

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

Pappas A., Gekas K., Stratou S., Haloulou S., Gologani A., *Pediatrics Clinic-Newborns Unit, "G. Hatzicosta" General Hospital, Ioannina - Greece*

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

***Spasojevic S., *Milovanov V., **Bregun Doronjski A.,** **Clinic for Gynecology and Obstetrics, Department of Neonatology, **Institute for Child's and Youth's Healthcare, Clinic for Pediatrics, Clinical Center Novi Sad - Yugoslavia*

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

***Milovanov V., **Bregun Doronjski A., **Cvejic A., *Spasojevic S.,** **Clinical Centre Novi Sad, Clinic for Gynecology and Obstetrics, Departement of Neonatology, **Institute of Child`s and Youth`s Healthcare, Clinic for Pediatrics Novi Sad, Vojvodina -Yugoslavia*

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

Komazec J., Matic A., Velisavljev - Filipovic G., Radisic B., *Department for Premature Children, Children and Youth Health Care Institute, Novi Sad-Yugoslavia*

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