Perinatology

PS-309 PERINATAL COUNSELLING IN EXPECTED EXTREME PREMATURITY IN THE NETHERLANDS: CURRENT AND IDEAL PRACTICE AMONGST PERINATAL AND NEONATAL PROFESSIONALS

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Background and aims In the updated (2010) Dutch national guideline "perinatal practice in extremely premature delivery", the gestational age (GA) at which resuscitation can be offered was lowered from 25^{+0} weeks to 24^{+0} weeks. Informed consent of the parents is required, however adequate prenatal counselling is not defined. We aimed to invent current and ideal counselling practice amongst professionals.

Methods Online questionnaire regarding current and ideal prenatal counselling (expected GA 24^{+0} weeks), completed by neonatologists and obstetricians from all tertiary centres in the Netherlands.

Results 120 questionnaires were returned (response rate 60%). Almost everybody (93%[1] vs 98%[2]) agreed with shared-decision making as an ideal model for counselling parents whether or not to initiate active care. A majority prefers recommendation of active care at 24 weeks GA, but comfort care on parental request is acceptable (58%[1] vs 49%[2]). A minority prefers recommendation of comfort care and active care only on parental request (11%[1] vs 23%[2]). Current factors making it less likely to recommend active care at 24 weeks GA: dysmaturity (92%[1] vs 76%[2]) and additional congenital anomalies (99%[1] vs 98%[2]).

There were differences in the preferential GA for certain interventions, the majority (58%) of neonatologists mentions chest compressions are justified above 26^{+0} weeks GA and 28.3% above 25^{+0} weeks GA. Obstetricians give earlier marges: either above 25^{+0} weeks GA (40%) or above 24^{+0} weeks GA (40%).

Conclusions We observed only partial consensus on current and ideal prenatal counselling. Further discussion ideally results in a consensus-based guideline.

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PS-310 IMMEDIATE DELIVERY VERSUS EXPECTANT CARE IN WOMEN WITH PRETERM PRELABOUR RUPTURE OF THE MEMBRANES CLOSE TO TERM (PPROMT): A MULTI-CENTRE RANDOMISED CONTROLLED TRIAL

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Background Preterm prelabour rupture of membranes (PPROM) is the cause of 40% of all preterm births. Best practice for women who rupture their membranes preterm is not known. The aim of this study is to determine whether immediate delivery or expectant management of women with PPROM at 34–36^{6} weeks gestation is associated with less neonatal and/or maternal morbidity.

Methods The PPROMT Trial is a large, international, multicentre, randomised controlled trial with 1835 recruits from 65 centres in 11 countries. The primary study outcome is the incidence of neonatal sepsis. Secondary outcomes include severe neonatal morbidity/mortality (sepsis, positive pressure ventilation >24 h or death), perinatal mortality, neonatal respiratory distress syndrome, mode of delivery and duration of hospitalisation for mothers and infants.

Results The trial finished in December 2013, 923 women were randomised to receive early delivery and 912 expectant management. 52 (2.8%) infants had sepsis. 134 (7.3%) had severe neonatal morbidity/mortality, including 6 (0.3%) deaths and 93 (5%) ventilation >24 h. 123 (6.7%) had Respiratory Distress Syndrome. 408 (22.2%) were born by caesarean section. Length of stay (median (IQR)) was 5 (4–8) days for mothers and 5 (3–9) days for infants. Analysis by intention to treat will be presented.

Conclusions There is a significant rate of neonatal and maternal morbidity after maternal PPROM at 34–36^{6}. If it can be demonstrated that either early planned birth or expectant management in this clinical situation is associated with less neonatal and/or maternal morbidity this will change current international practice.

PS-311 ASSOCIATION OF CAFFEINE CONSUMPTION WITH PRETERM BIRTH AND LOW BIRTHWEIGHT IN RIBEIRÃO PRETO, SÃO PAULO, BRAZIL

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Background and aims The association between caffeine consumption and adverse perinatal outcomes is still controversial. This study aimed to evaluate the association between caffeine consumption during pregnancy and preterm birth (PT, <37 weeks) and low birthweight (LBW, <2500 g) in the birth cohort of Ribeirão Preto, Brazil in 2010.

Methods A convenience cohort of 1370 pregnant women living in the city was evaluated between 22–25 weeks of gestation and their respective newborns. Standardised questionnaires were applied during pregnancy and soon after birth and anthropometric information of the newborn was obtained from medical records. The independent variable was the consumption of caffeine during pregnancy (high consumption ≥300 mg caffeine/day), considering the informed consumption of coffee, tea, cola and chocolate milk. The dependent variables were LBW and PT. Logistic regression was used to evaluate the association of caffeine consumption and PT and LBW, adjusting for maternal biological and sociodemographic variables.

Results Caffeine intake in this cohort was 96.2%, being 5.6% of high consumption. In unadjusted analysis, women who consumed caffeine ≥300 mg/day had twice the risk of LBW (OR = 2.82; confidence interval 95%, CI95% 1.49–5.34) than those who consumed <300 mg/day, but no association with PT (OR = 1.88; CI95% 0.98–3.59) was observed. After adjustment, the risk of LBW was three times higher (OR = 3.35; CI95% 1.29–8.66) and there was no association with PT (OR = 1.19; CI95% 0.48–2.86).

Conclusions In this cohort, the frequency of high caffeine consumption was low; however, it was independently associated with LBW, but not with preterm birth.

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PS-312 WITHDRAWN

PS-313 AN INQUIRY INTO ALCOHOL CONSUMPTION DURING PREGNANCY IN THE NETHERLANDS (2007–2010)

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Background and aims Alcohol consumption during pregnancy is associated with several adverse outcomes for the developing child, of which fetal alcohol syndrome (FAS) is the most well-known. In The Netherlands it is recommended not to drink any alcohol while pregnant. Our objective was to describe the prevalence and pattern of alcohol consumption during pregnancy in the Netherlands.

Methods In 2007 and 2010 we undertook two nation-wide surveys amongst mothers who brought their infant aged ≤6 months to a well-baby clinic. Survey-data were weighted for educational attainments to represent national figures.

Results In 2007 data were obtained from 2768 and in 2010 from 1448 women. Between 2007 and 2010, the frequency of drinking did not increase, but the amount per occasion did. Overall, 21% of women reported that they had drunk alcohol during pregnancy. Of women who drank alcohol during the first 3 months, 25% reported 1–3 drinking occasions per month; 7% reported weekly intake, and 0.5% reported daily intake of alcohol. Binge drinking (≥6 drinks/occasion) while pregnant was reported by 8%. In 2007, 53% had <1, 40% had 1–3, and 7% had ≥3 drinks/occasion. In 2010 this was respectively 4%, 83%, and 13%. As compared to the first three months, in the last six months of pregnancy alcohol intake was somewhat less.

Alcohol consumption in pregnancy was more prevalent amongst older (≥35 years of age), higher educated women, and amongst women who reported that they had smoked tobacco products while pregnant (adj. OR 2.06; 95% CI 1.51–2.73).

Conclusions Despite current recommendations, in 2007 and 2010, 21% of Dutch women drank alcohol while pregnant.

PS-314 THE RISK OF MACROSOMIA LINKED TO DIABETES IN PREGNANCY: DATA FROM THE FRENCH POPULATION IN 2011

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We evaluated the risk of macrosomia according to the type of maternal diabetes from the French birth cohort in 2011.

Method Data were obtained from the PMSI (medical Information system program) and the SNIIRAM (inter-regimens national system of information) of the French health insurance. All the childbirths and the terminations of pregnancy (TOP) after 22 weeks were selected. The mother's diabetic status was determined by an algorithm based on the consumption of antidiabetics and hospitalisation diagnoses before and during the pregnancy. An identifier in the PMSI links mothers and children. Macrosomia was defined as a birth weight (BW) > 4 kg or > 90th percentile for gestational age.

Results 806 579 childbirths /TOP > 22 weeks were identified in the PMSI. The motherchild chaining was obtained for 474 614 births. 16.7% of the newborn had BW >4 kg in type 1 diabetes (T1D), 13.4% in type 2 diabetes (T2D), 9.0% in GD, and 6.6% in the normal population. 42.5% (n = 354) of the newborn had a BW >90th percentile in T1D, 30.4% (n = 348) in T2D, 15.7% (n = 5096) in GD and 9.4% in the absence of diabetes. The OR compared with the absence of diabetes were respectively 7.0 [6.1–8.0], 3.9 [3.4–4.4] and 1.7 [1.6–1.8]. The median BW was significantly higher whatever the term of birth in cases of GD compared to the normal population.

Conclusion the risk of macrosomia is the highest in case of T1D, but it remains in case of GD, although it is lower.

PS-315 NEONATAL ADRENAL SUPPRESSION AFTER MATERNAL CORTICOSTEROID USE? A SINGLE-CENTRE CASE-STUDY

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Background The use of supra-physiological exogenous corticosteroids in pregnancy can lead to neonatal adrenal suppression causing life-threatening disease. However, evidence on the occurrence of neonatal adrenal suppression after maternal steroid use, is lacking.

Objective Examining the occurrence of adrenal suppression in newborns after maternal steroid use during pregnancy.

Methods Single-centre case series including all newborns (n = 18) between October 1st, 2006 and February 1st, 2014 of mothers using prednisolone, more than 10 mg/ day. Newborns were routinely assessed by physical examination, blood glucose concentrations, serum cortisol, adrenocorticotropic hormone concentration and urinary steroid profiles within 48 h after birth. Hypoglycemia was defined as blood glucose below 2,6 mmol/L (46 mg/dl). Abnormal serum cortisol was defined as twice below 100 nmol/L. An abnormal urinary steroid profile was defined as absence of fetal metabolites.

Results Six newborns suffered from hypoglycemia, responding well to oral feedings or intravenous glucose administration. All had additional risk factors for hypoglycemia; none had abnormal serum cortisol concentrations or urinary steroid profiles. In two newborns abnormalities in urinary steroid profiles were suggestive for adrenal suppression, although both had adequate serum cortisol concentrations. In both cases, the infants were born prematurely and placenta bed pathology was suspected. After four weeks, urinary steroid profiles of both neonates showed fetal metabolites.

Conclusion No clinically relevant adrenal suppression was found in eighteen newborns of mothers using corticosteroids during