

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+/-2,48 vs 39,2+/-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<sup>+</sup>ions (measured as titrate acidity of urine), total estrogens and placental lactogen .

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

## FC057

### 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±1,95 vs 0,2±0,3 g/24 hours. Moreover, the women in both groups were at the same mean age: 27,6±6,17 vs 28,1±6,54 years (NS). The women in both group were also at the same gestational age: 37,6±2,62 vs 37,1±2,15 (NS). Body mass index (BMI) before pregnancy was 23,8±2,79 vs 22,5±2,60 (p<0,05). BMI before labor was 29,9±3,8 vs 27,7±2,8 (p<0,01). On average, BMI increased 24,5±9,7% vs 24,1±7,0 (NS). Mean arterial blood pressure was 123,0±15,4/76,1±12,0 mmHg vs 115±6,0/68,0±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±5,0 vs 67,0±6,0 g/l (p<0,001) and hypoalbuminemia 443,4±58,0 vs 522,0±87,0µmol/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<sup>+</sup>, K<sup>+</sup>, Cl<sup>-</sup>, and Fe<sup>++</sup>, osmolality (which was measured also in urine), and blood morphology parameters.

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

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