

negative outcome a higher rate of Cesarean section, instrumental delivery (OR=1.96) and pathologic final delivery positions (15.3% non-diabetes/9.3% diabetes) can be observed. This all leads to a four times higher odds ratio of post-partus hospitalization (OR=3.70) and mandatory pre-partus therapy (OR=4.78) of the diabetes affected group.

Conclusions Newborns of mothers with gestational diabetes demonstrate a fetopathia diabetica with makrosomi and immaturity which leads to higher rate of birth complications and post-partus hospitalisation of almost every second newborn. An increased risk for mothers and their children exists in case of gestational diabetes.

985 MALE VERY-LOW-BIRTH-WEIGHT AND VERY-LOW-GESTATIONAL-AGE INFANTS HAVE ADVERSE PERINATAL OUTCOMES

doi:10.1136/archdischild-2012-302724.0985

¹A Valls-i-Soler, ²A Azeiteia, European Neonatal Network (EuroNeoNet). ¹Cruces University Hospital; ²BIOEF, Barakaldo, Spain

Background It's generally accepted that male Very Low Birth Weight (VLBW)/Very Low Gestational Age (VLGA) infants have a higher neonatal mortality rate (NMR), and this has been questioned recently (Arch Dis Child Fetal-Neonatal Ed. 2009; 94:F140–3).

Aim To determine if male gender has an adverse effect on NMR and early morbidity in VLBW/VLGA infants.

Methods Perinatal risk/protective factors, early neonatal complications and NMR were compared between male and female VLBW/VLGA infants admitted from 2006 to 2010 in 174 EuroNeoNet NICUs from 17 European countries (N=28,035). Independent comparisons using non-parametric tests and logistic regression models were performed to predict adjusted NMR. Crude and adjusted odds ratios (OR) were used to determine perinatal and early neonatal associations.

Results Male infants (52.3%) had a lower GA and higher BW than females. Crude NMR was higher in males (14 vs. 11.6%; OR=1.24 95%CI: (1.16–1.33)) as were most perinatal and early neonatal risk factors (vaginal delivery, low Apgar scores, resuscitation, RDS and need for surfactant therapy and early-onset sepsis), as well as major adverse neonatal outcomes (pneumothorax, late-onset sepsis, BPD, IVH₃₋₄, PVL and ROP₃₋₄). These differences in NMR and complications remained after adjusting for GA and/or BW alone and by perinatal differentiating factors for gender: BW, GA, 1-min Apgar score and multiple pregnancy (NM: OR=1.32 95%CI: 1.21–1.44).

Conclusion Male infants of VLBW/VLGA have a higher adjusted NMR and an increased rate of adverse neonatal outcomes.

Acknowledgements We thank patients and NICUs participating NICU's. EuroNeoNet is supported by the DGSANCO (EuroNeoStat project No 2008/1311).

986 A COMPARISON BETWEEN EFFECTS OF VAGINAL MISOPROSTOL AND OXYTOCIN IN SUCCESSFUL INDUCTION OF LABOR: A DOUBLE BLIND CLINICAL TRIAL

doi:10.1136/archdischild-2012-302724.0986

M Bakhtiyari. Tehran University of Medical Sciences, Tehran, Iran

Aim and Background: Labor induction for Prepare the cervix to active phase of labor, is now one of the most common methods in the field of Obstetrics and Gynecology. This study was conducted to compare the effects of misoprostol and oxytocin in BoAli Hospital, Tehran in 2011.

Method This study was a double-blind clinical trial by recruitments of 60 primiparous women that has been referred to BoAli hospital in Tehran in 2011. Individuals were divided into two groups by random allocation. For induction of labor, misoprostol and

oxytocin were prescribe in individuals who candidate for pregnancy termination by four hours intervals. For Analysis of data, t test, analysis of variance with repeated measurements, linear regression and descriptive statistics were used.

Results Mean age and standard deviation in intervention group was 24.07±3.96 and in control group equal to 24.13±3.97. Kind of treatment variable, cause of admission and hypertension history shown a significant association with increased or decreased time to achieve regular and suitable contractions for delivery (p<0.05). Results of t test in two groups of intervention and control shown that until three hours after receive Assigned treatment, there was no statistical significance between two groups of study, But then we are clearly seeing the better impact of misoprostol drug in the intervention group (p=0.014).

Conclusion Using misoprostol in labor induction in order to reducing the Time to reach the short and effective contraction is more effective Instead of oxytocin and it can be a good alternative.

987 EMIPIDIOLOGY AND MORBIDITY OF LATE PRETERM NEONATES IN CORRELATION WITH MATERNAL RISK FACTORS IN HESSEN, GERMANY

doi:10.1136/archdischild-2012-302724.0987

¹D Faas, ¹M Vajz, ²U Hennewig, ³B Misselwitz, ⁴F Oehmke, ⁵M Heckmann. ¹General Pediatrics and Neonatology, Justus-Liebig-University Giessen, Giessen; ²Pediatric Hematology and Oncology, Johannes Gutenberg University of Mainz, Mainz; ³Institut for Quality Assurance Hessen, Eschborn; ⁴Department of Obstetrics and Gynecology, Justus-Liebig-University Giessen, Giessen; ⁵Neonatology and Pediatric Intensive Care, Ernst Moritz Arndt University Greifswald, Greifswald, Germany

Short and long term morbidity in late preterm neonates (LP) and their correlation to maternal risk factors are relevant as shown in multiple studies in North America and European countries. Epidemiological studies showed an increase in LP birth over time. Corresponding data for Germany have not yet been published. Our goal was to evaluate the epidemiology of LP over a 7 year period and the correlation to potential maternal risk factors in Hessen, Germany.

Data was collected from the perinatal und neonatal quality assurance in Hessen form 2001 to 2007. For some calculations the two data sets were merged. Overall the data sets of 360.000 births and 44.000 neonatal hospitalizations were available, which is about 7.5% of all births during that period in Germany.

There is no increase in LP births from 2001 to 2007 in Hessen. Neonatal short term morbidity of LP is within the expected range and significantly higher than in term neonates. The following maternal risk factors were more predominant in LP: placental insufficiency, gestational diabetes, obesity, arterial hypertension, artificial reproduction techniques, caesarian section in previous pregnancy, ethnic background and multiple births. Maternal morbidity has an influence on the short term morbidity of LP.

There has been no increase in late preterm births in Hessen Germany 2001–2007. Several maternal risk factors for late preterm births can be identified. These results could be used to optimize management of mothers at risk to reduce the number of late preterm births and neonatal morbidity.

988 EFFECTS OF IRON SUPPLEMENTATION OF LOW BIRTH WEIGHT INFANTS ON COGNITION AND BEHAVIOR AT 3 YEARS

doi:10.1136/archdischild-2012-302724.0988

¹S Berglund, ²B Westrup, ³B Hägglöf, ¹O Hernell, ¹M Domellöf. ¹Clinical Science, Pediatrics, Umeå University, Umeå; ²Women and Child Health, Neonatology, Karolinska Institute, Stockholm; ³Clinical Sciences, Child and Adolescent Psychiatry, Umeå University, Umeå, Sweden