=-25.71$; $p<0,01$. Indications for forceps delivery were:

Prolonged second stage: I period 357 (73.91%), II period 61 (69.32%), $t=0.86$; $p>0,05$.

Posterior occiput position: I period 46 (9.52%), II period 15 (17.04%), $t=1.78$; $p>0,05$.

Fetal distress: I period 35 (7.25%), II period 10 (11.36%), $t=1.15$; $p>0,05$.

Maternal heart disease: I period 22 (4.55%), II period 2 (2.27%), $t=1.23$; $p>0,05$.

Preeclampsia: I period 13 (2.69%), II period 1 (1.13%), $t=1.15$; $p>0,05$.

In I period there were one diastasis of symphysis and one uterine rupture, in II period 2 placental abruptions (2,27%) as indications for forceps delivery. No maternal deaths were noted.

Conclusion: Indications in both periods were almost same, with no significant difference between periods. Forceps delivery rate was significantly lower in second period, probably due to significantly higher cesarean section rate.

FCP97

BACTERIAL VAGINOSIS IN 20-28 WEEKS PREGNANCY AND RISK OF PRETERM BIRTH

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In this prospective study we tried to determine whether there is an increased risk of preterm birth in pregnant with bacterial vaginosis. Pregnants complaining leucorrhoea were investigated at 20-28 weeks of gestations. Clinical examinations were done and gram stain and culture samples were taken from vaginal discharges. All cases were followed until birth. Delivery before 37 weeks accepted as preterm birth. In 178 pregnant there were 51 cases with bacterial vaginosis (28.65 %). In these cases 32 women had preterm birth (62.75 %). In the other 127 cases without bacterial vaginosis 29 pregnant women (22.83 %) had preterm delivery. In bacterial vaginosis group 11 cases (21.57 %) and in nonbacterial vaginosis group 24 cases (18.89 %) had urinary tract infections. In pregnant with bacterial vaginosis preterm birth was significantly higher than non bacterial vaginosis group ($p < 0.05$). We concluded that bacterial vaginosis was an important risk factor for preterm birth and should be investigated during pregnancy.

FCP98

ERYTHROPOIETIN PREVENTS ISCHEMIA-REPERFUSION INDUCED OXIDATIVE DAMAGE IN FETAL RAT BRAIN

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Objective: The aim of this study was to show the effect of erythropoietin on ischemia-reperfusion induced oxidative damage in fetal rat brain.

Methods: Fetal brain ischemia was induced by clamping the utero-ovarian artery bilaterally for 20 minutes and reperfusion was achieved by removing the clamps for 30 minutes. In control group, non-injured 19 day pregnant rats were used. In ischemia-reperfusion group, no treatment was given. 0.4 ml of human serum albumin solution and 5000 U/kg recombinant human erythropoietin (r-Hu-EPO) were administered in vehicle and treatment groups 30 min. before ischemia-reperfusion injury. Lipid peroxidation in the brain tissue was determined as thiobarbituric acid reactive substances (TBARS) concentration for each fetal rat. The one-way analysis of variance and post-hoc test were used for statistical analysis.

Results: TBARS increased statistically significant levels in fetal rat brain after ischemia-reperfusion injury comparing to control group. Recombinant human erythropoietin prevented increase in TBARS in ischemia-reperfusion injury.

Conclusion: Recombinant human erythropoietin has been shown to have neuroprotective effect in intra-uterine ischemia-reperfusion induced fetal brain damage in rats.

FCP99

PREDICTION OF TERM BIRTH WEIGHT FROM MEASURABLE MATERNAL CHARACTERISTICS

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Objective: Our aim was to determine the factors that could predict high birth weight based on possible maternal characteristics.

Methods: This retrospective case control study was performed in Baskent University Medical Faculty, De-

partment of Obstetrics and Gynecology. 180 patients who gave birth to babies heavier than 4000 g between January 2000- January 2002 were selected. 72 nonsmoking, nondiabetic women with uncomplicated gestations who had enough data were admitted to the study (Group I). Control group (Group II) included 76 patients with uncomplicated singleton pregnancies who had delivered babies <4000g between 37 and 42 weeks of gestation. Gestational age was confirmed by measuring crown rump length (CRL). Maternal weight, height, body mass index (BMI), parity, gestational age, 50 g oral glucose test value and second trimester maternal serum levels of alpha-fetoprotein (AFP), unconjugated estriol (uE3) and human chorionic gonadotropin (hCG) levels were compared in two groups. Univariate analysis was performed to detect parameters related with birth weights. Multiple linear regression analysis was used to detect independent risk factors to predict high fetal weight.

Results: A total of 1706 deliveries occurred during the study period. The rate of macrosomic deliveries was 11 % (n=180). The mean birth weight of the study and control groups was 4216 ± 247 and 3254 ± 327 g respectively ($p < 0.001$). Serum AFP levels in the study group (0.95 ± 0.30) was lower than control group (1.21 ± 0.48) ($p < 0.001$). Gestational age at delivery was higher in the study group (39.89 ± 1.20) than the control group (38.94 ± 1.34) ($p < 0.001$). Maternal parity, weight and body mass index also were higher in the study group ($p < 0.001$). Univariate and multiple linear regression analysis confirmed that gestational age and AFP levels were independent risk factors that could predict birth weight.

Conclusion: Gestational age and serum AFP levels are independent predictive risk factors for high birth weight.

FCP100

SUBAMNIOTIC HEMATOMA MIMICKING THE TUMOR OF FETAL MEMBRANES IN A MIDTRIMESTER TWIN PREGNANCY: A CASE REPORT

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Subamniotic hematoma formation is a pathophysiologic end point of placental abruption. Placental abruption itself usually happens in the third trimester, but it can take place any time after 20 weeks of gestation. We present a second trimester twin pregnancy admitted to our clinic with mild vaginal bleeding. Ultrasound examination revealed that two fetuses were alive and aged 23 and 24 weeks of gestation. A mass located on the fetal membranes separating the fetuses was observed to be freely floating by fetal movements. There was neither abdominal pain nor contractions on cardiotocography. Ultrasound examination and clinical evaluation made the hematoma diagnosis more unlikely since the hematomas are usually located by or under the placenta and adherent to decidual and myometrial structures and, clinical picture did not fulfil the placental abruption diagnostic criteria. The case was misdiagnosed as twin pregnancy complicated by a tumor of fetal membranes, another rare entity. But during clinical observation, uterine contractions and abdominal cramp like pain are developed, and pregnancy is terminated spontaneously by preterm labor. After the delivery of fetuses, placentas and fetal membranes expelled spontaneously. Gross and microscopic examination revealed that previously defined mass lesion was a subamniotic hematoma. We would like to stress that when a mass lesion located on or between the membranes is detected subamniotic hematoma should be kept in mind in differential diagnosis.

FCP101

FETAL-MATERNAL HEMORRHAGE AFTER AMNIOCENTESIS OR CORDOCENTESIS – IMPLICATIONS ON THE TREATMENT OF RH-ALLOIMMUNIZED PREGNANCY

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Objective: Amniocentesis and cordocentesis are invasive procedures used in prenatal diagnosis and treatment generally, including Rh-alloimmunized pregnancies. However, these methods can cause considerable

able fetal-maternal hemorrhage (FMH), worsening of the existing, or appearing of the new aloimmunization. Our aim was to compare the frequency and amount of the FMH after amniocentesis or cordocentesis; evaluate if transplacental approach increases the risk for the appearance of FMH; and show the significance of the results in the treatment of the Rh-aloimmunized pregnancies.

Methods: We studied 61 pregnant women who underwent invasive prenatal diagnostic procedures. The presence of "irregular" antibodies was not registered in any of the pregnancies, no matter to their D-antigen status (Rh-positive or Rh-negative). Amniocentesis was done in 33, while cordocentesis in 28 cases. Anamnestic data of previous bleeding and invasive procedures in two months period were registered. After each intervention we registered if placenta was penetrated. We preferred extraplacental approach. For the detection of FMH, Kleihauer-Braun-Betke "acid elution test" (KBBT) was used in mother blood samples taken immediately before and 1 hour after the intervention.

Results: All pregnant women were older than 35 years. Average gestation was smaller in amniocentesis subgroup. Before the intervention we registered FMH in only one case of amniocentesis (1.6%). Amount of FMH was 0.05ml and didn't change after the intervention. We considered this FMH "silent" because there was no data of previous bleeding or invasive procedures. Previous bleeding was noted in 7, while invasive procedures were done in 12 cases, but FMH wasn't registered before the intervention in any of these cases. We registered new FMH in 2 cases after amniocentesis and 8 after cordocentesis (6.1: 28.6%) which shows statistical difference. After the cordocentesis we found higher mean FMH volume, more frequent severe FMH (> 5ml of fetal blood), increased percentual loss of total fetal-placental blood volume. FMH is more frequent following the transplacental approach (27.8%) comparing with the extraplacental (11.6%), but there is no statistical difference. During the cordocentesis FMH is more frequent following transplacental approach (33.3%: 23.1%), but there is no statistical difference. Two largest quantities of FMH were found in two cases of cordocentesis in which we punctured through placenta twice.

Conclusions: Cordocentesis is a method with increased risk for the worsening of the preexisting or the appearance of the new aloimmunization comparing with the amniocentesis. Therefore in Rh-aloimmunized pregnancy cordocentesis is justified under the suspicion of severe anemia and the need for FIVT. Clinical significance of the KBBT is to individualize the anti-D-immune globulin immune-prophylactic dose; after the cordocentesis in D-negative nonimmunized mother, KBBT should be done, and if necessary, increase the dose of Rhlg.

FCP102

COLOR DOPPLER IN THE DIAGNOSIS OF FETAL ANEMIA IN PREGNANCY COMPLICATED BY RHESUS ALOIMMUNIZATION

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Objective: The diagnosis of fetal anemia is achieved either by amniocentesis or by cordocentesis. These invasive procedures are associated with complications, and, therefore, noninvasive methods are studied. During anemia the blood viscosity decreases and the blood velocity increases, so measuring medial cerebral artery (MCA) velocities can be useful in the prediction of fetal anemia. Our aim was to determine changes in MCA blood velocity of the anemic fetuses; relationship of these changes and fetal hemoglobin and haematocrit values; and to establish the significance of this method in the diagnosis of fetal anemia.

Methods: Clinical study was conducted during 1992-2000, and included 44 Rh-aloimmunised pregnant women who underwent cordocentesis in order to maintain fetal hemoglobin and haematocrit. Before the intervention we obtained MCA flow velocity waveforms of every fetus and registered pulsatility index (Pi) and mean velocity (Vmean). Only third trimester pregnancies (28-32. gestation weeks) with cephalic presentation were included in the study. MCA mean velocities were considered normal if ranged ≤ 21 cm/s. Based on the haematocrit all fetuses were divided in four groups: group 1-nonanemic (≥ 140 g/l); group 2-mild anemia (120-139.9 g/l); group 3-moderate anemia (100-119.9 g/l); group 4-severe anemia, with the need for transfusion, (≤ 99.9 g/l). We compared mean velocities between the groups and correlated

mean velocities with the values of hemoglobin and haematocrit. Every fetus were taken only once in the study, no matter what the number of cordocentesis was.

Results: Of 44 fetuses, 15 didn't show the presence of anemia, 14 had mild anemia, 9 had moderate anemia, while severe anemia with the need for transfusion was registered in 6 cases. Mean velocity was: $18.33 \pm 0.78 \text{ cm/s}$ in group 1; $21.38 \pm 0.87 \text{ cm/s}$ in group 2; $22.67 \pm 1.12 \text{ cm/s}$ in group 3; and $24.85 \pm 1.44 \text{ cm/s}$ in group 4. All anemic fetuses had average mean MCA velocities higher compared to the nonanemic. In severe anemia mean velocities are higher than in moderate forms, showing statistical difference ($p < 0.05$). Mean velocities are higher in severe forms showing negative correlation with hemoglobin and hematocrit values ($p < 0.05$).

Conclusions: In Rh- aloimmunised pregnancies anemic fetuses have increased mean blood velocities in MCA, especially in the cases of severe anemia. There is a negative correlation between mean velocities and hemoglobin and haematocrit. We suggest measuring mean blood velocities of the fetal MCA in the diagnosis of fetal anemia and in the determination of the time for cordocentesis.

FCP104

PROFILE OF CONGENITAL MOLFOMATION AT CHENGALPATTU MEDICAL COLLEGE HOSPITAL RURAL BASED HOSPITAL IN SOUTH INDIA

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Background: This study is conducted in rural area where consanguineous marriages very common. Marriages between cousins, between uncle and niece are often practiced in the rural part of this country.

Aim of the Study: To study in the congenital malformation (major and minor) in Chengalpattu Medical College Hospital.

Methods: Study Period: 1999-2000. Place of Study: Department of obstetrics and Neonatal Unit, Department of Pediatrics at CMCH. The babies were examined by Pediatrician soon after birth and screened for major and minor malformations, investigations were done to an established to diagnosis and genetic screening were done by the Department of genetic Tharamani Government of TamilNadu. The results were collected and entered by research investigators and the data was analyzed using stata software.

Results: Among the congenital malformation 20% had cardiac disorders. 17% had GIT malformations, 6% had hydrocephalus and 10% had neural tube defect. Among the minor malformation 9% had cleft lip and cleft palate, 8% had limb defects.

FCP105

CYTOKINE LEVELS IN PREGNANT WOMEN WITH HYPEREMESIS GRAVIDARUM

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Introduction: Overactivation of maternal immune system or high concentrations of trophoblast-derived cytokines may be responsible for the onset of first trimester pregnancy pathologies, including hyperemesis gravidarum. However, to our knowledge, there is no study evaluating maternal serum cytokine levels in patients with hyperemesis gravidarum. In the present study, we evaluated maternal serum concentrations of IL-1 β , IL-2R, IL-6, IL-8, and TNF- α levels in patients with hyperemesis gravidarum and compared the levels with those in the healthy pregnant and non-pregnant women.

Materials - Methods: Thirty women with hyperemesis gravidarum, 30 women with healthy pregnancies in the first trimester, and 30 non-pregnant women were enrolled in the study, prospectively. Maternal serum IL-1b, IL-2R, IL-6, IL-8, and TNF- α levels were evaluated using two-site chemiluminescent enzyme immuneometric assay method in the three study groups.

Results: There was no significant difference in median maternal serum IL-2R and IL-8 levels within the three groups. In healthy pregnant patients, serum levels of IL-1b and IL-6 were significantly higher than that in the non-pregnant women. Median (range) TNF-a levels were significantly higher in hyperemesis group than the levels in healthy pregnant and non-pregnant women [25.8 pg/ml (4.9-140) vs. 10.85 pg/ml (4.1-35.8); 25.8 pg/ml (4.9-140) vs. 12 pg/ml (4.3-68.2)].

Conclusion: We found significantly elevated TNF-a levels in patients with hyperemesis gravidarum compared the levels in healthy pregnant and non-pregnant women. Elevated TNF-a levels may play a role in the etiology of hyperemesis gravidarum.

FCP106

HEPATIC PORPHYRIA – ILLUSTRATIVE EXAMPLE OF DIAGNOSTIC ERROR

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Background: Porphyrrias represents hereditary diseases, in which there is enzyme deficit, having as a consequence the disturbance in hem synthesis, protoporphyrin with building Fe.

Hem is synthesised in liver and bone marrow and beginning of its synthesis controls DALA enzyme, which is very unstable and often suprimized or stimulating by many endogenous and exogenous factors. Porphyrrias can be primary (erythropoetic and hepatic) and secondary (with diseases of liver and bone marrow). Hepatic porphyrias account for half of all porphyrias and in more than 2\3 of cases first time appears during pregnancy. Maternal mortality accounts for 20% hepatic porphyry is inherited autosomal dominant but the most important is the enzyme deficit in uroporphobilinogen synthetasa, which leads to increase production of porphyrin precursors (DALA and PBG) its increase excretion by urine. The Clinical picture includes abdominal symptoms, neuropsychic symptoms, and disturbance of autonomous nerve system. In the diagnosis very important is the personal and family history, screening tests and confirmation of the diagnosis is made by quantitative determine of DALA, PBG in urine, stools and erythrocytes. In therapy primary we must avoid drugs which induct DAL or provoke degradation of hepatic hem. In therapy of acute attack we administrate hemarginin, large quantities of glucose and symptomatic therapy.

Review of case: Patient I. S. born in 1964, from Pristine. Diagnosis of acute hepatic porphyry is made after a numerous of diagnostic – therapeutic neglects which start after the first delivery, when she was hospitalised because of epic attacks first in the Neuropsychiatric Clinic in Pristine. Because of worsening symptoms and intensive abdominal pain and a suspicion for acute pancreatitis she was transferred in our clinical centre. After complete diagnostic procedures and confirmation of diagnosis, continue with the administration of adequate therapy which lead to significant subjective condition and normal findings and the patient was released home with a list of contraindicated drugs.

Because of the previous events, risk and fear of the patient for relapse of the disease her next delivery was controlled in our Clinic. During the pregnancy, delivery and puerperium precipitated medicines were avoided.

Conclusion: The described case indicates that delivery and puerperium is a possible declarative factor in the appearance of acute act of porphyry. Non – diagnosed porphyry in this case, it led to inadequate therapy-contraindicated, which lead to aggravation of the clinical picture.

FCP107

IV ADMINISTRATING AMOXICILLINE TO PREGNANT WOMEN, COLONIZED WITH STREPTOCOCCUS GROUP B – POSITIVE OUTCOME TO NEWBORNS OF NEXT DELIVERIES

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Introduction: SGB vaginal colonization of pregnant and newborn infection (early-late syndr.) is frequent. These newborn have an increased risk of serious illness, high mortality rate in first hours-days of life,

and seriously ill after 2nd week. Women remain colonized for life and SGB infection risk it for next fetuses. Aim: To intervene to the pregnant for mild newborn infection, mild early syndr, to have time to intervene to the newborn without late syndr, for healthy newborn in new pregnancies.

Material-Method: For 6 years, 203 women were studied (positive vaginal, anal cultures), 123 (60,59% group a) with regular obstetric observation took peros ampiciline in pregnancy and before delivery 2gr iv, 21 (10,34% group b) were found positive culture due to ill newborn. The rest 56 (27,58% group c) positive-38 primepare-took iv amoxiciline for 7days (1grx3) and 7days peros. Same therapy to 3 subgroup c1 out of pregnancy with SGB due to preterm deliveries. Therapy started in age 20-22 weeks, in delivery amoxiciline once iv 2gr From c group 2nd pregnancy 35(59,3%), 3rd 26(44,07%) and 1c1 woman delivered for a 2nd time. We observed 85 women a&b group in their next pregnancies, they took iv-peros amoxiciline in the same manner.

Results: a&b newborns all from birth hospitalized; 1group & 2 b deaths, 11 late grave syndr in total. From c 12 needed hospitalization, 0 late syndr. Next births of all groups no death, mild newborn infection a&b group, without c group infection.

Conclusion: Amoxiciline IV administration for 7 days to SGB pregnant helps to have mild newborn infections, without late syndr. And no deaths; in next pregnancies newborns have almost no infection, without need for hospitalization.

FCP108

POSITIVE TRIPLE SCREENING TEST RESULTS AND CHROMOSOMAL ABNORMALITIES IN WOMEN LESS THAN 35 YEARS OF AGE

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Triple screening test has a significant predictive value for detection of fetal Down's syndrome cases. In this study we evaluated the results of triple screening test for chromosomal abnormalities in women less than 35 years of age. We had 201 screen positive women for trisomy 21 at a cut off level 1/270 and 12 screen positive cases for trisomy 18 at a cut off level 1/100. Amniocentesis was performed for all. In cases with positive screen for trisomy 21 we detected two cases of fetal Down's syndrome and 4 cases with normal chromosomal aberrations. In cases with with positive screen for trisomy 18 we detected a case with fetal Turner's syndrome. We concluded that using a lower cut off level unnecessary amniocentesis might be decreased.

FCP109

SERUM URIC ACID MEASUREMENTS IN HYPERTENSIVE DISORDERS OF PREGNANCY

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Relation between serum uric acid levels and hypertensive disorders of pregnancy was suggested by some authors. In this study we investigated serum uric acid levels and clinical findings of pregnant women with hypertensive disorders. The study population consisted of 46 healthy pregnant women as a control group, 122 women with pregnancy induced hypertension (PIH), 25 women with chronic hypertension and 31 women with chronic hypertension and superimposed preeclampsia. Mean age and parity were significantly lower in control and PIH groups. Mean gestational age and mean birth weight were significantly higher in the control group than the others, because of pregnancy interruptions in the hypertensive pregnant due to fetal distress. Serum uric acid and creatinin levels were significantly elevated in hypertensive pregnant. There was no significant difference in mean uric acid levels between various hypertensive disorders.

As a conclusion, serum uric acid levels may be useful in follow up of pregnant with hypertensive disorders but can not be used for differentiating various hypertensive disorders of pregnancy.

FCP110

THE INCIDENCE OF CONGENITAL MALFORMATIONS IN GAZI UNIVERSITY HOSPITAL

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Objective: To determine the incidence and types of congenital anomalies in Gazi University Hospital.

Method: The total number of 4261 neonates born in the Department of Obstetrics and Gynecology, Gazi University Faculty of Medicine during 1997-2002 were studied retrospectively. The birth registries of newborns with congenital anomaly were identified. The total incidence, types and combined anomalies were determined.

Results: The overall congenital anomaly incidence was 1.7% and the NTD incidence 0.50% in our population. Anencephaly was the second most common NTDs with the ratio of 37%, following the spina bifida cases. Facial and musculoskeletal system abnormalities were two and third most common malformations. Urogenital system anomalies were fourth most common type of malformation with an incidence 0.1%. Omphalocele incidence population was 3 in 4261 births and gastroschisis was 2 in 4261 births.

Conclusion: The overall congenital anomaly incidence in newborn in our population is 1.7%. The most common malformations were NTD, facial and musculoskeletal system abnormalities. NTDs incidence was 0.50% in Gazi University Hospital.

FCP111

A RARE CASE REPORT: 45,X/47,XXX MOSAICISM IN GTG BANDING AND ADDITIONAL XX/XXXX MOSAICISM IN FISH TECHNIQUE THROUGH AMNIOCENTESIS AND CORDOCENTESIS; A COMPOSITE KARYOTYPE INVOLVING TRISOMY 7 IN CULTURED SKIN FIBROBLASTS

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We report cytogenetic and FISH analyses performed in the amniocentesis (AS) and cordocentesis (CS) material of mosaic sex chromosome and marker chromosome of the fetus in utero combined with trisomy 7 in cultured skin fibroblasts of the same fetus after the termination. A 27 year old, gravida 3, para 1 woman was referred for prenatal diagnosis because of intrauterine growth retardation and abnormal triple test screening indicating an Edwards syndrome risk of 1/83. Amniotic fluid cell culture and cord blood culture were performed synchronously in the 27th week of gestation (21st week of gestation in ultrasound findings). After the GTG banding technique, the fetal karyotypes of the AS were found as 45,X in 14 clones, 47,XXX in 3 clones and 45,X,-16,-X,+mar in 3 clones from 2 separate culture dishes. The fetal karyotypes of the CS were 47,XXX (78%) in 39 clones and 45,X (22%) in 11 clones. Since ultrasound evaluation showed that there had been no uterine growth in the preceding weeks and the delivery of the patient started spontaneously at 32nd week (24th gestational week in sonography), a 900gr ex fetus was given birth. Physical examination of the fetus revealed dismorphic phenotype and external genitalia was evaluated as ambiguous. Autopsy findings were right polycystic kidney and skeletal deformities indicating mesomelic dysplasia. Skin fibroblasts culture was performed and beside the diagnosis of monosomy X, a third cell line, trisomy 7 was detected and karyotype was evaluated as composite; 46-47,X,+7,-X[cp18]. Fluorescence in situ hybridization (FISH) technique was performed to the amniocentesis and cordocentesis materials and a third and a fourth cell line were determined, revealing XX and XXXX karyotypes. It was shown that FISH proved useful in detection of the low frequency cell lines which need analyses of a large number of metaphase spreads by GTG banding.

FCP112

PREVALENCE OF CANDIDA SPP AND BACTERIA IN THE VAGINAL CULTURES OF PREGNANT WOMEN

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Pregnancy predisposes individuals to bacterial and fungal infections of urinary and genital systems. Several studies report increased rates of asymptomatic vaginal carriage rates of yeasts, including *Candida* species and incidence of symptomatic infection in pregnant women. In the period of pregnancy, there is a reduction in the prevalence and concentration of lactobacilli. Yet the pathogenesis of vaginitis remains.

In this study, we report the prevalence of *Candida* strains and bacterial strains in the vaginal cultures of 71 pregnant women. Percentage of positive cultures in pregnant women reached 27%. *Candida* strains were isolated with the percentage of 24% from all of the patients. *Candida* sp. and plus *Escherichia coli* was isolated in a patient (1%). *Candida* sp. and plus coagulase negative *Staphylococcus* sp. was isolated in a patient (1%). 12 *Candida albicans* (63%), 4 *Candida glabrata* (21%), 1 *Candida tropicalis* (5%), 1 *Candida parapsilosis* (5%), 1 *Candida tropicalis* and plus *Candida albicans* (5%) were identified among 19 *Candida* strains according to classical mycological methods.

Among pregnant women, both asymptomatic and symptomatic vaginitis caused bacterial and fungal microorganisms could be detected. We found that vaginal candidiasis is the most frequent clinical concern in the group of pregnant women. The effects of vaginal infections on the pregnancy, preterm labor and neonatal infections must be evaluated with further studies.

FCP113

DIFFICULTIES IN THE LABORATORY DIAGNOSIS OF CONGENITAL TOXOPLASMOSIS

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The protozoan *Toxoplasma gondii* is an obligate intracellular parasite that infects humans and a broad spectrum of vertebrate hosts. Of the 15 to 85% of world human population is chronically infected with *T.gondii* depending on geographical location. The aim of this study was to detect the DNA of *T.gondii* by using either a two-step PCR method and serological assays to investigate the intrauterine infection in the amniotic fluid and blood of a pregnant woman.

Patient was 24 years old and at the 16th weeks of pregnancy. IgM and IgG antibodies against *T.gondii* were measured by a sensitive chemiluminescent paramagnetic immunoassay system. IgM and IgG ELISA and IFAT IgG were performed by using in house antigens. ELISA immunocapture IgM assay was also performed. PCR: Following the DNA extraction, PCR was performed by using 2 different primer sets. *T.gondii* IgM, IgG antibodies, IgG avidity and PCR of amniotic fluid were found to be positive at the first trimester of the pregnancy. At the 16th week of pregnancy, *T.gondii* IgM became negative (ELISA Immunocapture IgM negative), while IgG antibodies were positive (IFAT IgG: 1/128; ELISA IgG 1/1024). PCR analysis by using two different primer sets derived from *T.gondii* B1 gene and performed in two different laboratories gave positive results at expected length. No symptom has been detected in the favor of toxoplasmosis by USG controls of the fetus. Patient gave a birth and no symptoms of toxoplasmosis by physical examination and other methods were detected in the baby.

In conclusion, due to possibility of the late onset of *T.gondii* infection, it is suggested that the baby should be followed for a long term.

FCP114

PREVALENCE OF CYTOMEGALOVIRUS, HERPES SIMPLEX VIRUS-2, HUMAN PAPILLOMAVIRUS 16-18 IN THE CERVICAL SMEAR OF PREGNANT WOMEN IN TURKEY- PRELIMINARY STUDY

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Human cytomegalovirus (CMV) is the leading cause of prenatal viral infection. Affected infants may suffer intrauterine growth retardation and serious neurological impairment. Herpes simplex virus (HSV) is frequently shed after infection of the genital or perianal area. HSV often produces asimilar clinical picture. Uterine cervix carcinoma is the second most common female type of cancer and also the second highest mortality cause for women. The aim of this study is to detect the CMV DNA, HSV-2 DNA and HPV DNA 16-18 from the cervical smear of the pregnant women by PCR.

Cervical swab samples in PBS were used for the DNA extraction by phenol chloroform isoamyl alcohol. CMV, HSV-2 and HPV 16-18 detection were carried out by PCR using specific primers. The PCR products were run on agarose gel and the bands corresponding to expected length were accepted as positive.

Three (3/71; 4%) and 2 (2/71; 4%) of the samples of the pregnant women were found to be positive for HPV and HSV-2, respectively. Dual infection with HPV and HSV positivity was found in one patient. HPV18 were detected in all positive samples. CMV was found to be negative in all samples.

In conclusion, HPV and HSV should be screened due to high prevalence of these viruses in pregnant by using sensitive molecular methods. Medical treatment and labor should be planned with care.

FCP115

A COMPARISON BETWEEN TRAMADOL AND PETHIDINE IN LABOUR PAIN

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Aim: To evaluate the analgesic efficacy and adverse effects of tramadol and pethidine in pregnant women in labour.

Material-Method: Fifty-nine women reaching term were included in this study and evaluated into two groups, retrospectively. Group 1 received 100 mg pethidine intramuscularly, group 2 100 mg tramadol intramuscularly. Analgesic efficacy, maternal side effects namely; nausea and vomiting, fatigue and drowsiness, changes in the blood pressure and heart rate were assessed at 10, 30, 60, 120, 180, 240 minutes after administration of the study drugs. Progress of labour and fetal well-being at 1.,5. minutes with APGAR scores were evaluated.

Results: Pain relief effect was superior at 30 and 60.minutes in the pethidine group than tramadol. The frequencies of nausea and fatigue were higher in the tramadol group. Systolic and diastolic blood pressure decreased and heart rate increased after injection in both groups, but only the change in diastolic blood pressure showed a significant difference in pethidine group. There was no evidence of a difference between treatment groups in terms of vomiting and drowsiness, changes in diastolic blood pressure and heart rate, duration of labour, APGAR scores of neonates. There was no respiratory depression in the neonates.

Conclusion: These findings indicate that pethidine can be preferred to tramadol for obstetrical analgesia because of its superiority in analgesic efficacy with its low incidence of maternal adverse effects.

FCP116**INTRAPARTUM GLUKOZUN NEONATAL ASFİKSİYE ETKİSİ**

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Amaç: Intrapartum intravenöz sıvı verilen hastalarda glukozun umbilikal kord asid baz dengesi üzerine etkilerini araştırdık.

Materyal ve Metod: Düşük obstetrik riske sahip gebelere intrapartum %5 dekstrozu ringer laktat solusyonu ve dekstrozsuz ringer laktat solusyonu verilerek umbilikal kord asit baz değerleri ölçüldü.

Bulgular: Çalışmaya 158 intrapartum gebe ile başlandı. 22 hasta kriterlere uymadığından çalışma dışı bırakıldı. 72 hastaya %5 dekstrozu ringer laktat solusyonu, 64 hastaya dekstrozsuz ringer laktat solusyonu uygulandı. Umbilikal arter pH değerleri arasındaki istatistiki anlamlılık yoktu, $p=0,08$ pCO_2 ortalaması istatistiki olarak farklıydı $p<0,05$.

Tartışma: İntrapartum glukoz infüzyonu annede ortaya çıkabilecek katabolik süreci önlemekte ve böylece fetüsü doğum esnasında oluşabilecek asidotik stresten korumaya yardımcı olmaktadır.

Sonuç: Bu bulgular eşliğinde intravenöz sıvı uygulamasında %5 glukoz içeren solusyonun daha çok tercih edilmesi gerektiğini düşünüyoruz.

FCP117**DİJİTAL SERVİKAL MUAYENİN MİKROBİYOLOJİK ETKİSİ**

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Amaç: Bu çalışmanın amacı dijital muayene ile vajinal mikroorganizmaların servikse penetrasyonunu tanımlamaktır.

Metod: Dijital servikal muayeneden önce ve sonra steril spekulum ile muayene edilip standardize edilen semikantitatif endoservikal kültür alınan membranları rüptüre 34 haftalık veya daha geç gebelik haftasına sahip 35 hasta rapor edildi.

Bulgular: Dijital muayeneden önce alınan kültürlerde $2,8 \pm 1,7$ değişik tipte organizma tanımlanmıştır. Buna karşılık dijital muayeneden sonra $4,4 \pm 1,5$ değişik mikroorganizma tanımlanmıştır ($p<0,001$). Muayeneden sonra alınan kültürlerde 28 hastadan (%80) daha yüksek miktarda ve değişik tipte mikroorganizmaya rastlanmıştır. Fetal membranların durumunun (rüptüre veya intakt) bu ilişkiye etkisi yoktur.

Sonuç: Vajinadan servikal kanala mikroorganizma girişine dijital muayenenin ani bir etkisi vardır.

FCP118**İKİZ GEBELİKLERDE DÜŞÜK APGARLI BEBEK DOĞUMUNU ETKİLEYEN RİSK FAKTÖRLERİNİN ANALİZİ**

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Amaç: İkiz gebeliklerde birinci (A Bebek) ve ikinci (B Bebek) doğan bebeklerde düşük Apgarlı doğumu etkileyen risk faktörlerinin analizi

Materyal - Metod: 01.01.2000 ve 31.12.2001 tarihleri arasında doğum yapan 170 canlı ikiz gebelik dosyaları taranarak anne yaşı, paritesi, preterm doğum oranı, erken membran rüptürü varlığı, fetusların prezentasyonu, vajinal veya sezaryen doğum varlığı kaydedildi. Bu faktörlerin bebeklerin düşük Apgar nedeniyle yenidoğan yoğun bakımına transferlerine etkisi lojistik regresyon analizi modelinde incelendi.

Bulgular: Annelerin yaşı $26,6 \pm 5,4$ idi. Olguların % 20'si (n=34) multipardı. Erken membran rüptürü 39 gebede (%22,9) gözlemlendi. Preterm doğum oranı %43,5 (n=74), sezaryen doğum oranı ise %64,1 (n=109) olarak gerçekleşti. A Bebeklerin 108 i (%63,5) verteks, B Bebeklerin ise 81'i (%47,6) verteks prezentas-

yonunda idi. A Bebeğin düşük Apgarlı olarak doğmasındaki en önemli faktör preterm doğum varlığı (OR=26.9, CI=3.4-214) idi. B Bebeğin düşük Apgarlı olarak doğmasındaki en önemli etkenler ise preterm doğum (OR=6.8, CI=2.1-22) ve erken membran rüptürüydü (OR=3.4, CI=1.2-9.7). Araştırılan diğer risk faktörlerinin düşük Apgarlı doğuma etkisi istatistiksel olarak anlamlı bulunmadı.

Sonuç: Prematürite ve erken membran rüptürü ikiz gebeliklerde düşük Apgarlı bebek doğumunu etkileyen en önemli faktörlerdir.

FCP119

İLERLEMİYEN EYLEM TANISI ALAN HASTALARDA RİSK FAKTÖRLERİNİN ANALİZİ

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Amaç: Doğumun ikinci evresinde ilerlemeyen eylem tanısı alan olgulardaki risk faktörlerini araştırmak. Materyal - Metod: İlerlemeyen eylem tanısı konulan 183 olgu ve her çalışma olgusundan sonra gelen ve vajinal doğum yapmış ilk beş olgu alınarak oluşturulmuş toplam 915 kişilik kontrol grubunun dosyaları incelendi. İlerlemeyen eylem tanısı için doğumun latent fazını tamamlamış olup servikal dilatasyonu 4cm ve üzeri olan olgulardan, on dakikada 200 montevideo ünitesinin üzerinde kontraksiyon şiddetine sahip olduğu halde iki saat süreyle servikal değişikliğin olmaması alındı. Risk faktörleri lojistik regresyon analizi ile araştırıldı.

Bulgular: Tatminkar olmayan fetal kalp hızı trasesi olanlarda (OR=10, CI=5-20), oksitosin ile doğum indüklenen olgularda (OR=8.9, CI=5.6-14), gebeliğe bağlı hipertansiyonu olanlarda (OR=4.6, CI=1.9-10.8), nulliparlarda (OR=3.7, CI=2.3-6.1), erken membran rüptürü olanlarda (OR=2, CI=1.2-3.1), postterm gebeliklerde (OR=1.8, CI=1.07-3.1) ve oksiput posterior prezentasyonu olanlarda (OR=3.6, CI=2.2-6) ilerlemeyen eylem riskinin arttığı bulundu.

Sonuç: İlerlemeyen eylem için risk faktörlerinin bilinmesi istenmeyen fetal ve maternal komplikasyonları önleyebilir.

FCP120

İNTRAUTERİN FETAL ÖLÜMLERDE MATERNAL MORTALİTE VE MORBİDİTENİN ANALİZİ

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Amaç: İntrauterin fetal ölüm ile komplike olmuş gebeliklerde maternal risk faktörlerinin analizi.

Materyal Ve Metod: Ocak.2000-Aralık.2001 tarihleri arasında intrauterine fetal ölüm tanısı almış ve 443 olgu retrospektif olarak incelenerek maternal morbidite nedenleri araştırıldı. Maternal hipofibrinojeneminin risk faktörleri lojistik regresyon analizi ile araştırıldı. Hipofibrinojenemi <400 mg/dl, ciddi hipofibrinojenemi <150 mg/dl olarak alındı.

Bulgular: Olguların yaş ortalaması 28±5.9, gestasyonel yaşları 237±36 idi. Hastaların %36.9'u (n=283) antenatal takip almamıştı. Fetusların %25.1'inin non-verteks prezantasyonu vardı. Olguların %7'sinde doğum, oksitosin indüksiyonu ile; %35.9'unda misoprostol ile başlatıldı. Annelerin %19.6'sında hipertansiyon hastalığı, %4.1'inde ise gestasyonel diabetes mellitus saptandı. Olguların %0.9'unda plasenta previa mevcuttu. Toplam 30 olguda (%6.8) dekolman plasenta; 2 olguda ise (%0.05) uterus rüptürü gelişti. Sezaryen doğum hızı %14.9 oldu. Hipofibrinojenemi 148 (%33.4) olguda; ciddi hipofibrinojenemi (fibrinojen< 150 mgdl) 18 (%4.1) olguda gözlemlendi. Ciddi maternal hipofibrinojenemiye yol açan en önemli risk faktörleri dekolman plasantanın varlığı (OR=40.6; CI=12.1-136.1; p<0.001) ve fetüsün ölümünden sonra uterusda dört haftadan fazla süreyle kalmasıydı (OR=2.8; CI=1.2-6.6; p=0.01). Maternal mortalite izlenmedi.

Sonuç: İntrauterin fetal ölüm zamanının ultrasonografi ile tahmini ve gebelerin dekolman açısından izlenmesi potansiyel fatal bir komplikasyon olan ciddi hipofibrinojenemiyi önlemede etkili olacaktır.

FCP121

FETAL WEIGHT ESTIMATION BY FUNDUS-PUBIS MEASUREMENTS : A COMPARISON OF TWO DIFFERENT METHODS

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The abdominal examination is an important component of the physical examination and should take place at every prenatal visit and childbirth management. Abdominal palpation enables the nurse to assess both uterine size and fetal position. The fetal weight may be roughly estimated by attempting to palpate as much of the fetus as possible abdominally and then envisioning the remainder. The sum of the two estimates gives the examiner an approximate idea of the fetal weight. The height of the fundus should be compatible with the estimated date of delivery; otherwise, complications such as small gestational age, hydramnios, fetal macrosomia should be considered.

In this study, fetal weight estimation was made prospectively by measuring two different methods symphysial – fundal height with Johnson's formula in 321 (single) gravid women in labor with vertex presentation, between 34 – 42 weeks of gestation, who were admitted Eskişehir Maternity and Child Hospital. There are two methods which are used in measuring fundal height. One of them includes the upper curve of the fundus in measuring fundal height but the other one does not.

Estimated fetal weights were compared to real birth weights, in addition, the effects of diastasis recti on measurement of fundal heights.

The findings of those methods about the fundal height are compared. In conclusion, fundal height measurement which is very simple and easy, should be widespread use and low cost make.

FCP122

Rh UYUŞMAZLIĞINA BAĞLI HİDROPSLU FETUSTE İNTRAVASKÜLER TRANSFÜZYON: OLGU SUNUMU

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Olgu: 33 yaşında Gravida 8,Para 6, sadece ilk bebeği yaşayan ve son üç hamileliği önce term, sonra 6 aylık ve son olarak 7 aylık in utero mort du foetus'le sonuçlanmış bir hasta mevcut gebeliğinde Rh uyuşmazlığına bağlı Immün Hidrops tanısı ile 30.7.2001'de ünitemize refere edildi. Yapılan incelemede 20+ haftada ileri derecede hidrops gelişmiş fetus tespit edildi. İlk intrauterin-intravasküler transfüzyon 21+ haftada başarıyla yapıldı . Daha sonra 24+, 27+ , 30+, ve 33+ haftalarda tekrarlanarak toplam beş transfüzyonla fetus viabiliteye ulaştırıldı. Son transfüzyon sırasında kordonda oluşan hematoma sebebi ile hasta acil sezaryene alınarak 2400 gr., 48cm Kız bebek doğurtuldu. Apgar'ı 1.dk 3 ve 5.dk 8 olan bebekte nidoğan ünitesinde 12 gün tedaviden sonra sağlıklı olarak taburcu edildi.

Sonuç: Vaka ağır şartlarda prezantasyonu, son transfüzyonda oluşan komplikasyon , yönetimi ve tartışılması, bu olguların yönetiminde ekip organizasyonu ve tekniği yönünden sunulmaktadır. Seri intravasküler transfüzyon bir hastanede Fetal Tıp merkezi için diğer disiplinlerin de katılımlarını gerektiren koordineli bir ekip çalışmasının altın standardı olmaya devam etmektedir.

FCP123

YARDIMCI ÜREME TEKNİKLERİNDE PCO SENDROMLU OLGULARA VERİLEN ADJUVAN METFORMİN TEDAVİSİNİN KONJENİTAL ANOMALİ YÖNÜNDEN İNCELENMESİ

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Amaç: Yardımcı Üreme Teknikleri (Y.Ü.T.) uygulanan polikistik over sendromlu olgularda adjuvan metformin tedavisi ve ilk trimesterde metformine devam edilen gebe olgularda bu ilacın konjenital anomaliler açısından retrospektif olarak incelenmesi.

Yöntem: 2000 Şubat ve 2001 Ekim tarihleri arasında İstanbul Memorial Hastanesi IVF, Genetik ve Perinatoloji Merkezinde tedavi ile gebelik elde edilen ve birinci trimesterde 850 mg metformin kullanımına devam eden 95 olguda prognoz, ikinci düzey ultrasonografi ve doğum sonrası anomali bulgularının retrospektif analizi yapılarak değerlendirilmiştir.

Bulgular: Olguların yaş ortalaması 29.3 ± 4.4 ve body mass index'i (BMI) 26.9 ± 4.3 idi. Gebelik ede edilen 95 olgunun %71'i (n= 68) doğumla sonuçlanmış, % 6.3 oranında (n=6) biyokimyasal abortus, %5.2 (n=5) blighted ovum ve %6.3 (n=6) olguda ise 24. gebelik haftası tamamlanmadan önce total gebelik kaybı gözlenmiştir. Olguların tümünde metformin kullanımına 12. haftaya kadar devam edilmiştir. Şiddetli erkek infertilitesi nedeni ile intrastoplamik sperm enjeksiyonu (ICSI) yapılan 2 olguda ikinci düzey ultrasonografide gross anomali saptanmıştır (2/71) %2.8. Amniosentezle karyotipleri normal bulunan bu fetuslerde doğum sonrası anomaliler teyid edilmiştir. İkinci düzey ultrasonografide pyelektazi saptanan üçüncü bir olguda ise amniosentez sonucu normal bulunmuş ve termde doğum sonrası yapılan incelemelerde anomali saptanmamıştır.

Sonuç: Y.Ü.T. uygulanan PCO sendromlu olgularda adjuvan olarak kullanılan metformin, ilk trimester kayıplarının önlenmesi amacı ile gebeliğin 12. haftasına kadar kullanılmış, abortus ve konjenital anomali oranları doğal oluşan gebeliklerle kıyaslandığında normal sınırlarda bulunmuştur. Metformin gebeliğin ilk trimesterinde emniyetle kullanılabilir. Böylece PCO olgularında LH hormon dengesizliğine bağlı erken gebelik kayıpları başarı ile önlenilmekte ve konjenital anomali oranlarında artış izlenmemektedir.

FCP124

29 HAFTALIK KANAMALI PLACENTA PREVIA'DA ACİL CERVİCAL CERCLAGE: OLGU SUNUMU

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Olgu: 23 yaşında bir primigravida 28+0. haftada kanama ile acilen yatırıldı. Yapılan ultrasonografik değerlendirmede fetal ağırlık 1100gr. olarak bulundu. Öncesinde rutin 23. hafta servikal değerlendirme sırasında posterior yerleşimli plasentanın internal os'u tamamen kapattığı tespit edilmişti. Konservatif tedbirlere rağmen kanamanın artması üzerine hasta operasyona alınarak internal os ve uteroplazental kanama yüzeyini stabilize etmek amacıyla acil servikal cerclage yapıldı. Kanama postoperatif dönemde giderek azaldı. 20 gün sonra gebelik 31. haftayı doldurduğunda tekrar artan kanama ve kontraksiyonlar nedeniyle Sectio yapılarak 1400gr. ağırlığında 1.dk 3 Apgarlı, 5.dk entübe, preterm AGA (gestasyonel haftasına uygun tartı) doğurtuldu. Doğumdan hemen sonra gelişen solunum yetersizliği RDS (respiratuar distres sendromu) ile uyumluydu. Erken dönem tek doz sürfaktan uygulandı. Mekanik ventilasyon ile CMV modunda 4 gün, ekstübasyon sonrası nazal cpap 4 gün sürdü. Bu dönem içinde umbilikal arter ve ven kateteri kullanıldı. Prematürite apnesi kontrol altına alındı. Total enteral beslenmeye 12. günde geçildi; 16. günde tamamen oral beslenebilmekteydi. Prematürite retinopatisi, intraventriküler kanama, sepsis, prematürite anemisi veya raşitismi gelişmedi. Toplam yatış süresi 18 gün olmakla birlikte 33 1/7 gün ve 1565 gram olarak taburcu edildi. İki ay 10 günlükken bebek yakınmasız, tartı 4300 gram, boy 52 cm. ve baş çevresi 36.8 cm. olarak saptandı.

Sonuç: Placenta Previa'da aşırı prematüritenin önlenmesi ve yenidoğan yoğunbakım süresinin azaltılması amacıyla yapılan bu operasyonun bu olguda amacına ulaştığını düşünmekteyiz.

FCP125

SEKSİYOLU HASTALARDA VAJİNAL DOĞUM ORANLARIMIZ

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Amaç: Atatürk Üniversitesi Tıp Fakültesi Kadın Hastalıkları ve Doğum Kliniğine başvuran önceki gebeliğinde sezaryen geçirmiş hastalarda vajinal doğum oranlarını incelemek.

Yöntem: Ocak 1999-Aralık 2001 tarihleri arasında kliniğimize yatırılan hastalardan önceki gebeliklerinde sezaryen geçirenler çalışmamıza alındı. Hastalar, elektif olarak sezaryene alınanlar (n=304) ve seksiyon sonrası vajinal doğuma bırakılanlar (n=126) olmak üzere 2 gruba ayrıldı. Daha önce 2'den fazla sezaryen olanlar, klasik seksiyolular, seksiyodan sonra geçen sürenin 2 yıldan az olması, iri bebek, malprezentasyon, BPU gibi obstetrik ve medikal kontrendikasyonu olanlar ve vajinal doğumu kabul etmeyen hastalar vajinal doğuma bırakılmadı. Vajinal doğuma bırakılanlar rüptür belirtileri açısından yakın takibe alındı.

Bulgular: Daha önce sezaryen olan hastaların 86'sına (%68) başarılı bir şekilde vajinal doğum yaptırıldı, doğum sonrası uterin kaviteye girilip insizyon hattı palpe edilerek rüptür kontrolü yapıldı. Doğumu vajinal yoldan yaptırılan hastaların hiçbirinde rüptür bulgusuna rastlanmadı. 40 hastada ise fetal distres, sekonder arrest, rüptür tehdidi gibi nedenlerle sezaryene geçildi. Bu hastalardan intrauterin ölü fetusu olan bir gebe vajinal doğuma bırakılmışken rüptür şüphesi üzerine sezaryene alındı ve eski insizyon yerinde gelişen komplet rüptür primer tamir edildi. Elektif alınan gruptan ise 3 hastada rüptüre rastlandı. Bunlardan hiç travay çekmeyen bir hastada inkomplet rüptüre rastlandı, bebeğin 1. dk apgarı 7 idi, 2. hasta servise başvurduğunda serviksi 4 cm açıklıkta ve kol sarkması bulunan gebe idi, acil sezaryen uygulandı, apgarı 2 olan fetus daha sonra ex oldu. 3. hastada ise elektif sezaryen sırasında sessiz rüptüre rastlandı, bebeğin 1. dk apgarı 6 idi. 3 hastada da rüptür yerleri primer tamir edildi.

1999-2001 tarihleri arasında sezaryen hikayeli hastalarda vajinal doğum oranlarına yıllara göre baktığımızda vajinal doğum oranlarının gittikçe arttığı görüldü (sırasıyla %16, 17.8, 23.4)

Sonuç: Sezaryen geçirmiş hastalar rüptür açısından riskli özellikler taşııyorsa dikkatli kontrol altında vajinal doğuma bırakılabilir ve önemli bir kısmında vajinal doğum başarılı olabilir. Bu başarı görüldükçe vajinal doğuma bırakılacak hasta sayısı artacak ve son yıllarda artan sezaryen oranları düşürülebilecektir.

FCP126

DİCLE ÜNİVERSİTESİ'NDE 20 YILLIK SEZARYEN ORANI, ENDİKASYONLARI VE BİRLİKTE YAPILAN DİĞER OPERASYONLAR

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Amaç: Kliniğimizde gerçekleştirilen sezaryen oranını, endikasyonlarını ve birlikte yapılan diğer operasyonları retrospektif olarak incelemektir.

Materyal ve Metod: Dicle Üniversitesi Tıp Fakültesi Kadın Hastalıkları ve Doğum Kliniğinde 1 Ocak 1983 ile 31 Mayıs 2002 yılları arasında gerçekleştirilen 18343 doğumdan, 5665 sezaryen olgusu ve sezaryen sırasında yapılan diğer operatif girişimler retrospektif olarak incelendi. Bunların yıllara göre dağılımı, oranı ve endikasyonları irdelendi.

Bulgular: Yıllara göre toplam doğum dağılımı 573 ile 1430, sezaryen dağılımı ise 125 ile 637 arasında değişmektedir. Sezaryen oranlarına bakıldığında en düşük 1986 yılında (%16.92), en yüksek ise 2002 yılında (%50.98) gerçekleştiği gözlenmektedir. Genel olarak sezaryen oranında yıllara paralel bir artış izlenmektedir. Sezaryen endikasyonları içinde artış, en sık eski sezaryen, elektif ve fetal distreste olmuştur. Eski sezaryen oranı 1994 yılına kadar %20'nin altında iken, 1995 yılından itibaren artarak %29.38'e çıkmıştır. Aynı şekilde elektif sezaryen oranı %1.63'ten %14.09'a, fetal distres %5.89'dan %16.29'a çıkmıştır. Sezaryen sırasında yapılan diğer operasyonlara bakıldığında; en sık tüp ligasyonu (%18.18), sırasıyla histerektomi (%2.77), uterus rüptürü (%0.47), myomektomi (%0.42), ovarial kist ektiripasyonu (%0.21), mesane onarımı (%0.17) ve diğer operasyonlar (%0.33) izlenmektedir.

Sonuç: Kliniğimizde sezaryen oranında yıllara paralel bir artış gözlenmektedir. Son yıllarda tekrarlayan sezaryen operasyonlarının artması, antenatal tanı yöntemlerinin yaygın kullanımı, gebelerin ve hekimlerin elektif sezaryene eğilim göstermesi, yenidoğan ünitelerinin ve ameliyathane şartlarının gelişmesi gibi nedenler sezaryen oranını artırmıştır.

FCP127

FETUS BOYNUNA UMBİLİKAL KORDONUN MULTİPL DOLANMASI NEDENİYLE ANTENATAL FETAL KAYIP: OLGU SUNUMU

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Amaç: Fetus boynuna umbilikal kordonun multipl dolanması nedeniyle nadir görülen antenatal fetal kayıp olgusunu incelemek.

Olgu: G:3, P:1, 33 yaşındaki olgu gebeliğin 37. haftasında fetus hareketlerinin azalması ve doğum öncesi son kontrol amacı ile başvurdu. Ultrasonografi tetkikinde oligohidramniyos, intrauterin gelişme geriliği ve mort fetus saptandı. Prezantasyon baş olup fetus abdomeninde sıvı birikimi mevcuttu. Mevcut gebeliğin öyküsünde ikinci trimesterde 18 MoM aFP, normal kromozom bulgusu ve üçüncü trimesterde IUGR saptanması dışında önemli bir özellik yoktu. Doğum indüksiyonunu takiben 1600g/45cm ölçülerinde kız fetus normal vajinal yolla doğurtuldu. Umbilikal kordonun boyun etrafında sekiz defa dolandığı belirlendi. Yapılan ölçümde kordon uzunluğu 95 cm olup, fetus boynunda geniş ve derin iz bıraktığı gözlemlendi.

Sonuç: Gebeliklerin azımsanmayacak bir oranında saptanabilen kordon dolanması genelde antenatal dönemde ciddi sorunlara neden olmamakla birlikte, eylem sırasında komplikasyonlara yol açabilmektedir. Olgumuzda eylem öncesinde kordonun sekiz kez fetus boynuna dolanmış olmasını, fetal kayıp nedeni olarak düşünmekteyiz. Bu durumun aFP yüksekliğini takip etmesi kanaatimizce olguyu ilginç kılmaktadır.

FCP128

İNTRAUTERİN ATEŞLİ SİLAH YARALANMASI: OLGU SUNUMU

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Amaç: İntrauterin ateşli silah yaralanması olgusunu incelemek.

Olgu: G2, P1, 22 yaşındaki olgu gebeliğin 28. haftasında ateşli silah yaralanmasını takiben acil polikliniğine getirildi. İlk muayenede genel durum orta, şuuru açık, koopere, vital bulgular stabil. Kurşunun giriş deliği umbilikusun üstünde gözlenirken, çıkış deliği izlenemedi. Ultrasonografide 28 hafta ile uyumlu gebelik saptandı. Fetal kalp atım hızı <100/dakika izlenmesi üzerine hastaya laparotomi uygulandı. Kurşun, uterusun anterior sol korna yakın yerinden girip, sağ posterior duvarı geçmiş ve retroperitonda, sağ böbrek altında hematoma içinde bulunmuştur. Ayrıca ince barsakta muhtelif yaralanmalar ve batında 1000 ml kan ile karışık sıvı izlendi. Uterus alt segmentinden kesi yapılarak 1060g ağırlığında, 38 cm boyunda ve 0/0 APGAR'lı bebek doğurtuldu. Uygulanan fetal resusitasyona yanıt alınamadı. Uterustaki kurşunun giriş ve çıkış yerlerine primer sütür konuldu. Fetusun incelenmesinde kranyumda frontal bölgede kurşun giriş ve çıkış delikleri gözlemlendi.

Sonuç: Nadir görülmesi nedeni ile fetus kurşunlanması olgusu sunularak, gebelikte batin bölgesini kapsayan ateşli silah yaralanmalarında erken tanı ve laparotominin önemi vurgulandı.

FCP129**SEZARYEN DOĞUMLARDA PARIYETAL PERİTONİZASYON: RANDOMİZE KONTROLLÜ ÇALIŞMA****Numanoğlu C.*, Öztürk F.*, Numanoğlu N.**, Aslan H.*, Polat İ.*, Güllük A.*, SSK Bakırköy Doğum ve Çocuk Hastalıkları Eğitim Hastanesi, İstanbul - Türkiye**

Alt segment transvers insizyon uygulanan sezaryen doğumlarda pariyetal peritonizasyon yapılan (n=85) ve yapılmayan (n=86) olguların per ve postoperatif iyileşme süreçlerini karşılaştırmak amacıyla prospektif randomize kontrollü bir çalışma düzenledik Hastalar operasyonun süresi, (Anestezi kayıtları dikkate alınarak) analjezi gereksinimi, barsak seslerinin oskülte edilme zamanı, gaz salınımı, defekasyon zamanı ve diğer komplikasyonlar (Febril Morbidite, Yara Enfeksiyonu) yönünden incelendi. Pariyetal peritonizasyon uygulanmayan olgularda operasyon süresi ve postoperatif analjezi gereksinimi anlamlı derecede azalmış bulunurken; barsak seslerinin oskülte edilmesi, gaz salınımı, defekasyon, febril morbidite ve yara enfeksiyonu açısından anlamlı bir fark saptanmadı. Daha basit olması ve operasyon süresini kısalttığı gözönüne alındığında sezaryen doğum olgularında pariyetal peritonun açık bırakılması önerilebilir.

FCP130**SSK GÖZTEPE HASTANESİ PERİNATOLOJİ POLİKLİNİĞİNDE İKİ YILLIK LETAL FETUS ANOMALİLERİN SIKLIĞI VE TIBBİ TAHLİYE SONUÇLARI****Kepkep K., Koç A., Yetim G., Uysal A., SSK Göztepe Hastanesi 2. Kadın Hastalıkları ve Doğum Kliniği, İstanbul - Türkiye**

Amaç: Bu çalışmanın amacı 2 yıllık dönem içinde saptanan letal fetal anomalilerin ve tıbbi tahliye kararı verilen gebeliklerin sıklığını gözden geçirmek ve fetusun viabilite sınırı olarak kabul edilen 24. haftadan önce tanının konulmasının önemini vurgulamaktır.

Yöntem: Haziran 2000 –Haziran 2002 tarihleri arasında 11-34 gebelik haftalarında başvuran, 20-39 yaş arası toplam 22795 gebe incelenmiştir. Fetal letal anomali ve maternal sebepler nedeni ile 24. haftadan önce sonlandırılan ve geç dönemde tanı konulup sonlandırılan anomalili gebelikler retrospektif olarak değerlendirildi.

Bulgular: 11-34. gebelik haftaları arasında başvuran gebe kadınların toplam 120'sinde fetal anomali görülmüştür. Bunların 75 olgu (% 62.5) 24. haftadan önce, 45 olgu (%37.5) 24. haftadan sonra saptanmıştır. 24. haftadan önce tıbbi tahliye yapılan olgu sayısı 85 olup 10 olgu maternal nedenlerle sonlandırılmıştır. Tıbbi tahliye nedeni olarak fetal letal anomalilerin maternal nedenlere oranı 7.5 kat fazladır. En sık karşılaşılan anomali santral sistem anomalileridir ve tüm grup içinde oranı % 46'dır (n=61). Bunların 37'si 24. haftadan önce, 24'ü 24. haftadan sonra görülmüştür. Santral sinir sistemi anomalileri içinde en sık görüleni anensefalidir (%49)(n=25). 24. haftadan önce görülen anomaliler içinde 2. sıklıkta renal anomaliler (% 14) (n=9) görülmektedir. Bunları kalp, iskelet ve gastrointestinal sistem anomalileri takip etmektedir.

Sonuç: Fetal anomaliler içerisinde kliniğimizde en sık anensefali olmak üzere santral sinir sistemi anomalileri başta gelmektedir. İki yıl içinde görülen tüm anomalilerin % 37.5'inin 24. haftadan sonra tanınması, erken dönemde ultrasonografi ile takibin ve tanının önemini göstermektedir.

FCP131**KISA BOYLU ANNELERDE C/S ORANI****Kara F., Yeşildağlar N., Uygur D., Erkaya S., Zübeyde Hanım Doğumevi, Ankara - Türkiye**

Amaç: Boyları 150 cm ve altında olan kadınlarda C/S oranını tespit etmek ve maternal ve fetal sonuçları değerlendirmek.

Yöntem: Zübeyde Hanım Doğumevinde 2002 yılında ilk 6 aylık dönemde doğum yapan 150 cm veya daha kısa boylu 35 kadın prospektif olarak izlendi.

Bulgular: Boyları 150 cm veya daha kısa olan 35 kadından 15 tanesi C/S ile (% 42.85), 20 tanesi ise vajinal yolla (% 57.15) doğurtuldular. Hiçbir anne veya bebekte doğumdan kaynaklanan bir komplikasyona rastlanılmamıştır.

Sonuç: Boyları 150 cm veya daha kısa olan kadınlarda doğum yöntemi olarak sadece C/S düşünülmemeli, normal vajinal doğum yapabilecek olan kadınlara bu şans verilmelidir.

FCP132

ONYEDİ YAŞ VE ALTINDA DOĞUM YAPAN KADINLARDA C/S ORANI

Yeşildağlar N., Kara F., Erkaya S., Zübeyde Hanım Doğumevi, Ankara - Türkiye

Amaç: Onyediy yaş ve altında doğum yapan kadınlarda C/S oranını tespit etmek ve maternal ve fetal sonuçları değerlendirmek.

Yöntem: Zübeyde Hanım Doğumevinde 2000-2001 döneminde 12 ay içinde doğum yapan 17 yaş ve altında olan 152 kadın retrospektif olarak değerlendirildi. Onyediy yaşında 102, 16 yaşında 40, 15 yaşında 10 ve 14 yaşında yalnız 1 anne tespit edildi.

Bulgular: Onyediy yaşında olan 88 kadın vajinal (% 86.2), 14 kadın ise C/S ile (% 13.8), 16 yaşındaki 10 kadın vajinal (% 25), 30 kadın C/S ile (% 75), 15 yaşındaki 9 kadın vajinal (% 90), 1 kadın C/S ile (% 10) ve 14 yaşındaki 1 kadın vajinal doğurtulmuştur. Retrospektif değerlendirmemizde, bu yaş grubunda C/S oranı % 29.4 tespit edilmiş olup, gebelerin % 70.6'lık büyük çoğunluğu vajinal yolla doğurmuştur. Hiçbir anne veya bebekte doğumdan kaynaklanan bir komplikasyona rastlanılmamıştır.

Sonuç: Onyediy yaş ve altında olan kadınlarda doğum yöntemi olarak sadece C/S düşünülmemeli, normal vajinal doğum yapabilecek olan kadınlara bu şans verilmelidir.

FCP133

SEZARYEN OPERASYONLARINDA ÜRETRAL KATETER RUTİN UYGULANMALI MI?

Zeteroğlu Ş., Şahin G., Sürücü R., Çölçimen N., Yüzüncü Yıl Üniversitesi Tıp Fakültesi Kadın Hastalıkları ve Doğum Anabilim Dalı, Van - Türkiye

Amaç: Bu çalışmada sezaryen operasyonlarında üretral kateter uygulanan ve uygulanmayan hastaların intraoperatif komplikasyonlar ve postoperatif morbidite yönünden karşılaştırılması amaçlandı.

Yöntem: Bu çalışma prospektif randomize olarak planlandı. Aralık 2001-Haziran 2002 tarihleri arasında spontan miksiyon sonrası sezaryen ile doğum yaptırılan 50 hasta (1. grup) ile operasyon öncesinde Foley üretral kateter uygulanarak sezaryen yapılan 50 hasta (2. grup) intraoperatif komplikasyonlar ve postoperatif morbidite açısından karşılaştırıldı.

Bulgular: Gruplar arasında yaş, gravida, parite, sezaryen endikasyonları, postoperatif enfeksiyon riskini arttırabilecek faktörler ve operasyon süresi açısından anlamlı fark yoktu. Her iki grupta da intraoperatif komplikasyon görülmedi. Postoperatif mobilizasyon (6.58±1.69. saate karşılık 12.52±4.48. saat) birinci grupta anlamlı olarak daha erken gerçekleşti. Birinci gruptaki hastalar 5.24±3.53. saatte spontan idrara çıktılar. Postoperatif 12. saatte spontan idrara çıkmayan ve glob vesikale saptanan epidural anestezi uygulanmış 2 hastaya (%4) nelaton sonda uygulandı. İkinci gruptaki hastalarda sondanın çıkarılma süresi postoperatif 12.08±4.42. saatte. Birinci grupta üriner sistem enfeksiyonu saptanmazken ikinci grupta 4 olguda (%8) enfeksiyon saptandı ve aralarındaki fark anlamlı olarak tespit edildi. Aralarında istatistiksel olarak anlamlı fark olmamakla birlikte, birinci grupta hastanede kalış süresi daha kısaydı.

Sonuç: Sezaryen operasyonlarında üretral kateter uygulaması, postoperatif üriner sistem enfeksiyon oranını ve hastanede kalış süresini arttırmakta ve intraoperatif bir avantaj sağlamamaktadır. Sezaryen operasyonlarında üretral kateter uygulanmasının efektif olmadığını düşünmekteyiz.

FCP134

HİPEREMEZİS GRAVIDARUM OLGULARINDA TİROİD FONKSİYON TESTLERİ DEĞERLENDİRİLMELİ Mİ?***Şahin G., *Zeteroğlu Ş., **Şahin H. A., *Sürücü R., *Kulusarı A.***Yüzüncü Yıl Üni. Tıp Fak. *Kadın Hast. ve Doğum A. D., ** Aile Hekimliği A. D., Van - Türkiye*

Amaç: Bu çalışmada kliniğimizde yatarak tedavi gören hiperemesis gravidarum olgularında tiroid hormonlarının ve antitiroid tedavinin etkilerinin araştırılması amaçlandı.

Yöntem: Bu çalışma prospektif olarak planlandı. Haziran 2000- Nisan 2002 tarihleri arasında kliniğimizde yatarak tedavi gören, öncesinde herhangi bir medikal problemi olmayan, hiperemesis gravidarum tanısı almış hastaların demografik verileri, laboratuvar bulguları, uygulanan tedaviler ve sonuçları hazırlanmış olan formlara kaydedildi.

Bulgular: Çalışmanın sonunda 41 olgu değerlendirildi. Yaş, gravida ve parite ortalamaları sırasıyla; 27.24 ± 4.12 , 3.04 ± 2.25 , 1.58 ± 1.88 idi. Hastaların gebelik yaşları son adet tarihi ve ultrasonografik CRL ölçümlerine göre sırasıyla; 9 hafta 4 ± 2.3 gün ve 9 hafta 1 ± 2.9 gün olarak saptandı. Standart tedaviye yanıt alınan 31 olguda tiroid hormon profili normal sınırlarda iken, standart tedaviye yanıt alınamayan 10 olguda (%24.39) ise hipertiroidi bulguları mevcuttu. Endokrinoloji kliniğince konsülte edilen bu hastalara propylthiouracil (Propycil tablet Dr. F. Frik®) tedavisi başlandı. Bu gruptaki hastaların hepsinde klinik olarak olumlu cevap gözlemlendi.

Sonuç: Özellikle standart tedaviye yanıt vermeyen hiperemesis gravidarum olgularında, tiroid hormon profiline bakılması ve hipertiroidi saptananlarda antitirod tedavinin eklenmesi klinik olarak anlamlıdır.

FCP135

İKİZ EŞİN EXITUS OLDUĞU TERME ULAŞAN GEBELİK: OLGU SUNUMU**Zeteroğlu Ş., Şahin G., Sürücü R., Kamacı M.,** *Yüzüncü Yıl Üniversitesi Tıp Fakültesi Kadın Hastalıkları ve Doğum AD, Van - Türkiye*

Miad ikiz gebelik olarak başvuran ikiz eşin yaklaşık 24. haftada exitus olduğu diğer eşin canlı miadda, sağlıklı olarak doğurtulduğu olgunun sunumu amaçlandı.

31 yaşında gravida 5, parite 3, D/C 1 olan, son adet tarihini bilmeyen ve yaklaşık 9 aylık ikiz gebeliği olduğunu ifade eden hasta sularının gelmesi şikayeti ile kliniğimize başvurdu.

Yapılan ultrasonografik incelemede; birinci bebek gebelik yaşı, biparietal diameter (BPD) ve femur uzunluğu (FL) ölçümüne göre 40 hafta ve canlı, ikinci bebekte ise kardiyak aktivite negatif, kraniyal yapıların deforme olması nedeniyle BPD değerlendirilemeyip FL ye göre 24 haftayla uyumlu olarak tespit edildi. Amnion sıvıları ileri derecede azalmıştı. Plasentasyon dikoryonik ve diamniotik olarak saptandı.

Hastaya sezaryen abdominalis yapılarak, birinci bebek baş gelişli 7/9 APGAR'lı 2700gr kız, ikinci bebek 0/0 APGAR'lı 1200gr kız bebek olarak doğurtuldu. İkinci bebek ileri derecede massere ve kranium deforme idi. Birinci bebek normal olarak değerlendirildi.

İkiz eş erken dönemde exitus olmasına rağmen diğer eş terme kadar sağlıklı bir şekilde ulaşabilmektedir.

FCP136

PRETERM EYLEMLERDE NİFEDİPİN İLE RİTODRİN TEDAVİSİNİN KARŞILAŞTIRILMASI**Şahin G., Zeteroğlu Ş., Kamacı M., Sürücü R., Kahramanoğlu İ.,** *Yüzüncü Yıl Üniversitesi Tıp Fakültesi Kadın Hastalıkları ve Doğum A.D., Van - Türkiye*

Amaç: Bu çalışmada bir kalsiyum kanal blokeri olan nifedipin ile beta-adrenerjik agonist olan ritodrinin preterm eylem tedavisindeki etkinliklerinin ve yan etkilerinin karşılaştırılması amaçlandı.

Yöntem: Bu çalışma randomize prospektif olarak planlandı. Şubat 1999-Nisan 2002 tarihleri arasında kli-

niğimizde yatarak tedavi gören preterm eylem tanısı almış 60 olgu değerlendirildi. Otuz olguya (grup 1) Nifedipin (Nidilat 10 mg kapsül, Doğu İlaç®), diğer 30 olguya (grup2) ise İV Ritodrin (Prepar 50 mg ampül Eczacıbaşı®) tedavisi uygulandı. Doğumun 37. haftaya kadar önlenebildiği olgular mutlak başarılı, 48 saatten fazla zaman kazanılan ancak 37. haftaya ulaşamayan olgular rölatif başarılı ve 48 saatten daha az zaman kazanılan olgular da ise tedavi başarısız kabul edildi.

Bulgular: Gruplar arasında yaş, gravida, parite ve Bishop skorları açısından anlamlı fark yoktu. Birinci grupta mutlak başarı, rölatif başarı ve başarısızlık oranları sırasıyla; 20 (%66.70), 5 (%16.70) ve 5(%16.70) olarak saptanırken, aynı değerler ikinci grupta sırasıyla 16 (%53.30), 6(%20) ve 8 (%26.70) olarak saptandı. Tedavi ile kazanılan gün ise birinci ve ikinci grupta sırasıyla; 23.66 ± 21.15 ve 16.83 ± 14.83 gün olarak tespit edildi. Aralarında istatistiksel olarak anlamlı fark olmamakla birlikte, tedavi başarısı ve kazanılan gün sayısı birinci grupta daha yüksekti. Yan etkiler ikinci grupta daha fazla gözlemlendi.

Sonuç: Nifedipin hem kullanım kolaylığı açısından hem de yan etkilerinin daha az olması nedeniyle preterm eylem tedavisinde, ritodrin yerine kullanılabilir bir alternatiftir.

FCP137

PRETERM EYLEM, PREMATÜR MEMBRAN RÜPTÜRÜ VE ALT ÜROGENİTAL SİSTEM İNFEKSİYONLARI

*Şahin H. G., *Zeteroğlu Ş., **Şahin H. A., ***Deveci A., *Güvercinci M., *Yüzüncü Yıl Üniversitesi Kadın Hastalıkları ve Doğum A.D., **Aile Hekimliği A.D., ***İnfeksiyon Hastalıkları ve Klinik Mikrobiyoloji A.D., Van - Türkiye

Amaç: Preterm eylem ve prematür membran rüptürü ile vajinit ve idrar yolları infeksiyonları arasındaki ilişkinin saptanması amaçlandı.

Yöntem: Yüzüncü Yıl Üniversitesi Tıp Fakültesi Araştırma Hastanesi Kadın Hastalıkları ve Doğum kliniğine preterm eylem (grup I, n:37), prematüre membran rüptürü (PMR) (grup II, n:42) ve kontrol grubu olarak miad gebeliği olan (grup III, n:20) hastalar olmak üzere toplam 99 hasta çalışmaya alındı. Bu hastaların vaginal ve idrar kültürleri ile bakteriyel vaginosis, Trikomonas vaginalis ve candidanın araştırılması için vajenin yan duvarından alınan taze preparatlar incelendi. Alınan iki adet taze preparatın biri direkt mikroskopik incelemede Trikomonas vaginalis paraziti ve clue hücreleri yönünden incelenirken, diğer preparat %10'luk KOH çözeltisi kullanılarak whiff testi ve mantar incelemesi yönünden araştırıldı. Bakteriyel vaginosis tanısı için whiff testi pozitifliği, clue hücreleri varlığı ve vaginal pH'nın 4.5 veya daha yüksek olması kriterleri alındı.

Bulgular: İncelenen direk preparatlarda grup I' de bulunan hastaların %37.84'ünde, grup II' de bulunan hastaların %38.10'unda ve grup III'te hastaların %40'ında mantar sporları, hif veya pseudohifleri saptandı. Mantara bağlı vajinit açısından üç grup arasında anlamlı bir istatistiksel ilişki saptanamadı. Bunun yanında Gardnerella vaginalis yönünden incelenen preparatlar sonucunda I, II ve III. grupta bulunan hastaların sırasıyla %27.03, %28.57 ve %5'inde bakteriyel vaginosis tanısı konuldu. Üç gruptaki hastaların ortalama vaginal pH değerleri sırasıyla 4.92, 4.93 ve 4.44'tü. Trikomonas vaginalis yönünden üç grup arasında herhangi bir anlamlı istatistiksel ilişki saptanamadı. Hastalardan alınan vajen ve idrar kültür örneklerinde grup I' de bulunan hastaların sırasıyla %24.32 ve %18.92'sinde, grup II'deki hastaların %47.62 ve %9.52'sinde üreme saptandı. Grup III'teki hastalarda ise idrar ve vaginal kültürlerinde üreme saptanmadı.

Sonuç: Preterm eylem ve prematür membran rüptürü ile alt ürogenital sistem infeksiyonlarının önemli bir ilişkisi mevcut olup, gebeliğin antenatal kontrolleri sırasında asemptomatik infeksiyonların bile dikkate alınması ve tedavilerinin yapılması önemlidir.

FCP138

SEZARYEN OPERASYONLARINDA FETAL YARALANMALAR VE ASİSTAN EĞİTİMİ

Zeteroğlu Ş., Şahin G., Sürücü R., *Yüzüncü Yıl Üniversitesi Tıp Fakültesi Kadın Hastalıkları ve Doğum A.D., Van - Türkiye*

Amaç: Kliniğimizde yapılan sezaryen operasyonlarında intraoperatif fetal yaralanmaların değerlendirilmesi amaçlandı.

Yöntem: Ocak 1995-Haziran 2002 tarihleri arasında gerçekleştirilmiş olan 1128 sezaryen operasyonu kayıtları incelendi. Sezaryen endikasyonları ve intraoperatif fetal yaralanmalarla ilgili bilgiler hazırlanmış formlara kaydedildi.

Bulgular: Hastaların yaş, gravida, parite ve gebelik yaşları sırasıyla; 28.24 ± 1.20 , 3.75 ± 0.53 , 2.23 ± 0.41 ve 37.74 ± 0.98 olarak saptandı. Sezaryen endikasyonlarının dağılımı ise; fetal distress 275 (%24.37), eski sezaryen 236 (%20.92), ilerlemeyen eylem 187 (%16.57), elektif 137 (%12.14), makat prezentasyon 128 (%11.34), ablatio plasenta ve plasenta previa 99 (%8.77), diğer (transvers duruş, el geliş, kordon sarkması) 66 (%5.85) olarak saptandı. Fetal yaralanma 9 olguda (%0.79) saptandı. Bunlar sırasıyla; 4 olguda skalpta (%0.35), 3 olguda gluteal bölgede (%0.26), 1'er olguda kulak (%0.09) ve omuz bölgesinde (%0.09) yüzeysel bistüri kesisi idi ve birine cilt sütürasyonu yapıldı. Üç gluteal kesi olgusunun makat prezentasyon endikasyonu içindeki oranı %2.34 idi. Dikkati çeken nokta, bu yaralanmaların tümünün asistan doktorlar tarafından gerçekleştirilmiş olmasıydı.

Sonuç: Sezaryen operasyonlarında fetal yaralanma nadir, ancak olası bir komplikasyondur ve deneyim ile direkt ilişkilidir. Asistan eğitimi sürecinde üzerinde durulması gereken bir noktadır.

FCP139

SEZARYENLERDE İNFEKTİF KOMPLİKASYONLAR

***Şahin H. G., *Zeteroğlu Ş., *Kamacı M., **Deveci A., *Güvercinci M.,** *Yüzüncü Yıl Üniversitesi Tıp Fak. *Kadın Hast. ve Doğum A. D., **İnfeksiyon Hastalıkları ve Klinik Mikrobiyoloji A. D., Van - Türkiye*

Amaç: Sezaryen doğumlardan sonra infektif komplikasyonların saptanması.

Materyal-Metod: Ocak 1999 ile Aralık 2001 tarihleri arasında Yüzüncü Yıl Üniversitesi Tıp Fakültesi Araştırma Hastanesi Kadın Hastalıkları ve Doğum Kliniğinde sezaryenle doğum yapan 538 hasta çalışmaya alındı. Bu hastaların hepsine sezaryen öncesinde profilaktik antibiyotik uygulandı. Hastalar post-operatif dönemde febril morbidite, akciğer infeksiyonu, endometrit, yara infeksiyonu, tromboflebit ve idrar yolu infeksiyonu açısından değerlendirildi.

Bulgular: Çalışmaya alınan 538 hastanın 327'si (%60.78) acil şartlarda sezaryene alındı. Post-operatif dönemde karşılaşılan en sık komplikasyon febril morbiditeydi (n:73, %13.57). Hastaların 52'sinde (%9.67) yara infeksiyonu saptandı. Kırkbir (%7.62) hastada post-operatif dönemde endometrit saptanırken 11 (%2.04) hastada idrar yolları infeksiyonu belirlendi. Hastaların çok küçük bir oranında post-operatif dönemde akciğer infeksiyonu (%1.12) ve tromboflebit gözlemlendi (%0.56).

Sonuç: Sezaryen doğumlardan sonra en sık karşılaşılan febril morbidite nedeni yara infeksiyonu ve endometrit olup hastanede kalış süresini uzatan bu komplikasyonların azaltılmasına önem verilmelidir.

FCP140

TEK UMBİLİKAL ARTER: OLGU SUNUMU

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Umbilikal kordda tek arter ve tek ven tespit edilen olgunun sunularak literatür eşliğinde tartışılması amaçlandı.

24 yaşında gravida 2, parite 0 ve D/C 1 olan hasta son adet tarihine (SAT) göre 25 hafta 2 günlük gebe

iken polikliniğimize başvurdu. Ultrasonografik incelemede biparietal çap (BPD) ve femur uzunluğu (FL) ölçümlerine göre 22 haftalık gebelik, oligohidroamnios ve umbilikal kordda tek arter ile tek ven saptandı. Ultrasonografik incelemede ek fetal anomali saptanmadı. Kromozomal inceleme 46 XX normal karyo-tip olarak rapor edildi. İzleme alınan olguda SAT'ne göre 31 hafta iken yapılan ultrasonografik incelemede; BPD ve FL ölçümlerine göre 25 haftalık gebelik, oligohidroamnios ve umbilikal arter rezistans indeksi 0.77 olarak saptandı.

Sonografik takiplerde progressif intrauterin büyüme geriliği saptanan olgunun gebeliği SAT'ne göre 38 hafta iken C/S abdominalis ile 1495 gr canlı kız bebek doğurtularak sonlandırıldı. Bebeğin yapılan fizik muayenesinde gross anomali gözlenmedi. Erken neonatal dönemde solunum sıkıntıları ortaya çıkan bebek postpartum 17. günde ex oldu.

Umbilikal kordda tek artere % 0.85 oranında rastlanmakta ve olguların yaklaşık %50'sinde ek bir patoloji tespit edilememesine rağmen erken neonatal dönemde %14'ü ex olmaktadır.

FCP141

TÜRKİYE'DE GEBE KADINLARA YÖNELİK AİLE İÇİ ŞİDDET: PREVALANS VE EŞLİK EDEN FAKTÖRLER

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Amaç: Bu çalışmada gebe kadınlara yönelik uygulanan aile içi şiddetin türü ve oranını saptamak ayrıca eşlik eden sosyo-demografik özellikleri belirlemek amaçlandı.

Yöntem: Bu araştırma, Nisan-Haziran 2002 tarihleri arasında random olarak seçilen 475 gebede gerçekleştirilen kesitsel bir anket çalışmasıdır. Gebelerin sosyo-demografik özellikleri ile aile içi şiddete ilişkin görüşlerini saptamak amacıyla hazırlanan anket gebelerle yüz yüze görüşülerek çalışma hakkında gerekli bilgi verildikten sonra uygulandı. İstatistiksel analizlerde Chi-Square ve Mann Whitney-U Testleri kullanıldı. P değerinin anlamlılık sınırı ise 0.05 olarak kabul edildi.

Bulgular: Araştırmaya katılan 475 gebenin 307'si (%64.6) evlilikleri esnasında, 158'i (%33.3) ise gebelikleri esnasında da aile içi şiddete maruz kaldıklarını belirtmişlerdir. Sadece 168 (%35.4) gebe aile içi şiddete maruz kalmadığını ifade etmiştir. Gebelerin 105'i (%66.5) sadece eşleri tarafından, 36'sı (%22.8) eş ve eşinin yakınları tarafından, 17'si (%10.7) ise eşinin yakınları tarafından gebelikleri esnasında kendilerine şiddet uygulandığını ifade etmişlerdir. Gebelere uygulanan şiddet %44.9 oranında sözel; %55.1 oranında ise fiziksel şiddet tarzında ortaya çıkmıştır. Şiddete maruz gebelerde cinsel yaşamlarını çoğunlukla iyi olarak ifade edenler %43,7 iken şiddete maruz kalmayanlarda bu oran %61.1 olarak bulunmuştur. Şiddete maruz kalan kadınlar çocukları yaramazlık yaptığında şiddet uygulamayı %67.2 oranında uygun bulurken şiddete maruz kalmayanlarda bu oran %23.5 olarak tespit edilmiştir.

Sonuç: Bu araştırma sonuçları kadınların evlilikleri süresince büyük oranda aile içi şiddete maruz kaldığını ve bu durumun gebelik süresince de devam ettiğini ortaya koymuştur. Şiddete maruz kalan gebelerde cinsel sorunların daha sık yaşandığı ve kendi çocuklarına şiddet uygulamayı uygun buldukları tespit edilmiştir.

FCP142

FETAL MORTALİTE NEDENİNİ BELİRLEMEK İÇİN YAPILAN OTOPSİLERİN DEĞERLENDİRİLMESİ

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Amaç: Dicle Üniversitesi Patoloji Anabilim Dalında fetal mortalite nedenini belirlemek, otopsi sonuçlarının genel dağılımını yapmak ve tanıları gruplandırmaktır.

Yöntem: Çalışmaya, 1998–2002 tarihleri arasında Dicle Üniversitesi Patoloji laboratuvarında yapılan 147 fetal ve neonatal otopsi dahil edildi. Bunların 44'ünde (%29.9) çeşitli fetal anomaliler saptandı ve bunların sıklıkları sınıflandırıldı. Ayrıca 100 olgunun plasentaları patolojik olarak incelendi.

Bulgular: Anomalilerin sıklıkları sırasıyla; genitoüriner sistem (%6.1), iskelet sistemi (%5.4) ve yapısal (%2.7) defektler idi. Otopsi uygulanan olguların gebelik haftaları ortalama 28.1 ± 6.34 annelerin yaş ortalaması 26.4 ± 4.34 olarak bulundu. İncelenen 100 plasentada en sık hyalin depozisyonu, desiduit, koran-giozis, intervillöz fibrin, intervillöz trombus ve villitis tespit edildi.

Sonuç: Fetal anomaliler, herediter veya akiz sebeplerden kaynaklanabilir. Ölü doğum, neonatal ölüm ve ya doğum komplikasyonu sonucu görülen ölümlerin sebebini belirlemede, postmortem fetal otonsi ile birlikte plasentanın incelenmesi önemli bir tanı yöntemidir.

FCP143

NORMOTANSİF ve PREEKLAMPTİK GEBELERDE FİBRONEKTİNİN TANISAL DEĞERİNİN BELİRLENMESİ

Dönmez Kesim M., Akkaya A., Işık Ş., Şişli Etfal Eğitim ve Araştırma Hastanesi 3. Kadın Hastalıkları ve Doğum Kliniği, İstanbul - Türkiye

Amaç: Normotansif ve preeklampitik gebelerde endotelial hasarın bir belirteci olarak fibronektin seviyesini saptayarak, preeklampitik olgularda fibronektinin tanısai değerini belirlemeyi amaçladık.

Yöntem: Şişli Etfal Eğitim ve Araştırma Hastanesi 3. Kadın Hastalıkları ve Doğum Kliniği'ne 01.03.1999 – 01.07.2001 tarihleri arasında başvuran, yapılan muayene ve tetkikleri sonucunda preeklampsi ve eklampsi tanısı alan 3. trimesterdeki 54 gebe ile kontrol grubu olarak herhangi bir maternal patoloji saptanmayan 3. trimesterdeki 25 normotansif gebe çalışma kapsamına alındı. Plazma fibronektin düzeyleri radyal immunodiffüzyon yöntemi ile ölçüldü. İstatistiksel hesaplamalarda ki-kare, student ve anova testleri kullanıldı.

Bulgular: Preeklampitik grupta plazma fibronektin değerleri, kontrol grubu ile karşılaştırıldığında, ileri derecede anlamlı bulundu ($p < 0.001$). Ağır preeklampitik grup hafif preeklampitik grupla karşılaştırıldığında da plazma fibronektin değerleri ileri derecede anlamlı idi.

Sonuç: Bu bulgular, gebeliğin oluşturduğu hipertansiyonda endotel hasarının önemli rol oynadığı görüşünü desteklemektedir. Çalışma, preeklampside özellikle risk taşıyan grubun belirlenmesi için antenatal takiplerde fibronektinin oldukça etkin bir yöntem olduğunu ortaya koymaktadır.

FCP144

GEBELİKTE GÖRÜLEN DEMİR EKSİKLİĞİ ANEMİSİ TEDAVİSİNDE ORAL DEMİR SÜLFAT VE İNTRAVENÖZ DEMİR SÜKROZUN ETKİNLİĞİNİN KARŞILAŞTIRILMASI

Dönmez Kesim M., Can Y., Özmen Demirkaya B., Şişli T., Özpak D., Şişli Etfal Eğitim ve Araştırma Hastanesi 3. Kadın Hastalıkları ve Doğum Kliniği, İstanbul -Türkiye

Amaç: Bu çalışmada, gebelikte görülen demir eksikliği anemisinin tedavisinde intravenöz demir sükröz ve oral demir sülfat preparatlarının etkinlik ve toleranslarının karşılaştırılmasını amaçlandı.

Yöntem: Şişli Etfal Eğitim ve Araştırma Hastanesi 3. Kadın Hastalıkları ve Doğum Polikliniği'nde takip edilen 18 yaşından büyük, 24. gestasyonel haftasını tamamlamış ve hemoglobin değerleri $8-10$ g/dl, MCV < 100 fl ve Ferritin seviyesi < 50 mg/l olan 60 hasta prospektif, randomize olarak çalışmaya dahil edildi. Hastalar randomize olarak intravenöz demir sükröz (I.V. grup) ve oral demir sülfat (P.O. grup) olmak üzere 30'arlık iki gruba ayrıldı. Çalışma başlangıcında hemoglobin, MCH, MCHC, retikülosit sayımı ve ferritin seviyeleri kaydedildi. 7, 15 ve 30'uncu günlerde kırmızı kan hücre ve retikülosit sayımları tekrarlandı. 30'uncu günde ek olarak ferritin seviyeleri de ölçüldü. İstatistiksel değerlendirmede Mann-Whitney ve Wilcoxon testleri kullanıldı. $P < 0.05$ anlamlı olarak kabul edildi.

Bulgular: Tüm olgularda I.V. ve P.O. grupta, demir tedavisi sonunda hemoglobin değerleri belirgin bir artış gösterdi. 30'uncu günde I.V. grupta hemoglobin değeri $8,8 \pm 0,7$ g/dl'den $10,9 \pm 0,85$ g/dl'ye ve P.O. grupta $8,9 \pm 0,8$ g/dl'den $10,75 \pm 0,6$ g/dl'ye yükseldi. Çalışma sonunda ferritin düzeylerinde I.V. grup lehine anlamlı bir fark mevcuttu ($P < 0,001$). Ferritin seviyeleri I.V. grupta $4,9 \pm 3,1$ mg/l değerinden 161 ± 33 mg/l değerine, P.O. grupta ise $5,6 \pm 2,8$ mg/l değerinden $36,3 \pm 5,4$ mg/l değerine ulaştı.

Sonuç: Gebelikte demir eksikliği anemisi, gerek maternal gerekse fetal sonuçlar açısından önemli bir problemdir. Özellikle sosyo-ekonomik seviyesi düşük, beslenmesi yetersiz yüksek doğurganlık hızına sahip bölgelerde önemle üzerinde durulmalıdır.

Her iki tedavi şekli de hemoglobin değerlerini anlamlı derecede yükseltmiş olmasına rağmen I.V. demir sükröz tedavisi dikkatli bir test dozu yapıldıktan sonra demir depolarının kısa sürede doldurulmasını ve istenilen hemoglobin değerlerine ulaşılmasını sağlayan bir tedavi seçeneğidir.

FCP145

DOĞUM İÇİN BAŞVURAN GEBELERDE TİROİD FONKSİYONLARININ ARAŞTIRILMASI

Dönmez Kesim M., Şişli T., Karlık İ., Can Y., Özpak D., Şişli Etfal Eğitim ve Araştırma Hastanesi 3. Kadın Hastalıkları ve Doğum Kliniği, İstanbul - Türkiye

Amaç: Şişli Etfal Eğitim ve Araştırma Hastanesi 3. Kadın Hastalıkları ve Doğum Kliniği'nde yapılan çalışmamızda, travaydaki gebelerde tiroid fonksiyon değişiklikleri araştırılarak bunun maternal-fetal mortalite ve morbidite üzerine etkilerini değerlendirmeyi amaçladık.

Yöntem: Çalışmamıza Kasım 1998-Ocak 2002 tarihleri arasında doğum için kliniğimize müracaat eden tiroid fonksiyon testleri bakılabilen 250 travaydaki gebe dahil edildi. Ayrıca hastanemiz biyokimya bölümüne başvuran 150 gebe olmayan erişkin kadının test sonuçları değerlendirildi. Tüm gebelerden detaylı anamnez alınarak sistemik ve tiroid bezi muayenesi yapıldı. hemoglobinin, hemotokrit ve kan grupları belirlendi. Ayrıca gebe olan ve olmayan tüm kadınlarda Total T3, Total T4, Free T3, Free T4, TSH seviyeleri ölçüldü.

Bulgular: Travaydaki gebelerdeki Total T3, Total T4, Free T3, Free T4 değerleri gebe olmayan normal erişkin kadınlara göre anlamlı derecede yüksek bulundu ($P<0.001$). Gebelik komplikasyonlarının (preeklampsi, IUGR) insidansı tiroid fonksiyon bozukluğu olan olgularda normale göre anlamlı olarak yüksek idi (sırasıyla $P<0.05, P<0.01$)

Sonuç: Tiroid fonksiyon bozukluğu olan gebelerin gebelik seyri, doğum komplikasyonları ve neonatal sonuçlar (özellikle preeklampsi ve IUGR) yönünden ciddi risk altındadır. Bu nedenle tiroid fonksiyon bozukluklarına bağlı semptom ve bulguları olan gebelerin detaylı tetkiki ve tiroid fonksiyon bozukluğu kanıtlanmış olguların daha iyi maternal ve fetal sonuçlar için tedavilerinin yapılması gerekmektedir.

FCP146

INVESTIGATION OF FREE RADICAL SCAVENGING ENZYME ACTIVITIES AND LIPID PEROXIDATION IN HUMAN PLACENTA TISSUES WITH MISSED ABORTION

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Objective: This study was planned to investigate possible relationship between free radical scavenging enzyme activities- lipid peroxidations and missed abortion.

Methods: Superoxide dismutase (SOD), glutathione peroxidase (GSH-Px) and catalase (CAT) enzyme activities and levels of thiobarbituric acid reactive substances (TBARS), antioxidant potential (AOP) and non-enzymatic superoxide radical scavenger activity (NSSA) were measured in placenta tissues from missed abortion (n=27) and induced abortion (n=17) as a control.

Results: GSH-Px and CAT activities were found to be significantly increased, and SOD activity and levels of NSSA decreased in patients with missed abortion compared to control. However, there were no significant differences in TBARS and AOP levels between the groups.

Conclusions: Our results demonstrate that a compensation mechanism may be developed against possible oxidative stress in patients with missed abortion.

FCP147

MECKEL-GRUBER SENDROMU (Bir Otopsi Olgusu)

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Meckel tarafından 1822 yılında tanımlanmış, otozomal resesif geçişli nadir görülen kalıtsal bir hastalıktır. Meckel-Gruber sendromunu, oksipital meningoensefalosel, bilateral büyük multistik böbrekler ve polidaktili klasik triadı oluşturur. Ayrıca santral sinir sistemi anomalileri, ürogenital anomaliler, karaciğer ve pankreasta fibrotik değişiklikler, okuler anomaliler, yarı damak ve dudak, hidrosefali ve konjenital kalp defektleri sıklıkla eşlik eden diğer anomalilerdir.

Olgumuz, anomalili bebek öyküsü mevcut olan 18 haftalık kız fetus olup otopsi incelemesinde oksipital ensefalosel, polidaktili, bilateral polistik böbrek, karaciğerde fibrozis, bilier digenezis saptandı. Olgunun otopsi incelenmesi sonucunda olguya Meckel-Gruber sendromu tanısı konuldu. Nadir görülen bir sendrom olması nedeniyle sunuldu.

FCP148

PREEKLAMPTİK GEBELERDE PLASENTA VE GÖBEK KORDONU PATOLOJİSİ

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Amaç: Preeklampitik gebelerde plasental patolojinin preeklampsi şiddetiyle ilişkisini araştırmak ve göbek kordonunun değişik bölümlerinden kesitler alarak, maternal uçtan fetal uca kadar patoloji varlığını ve şiddetini incelemek.

Materyal ve Metod: Çalışma 30'u kontrol, 30'u hafif preeklampsi ve 30'i ağır preeklampsi olmak üzere 90 gebe ile yapıldı. Tüm gebelerde plasentanın özellikle makroskopik olarak patolojiye sahip bölümlerinden ve göbek kordonunun çeşitli bölümlerinden kesitler alınarak histopatolojik olarak değerlendirildi.

Bulgular: Her iki preeklamptik grupta plasental ağırlığın kontrol grubuna göre istatistiksel olarak anlamlı şekilde düşük olduğu gözlemlendi ($p < 0.001$).

Plasental infarkt, villus fibrozis, sinsityal düğümde artma, damar duvarında kalınlaşma, lümeninde obliterasyon ($p < 0.001$), villus fibrinoid nekroz, perivillöz fibrozis, villusta damarlanma artışı her iki preeklamptik grupta kontrol grubuna göre daha fazla bulundu ($p < 0.01$).

Göbek kordonundan alınan örneklerde; plasental uça; endotel düzensizliği, endotelde dökülme, bazal membranda kalınlaşma preeklamptik gruplarda anlamlı olarak fazla bulundu ($p < 0.001$). Orta bölümde; endotel düzensizliği ($p < 0.05$), endotelde dökülme, bazal membranda kalınlaşma ($p < 0.001$) preeklamptik gruplarda anlamlı olarak fazla bulundu. Fetal uça; endotel düzensizliği ($p < 0.001$) preeklamptik gruplarda anlamlı olarak fazla bulunurken endotelde dökülme, bazal membranda kalınlaşma gibi daha ağır bulgularda anlamlı fark yoktu ($p > 0.05$).

Sonuç: Ağır preeklamptik grupta plasental patoloji daha yaygın bulundu. Göbek kordonunda ise anneye doğrudan doğru gittikçe endoteldeki histopatolojik lezyonların şiddetinin azalması dikkat çekiciydi. Preeklampside anne ve plasentayı etkileyen sitotoksik maddeler umbilikal ven yoluyla fetusa ulaşabilir. Bu preeklampside fetusu etkileyen faktörlerin endojen faktörlerin anlaşılmasında yardımcı olabilir.

FCP149

FETUS AMORPHUS: OLGU SUNUMU

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Fetus amorphus veya fetus acardius monozygotik ikiz gebeliklerde görülen, nadir bir konjenital malformasyondur. Fetus acardius patogeneğinde en çok kabul gören teori ikizler arasında arteriyel veya venöz anastomozun varlığıdır. Fetus acardius gros olarak anormaldir ve prenatal USG incelemesinde tanılabi-

lir. Biz antenatal takibimizde olmayan, bize ilk kez 35. gebelik haftasında baş vuran hastanın obstetrik USG'de ölçümleri 35 hafta ile uyumlu kız fetus ile birlikte kese içerisinde ayrı bir fetusa ait olabileceğini düşündüğümüz 37x38 mm'lik ayrı kistik bir oluşum izledik. 39. gebelik haftasında eski sezeryan öyküsü nedeniyle sezeryan planlandı. 3210 gr canlı ve sağlıklı kız bebek doğurtuldu. Fetusa ait umbilikal kordun plasentaya periferden insersiyon yaptığı dikkati çekti. Plasentaya ayrı bir umbilikal kordla bağlı olan 8x7x6 cm büyüklüğünde kistik oluşum izlendi. Histopatolojik incelemede keratinize skuamöz epitel, immatür kemik, tiroid, fibroadipo dokular, sinir kesitleri, deri ekleri izlenen kistik oluşum fetus acardius olarak tanımlandı.

FCP150

MESANE BOYNU MOBİLİTESİNE VE ÜRİNER İNKONTİNANS GELİŞİMİNE ETKİLERİ YÖNÜNDEN VAJİNAL DOĞUM VE SEZARYEN DOĞUMUN KARŞILAŞTIRILMASI

Baloğlu A., Malay U., Uysal D., İzmir Atatürk Eğitim ve Araştırma Hastanesi I. Kadın Doğum Servisi, İzmir - Türkiye

Materyal – Metod : İzmir Atatürk Eğitim ve Araştırma Hastanesi I. Kadın Hastalıkları ve Doğum Kliniği'ne bağlı Gebe Polikliniği'ne başvuran 63 nullipar gebe çalışmaya alındı. Çalışmaya alınan tüm hastalar, bir kez gebelik döneminde ve bir kez doğumdan yaklaşık 9 hafta sonra anamnez, klinik muayene ve perineal ultrasonografi ile değerlendirildi.

Bulgular : İlk muayenede toplam 22 hastada (%35) stres üriner inkontinans yakınması devam eden hastaların 9'u spontan vajinal yolla, 1'i ise sezaryen ile doğum yapan kadınlardı.

Spontan doğum sonrasında hastaların 9'unda (%19) stres üriner inkontinans yakınması saptandı. Bu hastalarda mesane boynu mobilitesi vajinal doğum sonrasında anlamlı derecede artmış bulunurken sezaryen grubunda anlamlı değişiklik saptanmadı. Hastaların büyük çoğunluğunda (%60) semptomlar gebeliğin ikinci trimesteri içinde başladı.

Sonuç : Elde ettiğimiz sonuçlar, her ne kadar vajinal doğum sonrasında daha yüksek stres inkontinans semptomları saptanmış olsa da semptomların başlangıç dönemi göz önüne alındığında, doğum travması dışındaki faktörlerin (zayıf fibril bağları, azalmış kollajen miktarı ya da Tip I-III oranı, vb.) inkontinansa zemin hazırlayan asıl faktörler olduğuna dikkat çekmektedir.

FCP151

PATAU SENDROMU (TRİSOMİ 13): 2 OTOPSİ OLGUSUNUN İNCELENMESİ

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Canlı doğumlarda 1/5000 oranında görülen Trisomi 13 nedeniyle otopsi yapılarak incelenen 2 olgu sunuldu. Bu sendromun sitogenetiğini ilk kez Patau ve arkadaşları, klinik fenotipini ise Smith tanımlamıştır. Vakaların çoğunda morfolojik kromozom anomalilerinden nondisjunction bulunur. Nadir görülen bu sendromun translokasyon ve mozaizm gösteren tipleri de vardır. İleri maternal yaş riski arttırmaktadır. 13. kromozom, 21. kromozomdan büyük olduğu için anomaliler çok sayıda ve ağır seyreder. Mikrosefali, yarı damak ve yarı dudak, hipotelorizm, kardiovasküler, genitoüriner, oküler, santral sinir sistemi malformasyonları gibi çok sayıda anomali görülebilir.

Olgu 1: 40 yaşındaki annenin 24 haftalık kız fetusunda yapılan otopsi incelemesinde yarı damak ve yarı dudak, hipotelorizm, holopronsefali ve multikistik böbrek saptandı.

Olgu 2: 28 yaşındaki annenin, 28. gebelik haftasında doğurduğu kız fetusun otopsi incelenmesinde; ensefalosel, yarı dudak, basık burun, flekse parmaklar, polidaktili ve klinodaktili saptandı.

FCP152

MISSED ABORTUS NEDENİ OLARAK ABSELEŞEN DESİDUİT

Dane C., Dane B., Karabeyoğlu N., Erginbaş M., Çetin A., Haseki Eğitim ve Araştırma Hastanesi Kadın Hastalıkları ve Doğum Kliniği, İstanbul - Türkiye

İlk trimesterde abortusların önemli bir kısmının nedeni ortaya konamamaktadır. Çoğunlukla kromozal anomaliler ön planda düşünülmektedir. Fetüsün intrauterin enfeksiyonları bu dönemde missed abortus nedeni olabilir.

Bizim vakamızda; 25 yaşında, ilk gebeliğinde, 10. haftada missed abortus saptanan hastanın ikinci gebeliğinin ilk trimesterinde yapılan ultrasonografide fetal biometrinin 12. hafta ile uyumlu olduğu görüldü. Amnion sıvısının iyice azalmış olarak bulunduğu hastada, plasentanın 96.06 ile 81.04 cm boyutlarında olduğu ve gebelik kavitesinin % 90'ından fazlasını kapsadığı saptandı. Fetüsün plasentanın bir tarafına doğru yer değiştirdiği ve aktif hareketlerinin olmadığı görüldü. Parsiyel mol olarak düşünülen hastanın β -hCG değeri istenerek takibe alındı. β -hCG değeri 75170 mIU/ml bulundu. Bir hafta sonraki kontrolünde hastanın ultrasonografisinde fetal kalp atımının olmadığı saptandı, β -hCG 42630 mIU/ml olarak bulundu. İndükte abortus yaptırılan fetüsün otopsisinde 13. gebelik haftasıyla uyumlu anomalili previable fetüs, bilateral pes ekinovarus, belirgin skolyoz, iç organlarda hiperemi, ödem göbek kordonunda 1 arter, 1 ven varlığı ve plasentada abseleşen desiduit saptandı.

Intrauterin enfeksiyonlar fetal ölümlerin önemli bir nedeni olabilir. Akut desiduitin assendan bir enfeksiyon mu yoksa progesteron çekilmesiyle ilişkili fizyolojik bir fenomen olduğu konusu net olarak ortaya konamamıştır. Yapılan bir çalışmada akut desiduit spontan doğumların plasentalarında %85 oranında rastlanmıştır. Desiduit; koriondesiduit ve korioamnionitin öncü lezyonudur. Subklinik desiduit, missed abortus nedeni olabilir. Fetal vaskulit plasentanın oksijen diffüzyonunu bozarak fetal ölüme neden olabilir. Bizim vakamızda da iki gebeliğin de bu şekilde sonlanması, bu gibi durumlarda yaklaşımda önemli problem ortaya çıkarmaktadır.

FCP153

SEZARYEN SONRASI GELİŞEN DİSSEMİNE İNTRAVASKÜLER KOAGÜLOPATİ VE AKUT RESPIRATUAR DİSTRES SENDROMU

Dane C., Dane B., Erginbaş M., Semiz M., Çetin A., Haseki Eğitim ve Araştırma Hastanesi Kadın Hastalıkları ve Doğum Kliniği, İstanbul - Türkiye

Amniotik sıvı embolisi gebeliğin nadir, katastrofik bir komplikasyonudur. Amniotik sıvı ile maternal dolaşım arasındaki bariyerin bozulması sonucu oluşur. Dissemine intravasküler koagülasyon ve akut respiratuar distres sendromu görülebilir.

Gebeliğinin 38. haftasında kordon sarkması nedeniyle acil olarak sezaryene alınan hastanın operasyon sonrası soğuk terleme, taşikardi ve hipotansiyonu oluşmuş. Kan ve taze donmuş plazmaya rağmen kan değerlerinde yükselme görülmemesi üzerine ilk operasyondan yaklaşık 12 saat sonra relaparotomi yapılmış. Batın içinde herhangi bir kanama odağı bulunamayıp sadece multifokal kanama odakları görülmüş. Hastanın kan değerlerinin düşmeye devam etmesi, siyanoz gelişmesi, cilt döküntülerinin ortaya çıkışı, dispne ve takipneninin ortaya çıkması üzerine yoğun bakım bölümüne alındı. Kan gazı değerlerine göre hipoksemik olan hastaya mekanik ventilasyon başlandı. Akciğer grafisinde bilateral yaygın alveolar infiltrasyon saptandı. Endotrakeal aspirasyonda hemorajik köpüklü sekresyon olduğu görüldü. Hasta DIC ve ARDS tanısıyla gerekli olan tedavisi düzenlendi. Ondördüncü günde hasta ekstübe edildi.

Amniotik sıvı embolisi gebeliğin anafilaktik sendromu olarak bilinmektedir. İlk defa 1926'da Meyer tarafından tanımlanmıştır. Patogenezinde amniotik sıvı debrislerinin pulmoner dolaşıma karışarak mekanik obstrüksiyon oluşturması ve sonuçta kardiyovasküler kollapsa giden tablo olarak tanımlanmaktadır. Sıklığı 8000 ile 80000 gebelikte bir olarak hesaplanmaktadır. Maternal mortalitenin %61, yaşayanların %15 inde nörolojik sekel bulunmuştur. Yönetim; oksijenizasyon, ventilasyon, dolaşım desteği sağlanması ve koagülopatinin düzeltilmesidir. Erken tanı, agresif resüsitasyon ve koagülopatinin düzeltilmesi ile yoğun bakım şartlarında bu tür hastalarda iyi sonuçlar almak mümkün olabilmektedir.

FCP154**İKİZ GEBELİKTE FETAL OVER KİSTİ**

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Fetal over fetal gonadotropinlerin, plasental koryonik gonadotropinlerin etkisi altında çeşitli büyüklükte kistler oluşturmaktadır. Perinatal ölümler sonrası yapılan otopsi çalışmalarında %32-34 gibi oranlar bildirilmiştir. Bu kistler genellikle postnatal ilk birkaç ay içerisinde kaybolmaktadır. Bir çalışmada, over kist torsiyonu nedeniyle opere edilen yenidoğanların %92'sinde prenatal ultrasonografide torsiyon bulgularının saptanabileceği gösterilmiştir.

Kliniğimize 33 gebelik haftasında başvuran hastanın yapılan ultrasonografisinde: fetal gelişimleri normal, biamniyotik ikiz gebelik, II. Bebekte 4 cm çapında, hipoekojen, düzgün cidarlı, mesane komşuluğunda, over kisti olarak değerlendirilen kistik yapı saptandı. İki hafta sonra yapılan kontrolünde, kistin 5 cm çapında, heterojen içerikte, yer yer hiperekojen görünüm aldığı izlendi. Ön planda torsiyon veya hemoraji düşünüldü. Haftalık takiplerde fetal gelişim ve iyilik halinde herhangi bir bozulma olmadan, kistik yapının çapı 3 cm'e inerken, içeriği hipoekojen görünüm aldı. Otuz sekizinci gebelik haftasında normal spontan doğum sonrası bebek asemptomatik olarak değerlendirildi. Ultrasonografi takibine alındı.

Küçük, basit over kistlerinin genellikle seri ultrasonografi takiplerinde kaybolduğu görülmektedir. Yapılan çalışmalarda, hipoekojen ve ince cidarlı kistlerin büyüklük ve tanı sırasındaki gebelik haftasından bağımsız olarak %44 oranında perinatal dönemde torsiyone olabileceği bildirilmiştir. Bu komplike kistlere ooforektomi veya adnektomi uygulanmaktadır. Komplike olmayan, >5cm kistler torsiyonu ve bunun sonucu olan ooforektomiyi önlemek amacıyla aspire edilebilmektedir. İşleme bağlı maternal ve fetal morbidite, mortalite bildirilmemiştir. Bizim vakamızda olduğu gibi torsiyon bulguları gösteren over kistlerinde doğum sonrası cerrahi müdahale gerekmektedir, ancak ultrasonografide kaybolan ve asemptomatik kistlerde, konservatif tedavi uygun seçenektir.

FCP155**İLK TRİMESTERDE TORSİYONE OVER**

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İlk trimesterde basit over kisti sıklığı % 29 olarak bildirilmektedir. Bu kistlerin çoğu gebelik ile ilişkilidir (korpus luteum, teka lutein kisti) ve genellikle 16. gebelik haftasında kaybolurlar. Torsiyone olduğu düşünülen vakalarda erken girişim önemlidir. İlk trimesterde torsiyone over kisti ön tanısıyla opere edilen üç vaka ve gebeliklerin akıbetini bildirmek istedik.

I. 26y, G1, 10 haftalık ikiz gebelik. Ovulasyon indüksiyonu sonucu hiperstimulasyon sendromu gelişmiş olan gebe akut batin tablosu ile başvurduğunda acilen laparotomi uygulandı, detorsiyon, kistektomi ve multipl kist aspirasyonu yapıldı. Onbeş gün oral mikronize progesteron verildi. 32. gebelik haftasında erken membran rüptürü sonucu C/S ile doğurtuldu.

II. 34y, G4P3, 11. gebelik haftasında akut batin tablosu ile başvuran hastaya laparotomi sırasında overin nekrotik görünümde olması nedeniyle ooforektomi yapıldı. On gün oral mikronize progesteron sonrası takipte herhangi bir komplikasyon gelişmedi.

III. 20y, G1, 7. gebelik haftasında kasık ağrısı şikayeti olan hastada USG bulguları ile torsiyone over kisti düşünülerek laparotomi yapıldı. Nekrotize olan over çıkarıldı. Oral mikronize progesteron başlandı, 10. günde allerjik reaksiyon gelişmesi üzerine kesildi. İki gün sonra abortus ile sonuçlandı.

Adneks torsiyonu seyrek görülür, ancak gebeliğin ciddi komplikasyonlarından biridir. Sıklıkla ilk trimesterde meydana gelir. Tanıdaki zorluklar nedeniyle genellikle geç kalınmakta ve adnektomi ile sonuçlanmaktadır. İlk trimesterde korpus luteumun çıkarılmasından sonra hormon replasmanı yapılmadan devam eden gebelikler de sunulmuştur. İlk trimesterde torsiyon şüphesinin varlığında fetusun akıbeti düşünülmeden erken müdahale (mümkünse laparoskopik) edilmesi genç bir bayanın fertilitatesinin korunması açısından önem taşımaktadır.

FCP156

DENTES NATALES: OLGU SUNUMU

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Dentisyon (dişlenme) doğumdan sonra 6. ayda alt orta süt keserlerin çıkması ile başlar. 12000 canlı doğumda bir görülen intrauterin çıkan dişlere dentes natales denmektedir. 22 yaşında G3, P2, Y0 olan olgu polihidroamniyos tanısı ile perinatoloji polikliniğine başvurdu. Yapılan ultrasonografide fetusun her iki bacağında hiperekstansiyon mevcuttu. Spontan kontraksiyonları başlayan anne gebeliğinin 36. haftasında 1650 gr ağırlığında, 47 cm boyunda 1/0 Apgar skorlu bir kız bebek doğurdu. Otopsi incelemesinde, burun kökü basık, kısa boyun, üst süt keserler bölgesinde iki adet kesici formunda kırıkdağımsı yumuşak, sağ alt süt I nolu kesici diş bölgesinde bir adet süt santral formunda sert diş, bacaklarda hiperekstansiyon ve pes planovarus (vertikal talus) saptandı. Malformasyonlar ile birlikte üç adet natal diş tesbit edilen olgu nadir görülmesi nedeniyle sunulmaya değer bulundu.

FCP157

ANTENATAL DIAGNOSIS OF RING CHROMOSOME 22

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Ring malformation of chromosome 22 is an extremely rare disease . The diagnosis usually achieved by caryotype analysis during early childhood period. Indications of caryotype analysis are mental retardation, brain tumors, language delays and face-head malformations of the babies such as hipotelorism, dolichocephaly.

We are presenting a case which was diagnosed at as early as 16th week of pregnancy. Mrs.OS. admitted to our clinic for routine antenatal examination on her 6th week of pregnancy. Her medical history was unremarkable and initial lab. tests were within normal range including TORCHES. She diagnosed as hyperemesis gravidarum at 9th week and treated with iv fluids because she lost 5% of her prepregnant weight. On her first trimester usg screening , nuchal translucency measured as 2.1 mm and there was not any accompanying malformation. The size of the baby was exactly as it supposed to be according to LMP. Triple screening results of this patient were negative for trisomy 21 (1/330), trisomy 18 (1/10000) and NTD (1/10000)at the 16th week. The only problem was relatively increased trisomy 21 incidence compared to age risk and extremely high levels of hCG (5.1 MoM). At this time she had second level ultrasonography examination and the findings were as follows: Shape of the head was mimicing lemon sign, BPD was shorter than where HC(head circumference) was in normal range and FL was shorter for two weeks. At this point she was suggested to take antenatal caryotype analysis and the result reported as 46, XX, r(22)[65] / 45,XX,-22[7] / 47,XX,r(22),r(22)[3]. In order to eliminate maternal dissemination patient and the father of the baby get karyotype analysis and the results were normal. Ultrasonography performed at the 20th week and we have found hyperechogenic bilateral kidneys, hipotelorism, dolichocephaly, unilateral choroid plexus cyst and significant growth retardation of limbs.

Patient get genetic counselling and decided to terminate the pregnancy since 100% mental retardation is expected with this chromosomal abnormality.

We recommend antenatal caryotype analysis in every patient whose NT levels over 2 mm with the presence of triple screening deviations. We conclude that NT measurement is an essential part of pregnancy follow-up which lead us to diagnose rare abnormalities such as the case presented. If there is any accompanying usg finding and /or triple screening deviation antenatal caryotype analysis must be considered even NT measurements within normal range.

Ring chromosome 22 is a rare reason of mental retardation. The antenatal findings of the disease are early growth retardation of fetal limbs, asymmetric shape of head and increased nuchal translucency. Extremely high levels of hCG should be considered for caryotype analysis.

FCP158**FETAL AGE: EVALUATION OF BIPARIETAL DIAMETER. DEFICIENT OF ACCURACY IN EARLY EXAMINATION OR THE LOCAL SPECIFICITY IN GEORGIAN POPULATION?**

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Objective: the aim of our study was to evaluate the fetal age in Georgian population using Ultrasound examination and general analysis of multiple fetal growth parameters and their relation to menstrual age.

Methods: In this part of our study we detected the BPD of fetus in 1253 pregnant in 1989-1999. Estimated parameters were compared with parameters, estimated by Hadlock et all (1982).

Results: The statistically positive difference was found by comparative analysis in most cases.

Menstr.age (weeks)	14	15	16	17	18	19	20	21	22	23	24	25
Hadlock et all (1982)	2.70	2.98	3.30	3.63	3.95	4.28	4.56	4.84	5.21	5.48	5.86	6.15
N	4	12	32	36	24	23	19	27	27	21	24	16
Own data	3.03	3.42	3.80	4.08	4.38	4.56	4.98	5.34	5.59	5.91	6.19	6.51
N	4	5	4	5	14	11	17	41	31	40	59	52
p	<0.05	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
f	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
6.35	6.69	7.01	7.20	7.45	7.58	7.86	8.16	8.33	8.69	8.79	8.90	9.14	9.26	9.44
22	17	17	11	17	20	10	22	22	7	19	8	15	26	20
6.70	6.94	7.33	7.66	7.86	8.08	8.25	8.48	8.66	8.76	8.86	8.98	9.10	9.19	9.25
63	80	55	75	87	85	74	54	79	83	83	76	46	17	13
<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	>0.20	>0.10	>0.20	>0.20	>0.20	<0.02
<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	>0.05	>0.05	>0.05	>0.05	>0.05	<0.05

$r=0.99$ $m=0.03$ $p<0.001$

Conclusions: Detected parameters have a statistically positive difference with Hadlock et all (1982) estimated parameters. We must conclude that earlier studies have a certain deficient of accuracy or there is a local specificity in Georgian population.

FCP159**ESTIMATION OF FETAL AGE USING FEMUR LENGTH SONOGRAFIC MEASUREMENT IN GEORGIAN POPULATION. LOCAL SPECIFICITY OR DEFICIENT OF ACCURACY IN PREVIOUS STUDIES?**

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Objective: The aim of our study was to estimate the fetal age using Sonographic measurement and analysis of multiple fetal growth parameters and their relation to menstrual age in Georgian population.

Methods: In this part of our study, realized in 1989-1999, we detected the femur length of fetus in 1237 pregnant. Determined parameters we compared with Hadlock et all (1985) estimated parameters.

Results: The statistically positive difference was found by comparative analysis in most cases.

Menstr.age(weeks)	14	15	16	17	18	19	20	21	22	23	24	25
Hadlock et all(1985)	1.5	1.9	2	2.3	2.6	3	3.3	3.6	3.9	4.1	4.3	4.6
N	6	10	10	10	10	10	10	10	10	10	10	10
Own data	1.675	1.96	2.333	2.543	2.78	3.24	3.518	3.671	4.085	4.286	4.522	4.798
N	4	5	3	7	15	10	17	41	26	43	59	51
p	>0.10	>0.020	<0.005	<0.01	>0.10	<0.05	<0.05	>0.20	>0.05	>0.20	<0.005	>0.05
f	>0.05	>0.05	<0.05	<0.05	>0.05	<0.05	<0.05	>0.05	>0.05	>0.05	<0.05	>0.05

26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
4.7	5.1	5.5	5.4	5.6	5.8	6.3	6.1	6.4	6.7	6.8	7.2	7.1	7.4	
10	10	10	10	10	10	10	10	10	10	10	10	9	7	
5.032	5.119	5.521	5.779	5.98	6.102	6.265	6.525	6.697	6.941	7.117	7.336	7.496	7.689	7.8
53	72	67	61	90	80	62	69	86	81	81	72	50	19	13
<0.001	>0.20	>0.20	<0.005	<0.001	<0.02	>0.20	<0.001	<0.001	>0.10	<0.02	>0.20	<0.005	>0.20	
<0.05	>0.05	>0.05	<0.05	<0.05	<0.05	>0.05	<0.05	<0.05	>0.05	<0.05	>0.05	>0.05	>0.05	

r=0.996 m=0.019 p<0.001

Conclusion: Estimated parameters differ from Hadlock et al (1985) parameters. We conclude, that in Georgian population there are the local specificities or the previous studies have certain deficient of accuracy.

FCP161

EVALUATION OF ADVERSE OUTCOMES OF UNWANTED PREGNANCY ON THE WOMEN REFERRED TO MAZANDARAN EDUCATIONAL HOSPITALS 1999-2000

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Objective: In attention to high prevalence of unwanted pregnancy and adverse outcomes of that to determine of outcomes of these this research done on unwanted pregnant women referred to delivery room of Mazandaran Educational Hospital 1999-2000.

Material & Method: This research is a descriptive study on 1200 unwanted pregnant who referred to delivery room of educational hospital in Sari and Ghaemshahr city. Women who became pregnant while using contraceptive were sampled. The rate of spontaneous abortion, low birth weighs and preterm birth were estimated and compared with rate these in general population. Analysis of data was done with spss program and mean, SD was determined.

Results: The women with unplanned pregnancies were more on the 18-35 y/o(65/9)users of natural Family Planning (% 61) to seek antenatal care later in gestational age (%31/3) and users of medic in(%25/5). No relation was between gravida and unplanned pregnancy. There were rate of abortion (% 1/8) preterm labor (% 8/9) and low birth weight (%10/5)lower than rate of these in general population (%10-15,%10%10-12).

Conclusion: In spite of lower rate of adverse outcomes of unplanned pregnancies, but these pregnancy consider high risk pregnancy because effect of that on the factors such as medical complication (infection, users of medicin...) and Health behavior (late in antenatal care, malnutrition...). Important point, specially with culture and religion of my country is that wanted of pregnancy will probably change with progress of gestational age.

Key words: Unwanted Pregnancy, Adverse Outcomes

FCP162

DE NOVO DIAGNOSED ANTIPHOSPHOLIPID SYNDROME DUE TO SECOND TRIMESTER FETAL BRADYCARDIA

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Mothers known to have autoimmune diseases are at risk of delivering an affected infant with inborn defects such as congenital complete heart block, structural cardiac malformations. Antiphospholipid syndrome (APS) is an autoimmune disorder in which antiphospholipid antibodies (aPL) are thought to be involved in the development of venous and/or arterial thrombosis. Women with antiphospholipid antibodies have an unusually high proportion of pregnancy losses within the fetal period (10 or more weeks of gestation).

We report two cases of APS which are diagnosed in the second trimester, as a result of fetal bradycardia. Despite the patients had no symptoms related to systemic lupus erythematosus and even were not aware of their diseases, fetal bradycardia and the anamnesis of miscarriage seemed suggestive of circulating anticoagulants in maternal serum. Treatment was started with low molecular weight heparin, Nadroparine calcium (Fraxiparine flac.) 0.6 ml (15.000 ICU) / day and acetylsalicylic acid 80 mg/day. They both gave birth with cesarian sections to healthy babies at 35th and 37th week of gestations.

Fetal bradycardia appearing in the second trimester may be an indicator of antiphospholipid syndrome / circulating anticoagulants in maternal serum and deserves fetal-maternal investigation thus close monitoring and treatment.

FCP163

SSK ANKARA DOĞUMEVİ VE KADIN HASTALIKLARI EĞİTİM HASTANESİ PERİNATOLOJİ KLİNİĞİ 2001 YILI AMNİYOSENTEZ SONUÇLARI

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Amaç: Bu çalışmada, hastanemizin Perinatoloji Kliniği'nde bir yıl içinde yapılmış toplam 340 amniyosentez olgusunun endikasyonları ve kromozom analizi sonuçlarının sunumu amaçlanmıştır.

Yöntem: Kliniğimizde, 2001 yılı içinde, 4-2 MHz konveks prob ile ATL HDI 3000 ultrason cihazı eşliğinde 20 Gauge iğne kullanılarak, toplam 340 gebeye amniyosentez yapılmış ve sıvı örnekleri genetik laboratuvarında çalışılmıştır.

Bulgular: Amniyosentez endikasyonları, 178 (%52) hastada üçlü testte artmış risk, 136 (%40) hastada ileri maternal yaş, 17 (%5) hastada anomalili bebek öyküsü, 7 (%2) hastada fetal anomali ve 2 (%1) hastada ailede anomalili bebek öyküsü varlığı idi. Üçlü testte artmış risk öyküsü olan 178 hastanın %3.37'sinde, ileri maternal yaşa bağlı 136 hastanın %2.94'ünde, fetal anomalisi olan 7 hastanın %14.29'unda anomali saptanmış, anomalili bebek öyküsü olan 17 hastanın ve ailede anomalili bebek öyküsü olan 2 hastanın hiçbirinde kromozomal anomali saptanmamıştır.

Sonuç: Risk grupları doğru belirlendiğinde, amniyosentez kromozomal anomali saptanmasında etkili bir yöntemdir.

FCP164

PREVALENCE OF LOW BIRTH WEIGHT IN BABOL, IRAN (1998)

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Objective: Low birth weight (LBW) is one of the main cause of neonatal mortality and morbidity. The prevalence of LBW differ in different countries. The objective of this study was to determine the preva-

lence of LBW in Babol Mazandran (a north state) IRAN 1998.

Methods: This research was designed for limited span of time (cross-sectional), 3695 cases of neonates from all deliveries of Babol were selected in first 10 months of 1998. The data were collected by measuring the birth weight and interviewing the mothers, statistical analysis was done by SPSS software.

Results: The ratio of LBW was 7.44%. 61.6% were preterm and 38.4% SGA. Birth weight of 244 (88%) were between 1500-2500g, 19(6.9%) 1000-1499g, 6(2.8%) 750-999g and 6(2.8%) less than 750g. 50% of neonates was born from first pregnancy. Age of 9.8% of mothers were less than 18 years old, 82% between 18-35 and 8.2% more than 35 years old.

Conclusion: Prenatal education and regular antenatal visit for detection and prevention of preterm labor reduce the prevalence of LBW in my country like to the developed countries.

FCP165

ANTENATAL DIAGNOSIS AND PROGNOSIS OF CONJOINED TWINS: CASE REPORT

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In this report, two conjoined twin cases that were diagnosed at 19 th and 25 th week of gestational age are reported. First case was made termination of pregnancy because of the very poor outcome. Second case continued to carry the pregnancy after given counselling for the possibility of successful separation procedure with good outcome after birth. The neonates were delivered at 38th weeks of gestation and had separation procedure at 10th month of age without any complication. In selected cases, there is no need to make abortion because of the possibility of successful separation procedure after birth with good prognosis. Colour Doppler ultrasound examination in early stage of pregnancy in conjoined twin can make it possible to decide which cases are candidate for successful separation procedure after birth.

FCP166

PRENATAL DIAGNOSIS AND MANAGEMENT OF THE ANEURYSM OF THE VEIN OF GALEN. A CASE REPORT

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Background: "Aneurysm of the vein of Galen" encompasses a range of different midline arteriovenous fistula malformations. Prenatal Doppler sonography may contribute to the differential diagnosis of fetal cystic lesions of various origins. We describe a case of aneurysm of the vein of Galen which was detected as a cerebral cystic lesion prenatally. Diagnosis was incomplete as Doppler sonography has not been used.

Case Report: A cystic cerebral lesion, dilated third ventricle and cardiomegaly were identified by ultrasonography in a fetus at 32 weeks gestation. A 4600g male infant was delivered at 41 weeks gestation with cesarean section because of cephalopelvic disproportion. Cranial Doppler sonography revealed dilated third ventricle and aneurysm of the vein of Galen at the midline posterior to the third ventricle. Cranial magnetic resonance imaging showed severe neural parenchymal destruction in both hemispheres, additionally. Echocardiography revealed pathologies secondary to increased hemodynamic load. Postnatal management included transarterial embolization of the vessels feeding the aneurysm after angiography, by radiologists. The infant has grown appropriately at four months of age with no problems.

Conclusion: Prenatal diagnosis of aneurysm of the vein of Galen is possible with real-time ultrasonography, pulsed wave Doppler, color-velocity imaging and magnetic resonance imaging. Identification of this condition should prompt close follow-up of the pregnancy. Careful obstetric management and early postnatal intervention may lead to a favorable outcome. This case demonstrates that Doppler sonography is crucial for evaluation of fetal cystic lesions in the brain.

Key Words: Aneurysm of the vein of Galen, Prenatal diagnosis, Doppler sonography.

FCP167

GRAVES HASTALIĞI ve GEBELİK: OLGU SUNUMU

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Gebelikte nadir gölülmesine rağmen, baskılanmayan hipertiroidi maternal, fetal ve neonatal mortalite ve morbiditeyi artırır. Gebelikte hipertiroidi ve komplikasyonlarına dikkat çekmek amacıyla bir "Graves' Hastalığı" olgusu sunulmuştur. Oluşabilecek komplikasyonların hipertiroidin baskılanma derecesiyle yakından ilgili olduğu saptanarak yapılması gerekenlere literatür verileri doğrultusunda dikkat çekilmiştir.

25 yaşında, G1P0 hastaya 1.Trimesterde hipertansiyon tanısıyla tedavi başlanmış. 26. GH'da sinirlilik, nefes almada güçlük ellerde titreme şikayetiyle yapılan tetkiklerinde 'Graves' Hastalığı" tanısı koyulmuş. Tedavisini almayan hasta 33.GH'da kliniğimize başvurmuştur. Muaynesinde TA: 160/90mm/Hg Nb: 112/dk, hiperpne, siyanoz, tiromegali, eksoftalmus, Grade ii hipertansir retinopati,göz kapak retraksiyonu ve takip kusuru, tüm odaklarda 3/6 sistolik üfürüm belirlendi. Ultrasonografi ve Dopplerde nonnal fetal gelişim ve anatomi saptandı.

Tetkiklerinde 1.5gigün proteinüri, 3-4 kat artmış sT3 ve sT4, baskılanmış TSH belirlendi. Hipertiroidi, kronik hipertansiyon ve "superimpose" preeklampsi tanısıyla yatırılan hastaya propiltiourasi, verapamil, propranolol- dexametason ve lugol tedavisi başlandı.34. GH'da spontan travaya giren hastanın siyanozu, taşikardisi arttı, ortopne ve bilinç bulanıklığı gelişti.Oksitosinle doğum hızlandırılarak 2500g. sağlıklı ve ötiroid kız bebek doğurtuldu. Hasta postpartum tiroid fırtınası sonucu gelişen kalp yetmezliği ve pulmoner ödem tanısıyla yoğun bakım ünitesine kaldırıldı. Kontrolsüz hipertiroidi bebekte IUGG, hipertiroidizm ve prematürite; annede; hipertansiyon, preeklampsi, konjestif kalp yetmezliği riskini artırırken, metabolizmanın hızlanması ve gebelikte var olan volüm yüklenmesi sonucunda kolayca kardiyak dekompanseasyona ve pulmoner ödeme neden olabilir. Ayrıca cerrahi girişim,anestezi indüksiyonu, ve doğum gibi stres durumlarında hipertiroidi semptomların akut alevlenmesiyle tiroid fırtınasını geliştirebilir. Hipertiroidi gebelikte az görülmesine karşın özellikle anne yaşamını tehdit eden bir hastalıktır. Mümkünse gebelik öncesi tedavi edilmelidir. Tanı ilk defa gebelikte konulmuş sa amaç hipermetabolik durumun en kısa zamanda normale döndürülerek maternal komplikasyonların önlenmesi, somatik ve entellektüel sekeli bulunmayan çocukların doğmasını sağlamaktır. Böyle bir gebenin takibinde komplikasyonlara karşı hazırlıklı ve donanımlı olunmalı ve doğum mutlaka yoğun bakım merkezleri olan birimlerde gerçekleştirilmelidir.

FCP168

NASAL BONE MEASUREMENTS IN EARLY GESTATION

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Objective: The aim of the study was to obtain correlation between nasal bone measurements and gestational weeks.

Design: One-hundred and seventy-seven normal fetuses with a crown-rump length (CRL) ranging from 40,9 to 89,9 mm were examined in cross-sectional study. The nasal bone distance and nuchal translucency were recorded in the CRL plain.

Results: A significant increase in mean nasal bone measurement with increasing CRL was noted (1,5mm to 2,5; r=0,1295; p<0,001). There were no significantly correlation between the mean of nasal bone and nuchal translucency measurements (1,1 to 2,4 p=0,435). Also there was no any correlation with the increased NT (over +2SD) and nasal bone.

Conclusion: There is no correlation between nasal bone measurement and nuchal thickness. Therefore both are independent parameters. The nasal bone measurement changes with advancing gestational age.

FCP169

MULTIPLE CONGENITAL ANOMALIES IN A FETUS WITH APPARENTLY BALANCED DE NOVO TRANSLOCATION, 46,XY,t(3;8)(Q27-29;Q21)

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Apparently balanced de novo translocations detected in prenatal analyses may be associated with phenotypic abnormalities in the fetus. We describe a de novo reciprocal translocation between the long arms of chromosome 3 and 8 in a foetus with multiple congenital anomalies.

A 26-year-old primigravida was referred for genetic counselling because of ultrasonographic findings of cleft lip, pes equinovarus, and single umbilical artery at her 23th week of gestation. Cytogenetic analysis of cordocentesis material revealed 46,XY,t(3;8)(q27-29;q21) karyotype. Karyotype of the parents were normal. The pregnancy was terminated at 24th week. Post-mortem examination of this male fetus revealed facial dysmorphism characterised by hypertelorism, proptosis, depressed nasal bridge, low-set ears, unilateral cleft lip and palate, absence of left nostril and micrognathia. Claw appearance of the hands, simian crease on the right hand, bilateral pes equinovarus, and hypoplastic right kidney with pelvic localisation were other abnormalities.

Previous prenatal studies show that approximately 6% of de novo reciprocal translocations have a risk of serious congenital anomaly. Normal karyotypes of parents and apparently balanced translocations do not exclude particular hot spots among the breakpoints, causing serious abnormalities in the offspring.

FCP170

A NEW AUTOSOMAL RECESSIVE SYNDROME WITH ABDUCTED THUMB, BRACHYDACTYLY, ROCKER BOTTOM FEET, AND JOINT DEFORMITIES: SIGNIFICANCE OF DETAILED PRENATAL ULTRASONOGRAPHY CONFIRMED BY POST-MORTEM EXAMINATION

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For a reliable genetic counseling concerning following offspring it is of primary importance to describe fetal malformations in detail during pregnancy. We report on two fetuses with hand and foot abnormality first diagnosed by prenatal ultrasonography.

Case 1. The female fetus was the product of consanguineous couples (third cousins). The mother was referred at 23th week of gestation because of ultrasonographic abnormality and anomalous fetus history of the first pregnancy. Karyotype of cultured amniocytes was normal. The pregnancy was terminated at 24th week. Postnatal examination showed asymmetric face, high forehead, hypertelorism, flat nose, dysplastic ears, and hypoplastic mandible. The extremities were short. On the right hand there was a complete cutaneous syndactyly of the fingers 4-5 and partial webbing of fingers 2-3 and 4-5. 1st toes were bowed laterally. Fingers 2-5 were deviated laterally. Rocker-bottom feet, wide metatarsals and flexion deformities of both knees were other remarkable features. The autopsy was normal.

Case 2. Third pregnancy was terminated at 17th week of gestation due to the similar abnormalities. Post-mortem examination showed mild facial dysmorphism with oedematous eye lids, hypertelorism, and depressed nose. At first sight short extremities were noted. There were flexion deformities of hands and knees. 1st toes were bowed laterally. Internal organs and placenta were normal.

The main components of fetuses are mild facial dysmorphism, short extremities, brachydactyly, adducted thumb, rocker bottom feet, laterally placed 1th toes and a wide gap between 1st ve 2nd toes. This findings are not consistent with any previously recognised syndrome and represent a new condition with possible autosomal recessive inheritance.

FCP171

A STUDY ON 85 PREGNANCIES WITH CHROMOSOME ABNORMALITY DIAGNOSED BY PRENATAL CYTOGENETIC ANALYSIS**Gül D., Ceylaner S., Ceylaner G.,** *INTERGEN Genetic Center, Ankara - Turkey*

There is no doubt that, in the last decades, conventional cytogenetics has been a powerful tool for early prenatal diagnosis (PD). The present report describes chromosomal aberrations in 85 cases referred to our private laboratory for PD in a period between 1999-2002.

Amniocentesis (AC) and chorionic villus sampling (CVS) were two methods employed to obtain samples for cytogenetic analysis. Of 85 samples with abnormal karyotypes, 84 came from AC, while only 1 was from CVS. Of those, 41 were numerical (35 trisomies, 3 sex chromosome aberrations and 3 triploidy) and 44 were structural aberrations. The distribution of the results is given: Down syndrome (DS) (total= 33, trisomy 21, n=30, mosaic n=1, t(14;21) type n=1, t(21;21) type n=1), trisomy 18 (n=3), mosaic trisomy 20 (n=1), 69,XXX (n=3), Turner syndrome (n=2), 47,XXY (n=1), +mar (n=2), balanced reciprocal translocation (n= 13), pericentric and paracentric inversions (n=6), and pericentric inversion 9 (n=18).

The major indications were advanced maternal age (42.5 %), positive triple test (TT) (37.0%), ultrasound abnormalities (11.1%), recurrent miscarriages (5.5 %), parental structural rearrangement(1.8%), and previous chromosomal abnormality (1.8%). Maternal age ranged between 18-47 (mean=34). Of those who had fetus with Down syndrome, 12 were below 35 year of age, and 14 were above 35. Indications for the diagnosis of DS were advanced maternal age (48.3%), positive triple test (TT) (34.5%), ultrasound abnormalities (10.3%), and recurrent miscarriages (6.9%). Of those with ultrasound abnormalities, nuchal thickness was the major finding indicating DS (66%). Pregnancies with abnormal karyotypes (n=41) were terminated following a written consent of the families. On the other hand, those with balanced chromosome changes were not terminated.

The study clearly demonstrates that cytogenetic analysis should be indicated in a situation that there is even little suspicion for high risk pregnancy. We can conclude that:

1. Average maternal age for DS child is 34.
2. Advanced maternal age was the most frequent indication for PD (42.5%).
3. Maternal age and TT still remain as significant indicators for chromosome analysis.
4. Approximately 50% of the chromosome abnormalities are structural abnormalities. This means that DS itself is not a single indication for prenatal cytogenetic analysis.
5. Prenatal ultrasound is not a method of first choice for the diagnosis of DS. Because majority of DS cases revealed by cytogenetic analysis were normal at ultrasound controls.
6. Nuchal thickness is an important finding indicating prenatal cytogenetic diagnosis

FCP172

THE RESULTS OF 863 AMNIOCENTESIS OF ZEKAI TAHİR BURAK HOSPITAL**Ceylaner G., Ceylaner S., Danışman N., Mungan T., Yapar E.G., Günyeli İ., Küçüközkan T.,** *Zekai Tahir Burak Women's Hospital Ankara - Turkey*

Aim: This study performed to present and discuss the results and indications of amniocentesis performed and analyzed in Zekai Tahir Burak Women's Hospital.

Material-Methods: This retrospective study covers 863 genetic amniocentesis performed cases between 1998-2001 in our hospital. These cases had firstly referred from Antenatal outpatient clinics to High Risk Pregnancy Outpatient clinic. After obstetric evaluation, all cases had referred to the Genetics outpatient clinic for genetic counseling. Amniocentesis had been performed in High Risk Pregnancy Department and amniotic fluids had been evaluated in Genetics Laboratory.

Results: 863-amniotic fluid materials had been analyzed. Indications of these cases were listed in Table 1. 798 of them presented normal fetal karyotype (373 cases were 46,XX and 439 cases were 46,XY) while 46 of presented abnormal karyotype (%5,3) (Table 2). 21 Down syndrome cases, 5 trisomy 18, 4 trisomy 13, 6 translocations, 2 pericentric inversions, 1 triploidy, 3 sex chromosome anöploidy, 1 deletion,

1 duplication, 1 Angleman syndrome and 1 46,X,+21/47,X,+21,+mar (Y chromosome) were detected. 19 cases could not reported at the first time and reamniocentesis was performed 14 of them and reported at the second study. 6 out of 19 cases were presented slow culture and 13 cases were contaminated. Conclusions: The greatest group of indication was maternal age (35 and up) and there were 396 cases in this group while 20 had chromosomal abnormalities (% 5.05). Abnormal karyotypes were detected nearly in all groups but the most effective indications were ultrasound abnormalities, parental translocations and poor obstetric history. There are so few cases in the group of elevated AFP that, the detection rate of this group is worthless.

Table 1: Distribution and detection rate of indications

	Karyotype			
	Normal		Abnormal	
	No	% of total	No	% of group
AFP (0,75 MoM Ø)	130	15,06	5	3,84
AFP (2,5 MoM ≠) (NTD risk)	3	0,03	1	33,34
UE3 (0,75 MoM Ø)	122	14,14	8	6,55
HCG (0,50 MoM Ø)	30	3,5	-	-
HCG (2,0 MoM ≠)	138	15,99	9	6,52
Triple test Down syndrome (1/250)	300	24,76	15	5,00
Triple test Trisomy 18 (1/250)	10	1,15	3	30
USG abnormality	81	9,38	14	17,28
Chromosomally abnormal offspring	5	0,06	-	-
Offspring had Down Synd.	45	5,21	1	2,22
Parental translocation	7	0,08	2	28,57
Poor obst. history	87	10,08	8	9,19
Offspring had cong. Anomaly	66	7,64	2	3,03
Maternal age over 35	396	45,89	20	5,05
Colchicine uptake during pregnancy	4	0,05	-	-
Maternal stress	7	0,08	-	-
Papp-A/ Free B hCG	1	0,01	1	-

Table 2: Distribution of abnormal karyotypes

Abnormal karyotype	No	Abnormal karyotype	No
47,XY,+21	12	46,XX/ 47,XX,+13	1
47,XX,+21	7	47,XXY	1
47,XY,+18	2	47,XXY	1
47,XX,+18	3	46,XX/ 47,XXX	1
47,XY,+13	1	46,XY, t(1;10)	1
45,XY, t(14;21)(q10;q10)	1	46,XX, t(11;16)	1
45,XX, t(14;21)(q10;q10)	2	46,X,+21/ 47,X,+21,+mar (male fetus)	1
45,XY, t(13;14)(q10;q10)	1	47,XX,+mar Par.Trisomy 9	1
46,XY, t(13;14)(q10;q10)	1	69,XXY	1
46,XY, t(14;21)(q10;q10)	1	Angelman syndr	1
46,XY, t(13;13)(q10;q10)	1	46,XY,add 13	1
46,XY / 47,XY,+21	1	46,XY,inv (9)(q12;q13)	2

FCP173

CONGENITAL ANOMALY EVALUATION PROGRAM IN ZEKAİ TAHİR BURAK WOMEN'S HOSPITAL: PRELIMINARY RESULTS

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Aim: We are presenting the first results of our new and computer based evaluation program of congenital abnormalities in our hospital. This program is started to record of cases with congenital abnormalities more systematically. These findings can help us to discuss the screening programs we need in our hospital and in Turkey. In this study we are only presenting prenatally diagnosed cases in 2001.

Material and Methods: 148 congenital abnormality cases were evaluated. Cases diagnosed by ultrasound had been evaluated not only prenatally but also after pregnancy termination. Fetal examination, anthropometrical measurements, X-ray studies had done in all cases and families invited to Genetics outpatient clinic for genetic counseling. Autopsy was performed to 35 cases who approved. Both prenatal and postnatal findings of the cases enrolled to a computer program. All of the cases classified as in "International Classification of Diseases".

Results: 55 central nervous system defects (44 neural tube defects, 8 hydrocephaly, 2 holoprosencephaly and 1 microcephaly), 21 had chromosomal defect, 17 had musculoskeletal system disorder, [6 skeletal displasias (1 achondroplasia, 1 thanatophoric dysplasia, 1 Langer type mesomelic dysplasia, 1 hypophosphatasia, two campomelic dysplasia), 2 osteogenesis imperfecta (1 of type I, 1 of type III), 3 disostosis (1 spondylothoracic- Jarco Levin, 1 spondylocostal, 1 hemivertebra), 2 artrogryphosis multiplex congenital, 1 bilateral 1 unilateral club foot], 14 had congenital malformation syndromes, 17 had non-immune hidrops, 11 had genitourinary system disorder, 7 had cystic hygroma, 3 had congenital infection, 2 had gastrointestinal disorder, 2 had cardiovascular system disorder, 1 had respiratory system disorder and 5 had other disorders.

Conclusions: Multidisciplinary and computer registration based studies are necessary for systematic screening programs for congenital malformations. Multidisciplinary studies are more effective than the studies preformed by only one department. The biggest problem is the classification of cases. "International Classification of Diseases" is one of the most useful classifications to use in a computer program for screening studies.

FCP174

RESULTS OF POSTMORTEM EVALUATION OF 602 FOETUSES

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Aim: We are presenting the results of routine postmortem evaluations of foetuses in our hospital to stress the importance of this evaluation on prenatal diagnosis in further pregnancies and genetic counselling.

Material and method: 602 cases were evaluated between 1998-2001 in this study. The sources of the cases were 1) prenatally diagnosed and terminated pregnancies in our hospital 2) Foetuses detected during daily routine visit to morgue, 3) Cases referred from other hospitals. Postmortem examination of all cases and X- ray studies of 416 cases and autopsy (when family approved-60 cases) were done. Records of dysmorphic findings, antropometric measurements and photographs of the foetuses were archived. Cases were classified by using "International Classification of Disorders".

Results: 245 central nervous system disorder, 57 chromosomal disorder, 62 musculoskeletal system disorder, 115 multiple malformation syndrome, 35 hydrops fetalis, 26 genitourinary system disorder, 17 congenital infections, 11 cardiovascular defects, 10 gastrointestinal defects, 1 respiratory system anomaly, 5 unclassified cases (2 anhydroamnios sequence due to premature rupture of membranes, 2 conjoined twins, 1 type II sacrococsigal teratoma) were detected.

Discussion: Postnatal evaluation of foetuses is very important diagnostic study for adequate and accurate genetic counselling and planning prenatal diagnostic method for further pregnancies. Exact diagnosis of

a case presents aetiology and inheritance pattern of disorder. Risk assessment, determination of laboratory methods and detection of cases have risk in the same family are possible after exact diagnosis of case. On the other hand, prenatal diagnostic studies are getting cheaper and easier in case of effective postmortem evaluation.

The biggest group of anomalies was neural tube defect (181 cases) both in study group and in cases with CNS anomalies. This finding presents the importance of folic acid replacement. This is a very cheap and effective way of prevention.

Skeletal dysplasias were the biggest group in musculoskeletal system disorders. These disorders can be classified easily by X ray studies. On the other hand, all class of cases can have X-ray findings, because of that, X-ray studies necessary in all cases.

Chromosome analysis is also very important during this evaluation. Postnatal foetal blood samples and skin biopsy are the best choice. Foetal urine sample can sometimes helpful for chromosomal studies.

Conclusion: All fetuses must be evaluated by an experienced person. If this is not possible, foetal blood and skin samples must be send to a genetic centre and foetal photographs and X rays can be archived for consultation with an experienced centre. TORCH studies must be done from both foetal and maternal samples in perinatal period. These records are very important for the evaluation of these cases.

FCP175

KONJENİTAL KİSTİK ADENOMATOİD MALFORMASYON: İKİ OLGU

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Özet: Bu çalışmamızda nadir görülen akciğerin konjenital kistik adenomatoid malformasyonlu iki olguyu inceledik.

Anahtar Kelime: Konjenital kistik adenomatoid malformasyon

Giriş: Konjenital kistik adenoid malformasyon (KKAM), değişen klinik bulgu ve belirtilerle karşımıza çıkabilen, akciğerlere ait gelişimsel bir anomalidir. KKAM 1:25000-1:35000 gebelik oranında gözlemlenmektedir. KKAM, intralobar sekestrasyon, ekstralobar sekestrasyon, bronkopulmoner foregut malformasyon, bronşial atrezi, lobar amfizem kombinasyonlarını içine alabilecek bir yelpazeye sahiptir. KKAM prenatal tanısında kullanılacak yöntemler içerisinde en iyisi ultrasonografi, postnatal araştırmalarda ise X-ray ve bilgisayarlı yöntemlerdir.

Bu çalışmamızda ikinci trimestrede ultrasonografik olarak gözlemlediğimiz Tip III KKAM'lu iki olguyu inceledik.

Gereç ve Yöntem: Bu çalışma Haziran-Ağustos 2002 tarihleri arasında SSK Ege Doğumevi ve Kadın Hastalıkları Eğitim Hastanesi Perinatoloji departmanına başvuran hastalar arasından tespit edildi. Fetüslerin otopsi ve mikroskopi incelemeleri hastanemizin patolojik anatomi ünitesinde gerçekleştirilmiştir.

Olgu İncelemeleri: Olgu I: Olgu 36 yaşında, G3P2Y2, anamnezinde patolojik bir söylem saptanmadı. Son adet tarihine göre fetus 19 haftalıktı. Yapılan ultrasonografik incelemede fetus 20 haftalık, fetal hidrops hali, mediastinal kayma, akciğerler yoğun sıvıya bağlı olarak sıkışmış, Tip II KKAM görünümü izlendi. Yapılan fetal karyotip incelemesinde üreme sağlanamadı.

Olgu II: Olgu 30 yaşında G2P1Y1 anamnezinde patolojik bir söylem saptanmadı. Son adet tarihine göre fetus 18 haftalıktı. Yapılan ultrasonografik incelemede fetus 19 haftalık, fetal hidrops hali, mediastinal kayma, akciğerler Tip III KKAM görünümündeydi. Yapılan fetal karyotip incelemesi 46 XY idi. Her iki gebelik de aile onayı ve hastanemiz Perinatoloji Konseyi'nde tartışılarak sonlandırıldı. Otopsi incelemelerinde unilateral Tip II KKAM tespit edildi. Fetüslerden biri kız diğeri erkek fenotipindeydi.

Tartışma: KKAM nadir görülen akciğer hastalıklarından biridir. Kötü prognostik faktörler olarak geçen çift taraflılık, hidrops fetalis, mediastinal kayma, sağlam akciğerin ileri derecede hipoplazisi veya amfizematöz değişikliği, akut gelişen polihidramnios varlığı durumlarında postnatal sonuçlar yüz güldürücü değildir. Monni G'nin çalışmasında; KKAM'lu olgularda, tek taraf tutulumu ve küçük lezyon olması, akut polihidramnios ve hidrops hali olmaması iyi prognoz göstergesi olarak saptanmıştır. Kendi çalışmamızda hidrops gelişimi, mediastinal kayma, polihidramnios izlenmesi kötü prognostik gösterge olarak bulundu. Hastanemiz Perinatoloji Konseyi'nde yapılan tartışma ve hasta ile yapılan görüşmede gebelik sonlan-

dırılması kararı verildi.

Sonuç olarak KKAM izlem yöntemleri olgu sayısının az olması nedeni ile tam olarak netleşmemiş bir hastalık grubudur. Ancak gelişen cerrahi teknikler bu fetuslarda kötü prognostik faktörlerin olmadığı durumlarda yüz güldürücü sonuçlar vermektedir. Kötü prognoz düşünülen durumlarda Etik Kurul tartışması ve ebeveyn görüşmeleri sonucunda verilen karara göre davranılmalıdır.

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