venosus 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 Çalışkan E., Öztürk N., Aykan B., Öztürkoğlu E., Dilbaz B., Yalvaç S., Haberal A., SSK Ankara Maternity and Women's Health Teaching Hospital Ankara - Turkey

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. Abruption 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 Özkan S., Özeren S., Çorakçı A., Özkaya Ü., Göktan M., Yücesoy İ., University of Kocaeli, School of

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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 extremeties 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 utrasonographic 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 embo-