

## Abstracts

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**Aim** To investigate the oxidant-antioxidant status in babies born to preeclamptic mothers (BBPM).

**Method** The PON-1 (Paraoxonase), TAS (Total Antioxidant Status) and TOS (Total Oxidant Status) levels were measured in the cord blood and venous blood (7 day) of babies born to preeclamptic (n=31) and normotensive (N=25) mothers.

**Results** There was no difference between the two groups in terms of PON-1 and TOS levels in the cord blood and venous blood. However, the cord blood TAS levels were higher in BBPM (p=0.001); the TAS levels in the venous blood were higher in the control group (p=0.021). Furthermore, the cord blood PON-1 levels of babies born to severely preeclamptic mothers (n=18) were higher than those of babies born to mildly-moderately preeclamptic mothers (n=13) (p=0.042). There was no difference between cord blood TAS and TOS of babies born to severely and mildly-moderately preeclamptic mothers and the venous blood PON-1, TAS and TOS levels.

**Conclusion** The increased TAS level that was found in the cord blood of BBPM compared to that of the control group indicates that fetus is protected against oxidative damage caused by increased oxidative stress of the mother. Furthermore, the fact that the cord blood PON-1 level of babies born to severely preeclamptic mothers was higher than that of babies born to mildly-moderately preeclamptic mothers indicates the presence of a positive correlation between the severity of oxidative stress in the mother and the antioxidant protection of the baby. Our study is the first in the literature investigating PON-1 in BBPM.

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# ASSOCIATION OF DELIVERY TYPE WITH POSTPARTUM DEPRESSION AND MATERNAL ATTACHMENT

doi:10.1136/archdischild-2012-302724.1289

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**Objective** There are contradictory findings in the literature about the effect of delivery type on postpartum depression and mother - infant interaction.

**Aim** The aim of this study was to investigate the relationship between delivery mode, postpartum depression and maternal attachment.

**Method** Forty vaginal delivery (VD) women and 40 cesarean delivery (SD) women were recruited to participate in the study. The Edinburgh Postpartum Depression Scale (EPDS) was used to screen depressive symptoms, and Maternal Attachment Scale (MAS) was used to detect maternal attachment. Social support was assessed by the Multidimensional Scale of Perceived Social Support (MSPSS).

**Results** We found no significant difference in postpartum depression and perceived social support between two groups. On the other hand, MAS scores were significantly lower in SD women.

**Discussion** Delivery mode had no impact on the development of postpartum depression. However SD may be associated with impaired maternal attachment.

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# POSTPARTUM DEPRESSION IN MOTHERS OF INFANTS WITH VERY LOW BIRTH WEIGHT

doi:10.1136/archdischild-2012-302724.1290

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**Objective** Giving birth to an infant with very low birth weight (VLBW) is a major life event for a mother. Several studies have shown that mothers of these infants are at greater risk of psychological distress. The aim of this study was to investigate the level of depressive symptoms and to determine the associated factors among mothers who have infants with VLBW.

**Methods** The sample consisted of 105 subjects: 35 mothers of VLBW infants (< 1500 g), 35 mothers of low birth weight (LBW) infants (1500–2500 g), and 35 mothers of healthy term infants (> 2500 g). The Edinburgh Postpartum Depression Scale (EPDS) was used to detect maternal depressive symptoms. Maternal social support was assessed by the Multidimensional Scale of Perceived Social Support (MSPSS).

**Results** The mean EPDS score and the number of mothers with high depressive scores (EPDS>12) were significantly higher in mothers of infants with VLBW than in mothers of LBW and term infants. EPDS score was negatively correlated with birth weight, gestational age, and perceived social support and positively correlated with duration of hospital stay in mothers of infants with VLBW. Low birth weight and long hospital stay were found as predictors of postpartum depression in mothers of infants with VLBW.

**Conclusion** The birth and subsequent hospitalization of an infant with very low birth weight evoke psychological distress in mothers. Pediatricians should be more careful about depressive symptoms of mothers of infants with VLBW and should refer for counseling when it is necessary.

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# MATERNAL ATTACHMENT AND POSTPARTUM DEPRESSION IN MOTHERS OF PRETERM INFANTS AND THE ROLE OF ATTACHMENT STYLE

doi:10.1136/archdischild-2012-302724.1291

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**Background** Preterm birth is a psychologically distressing experience for mothers of Preterm infants and a risk for the early mother - infant relationship.

**Aims** The aim of this study was to investigate the depressive symptoms and maternal attachment, and role of attachment style in mothers of preterm infants.

**Subjects** The study group consisted of 75 mothers of Preterm infants and the control group consisted of 75 mothers of full-term healthy infants. Outcome measures: Adult Attachment Scale (AAS) was used to determine the attachment style of the mother. Maternal depressive symptoms were screened by the Edinburgh Postpartum Depression Scale (EPDS), and maternal attachment was measured by the Maternal Attachment Inventory (MAI). Maternal social support was assessed by using the Multidimensional Scale of Perceived Social Support (MSPSS).

**Results** The mean EPDS score and the number of mothers with high depressive scores (EPDS > 12) were significantly higher and maternal attachment scores were lower in mothers of preterm infants than mothers of term infants. Mothers of preterm infants with insecure attachment style had higher EPDS and lower maternal attachment scores.

**Conclusions** Our findings suggest that postpartum depression and insecure attachment style of mothers may be a risk for maternal attachment in preterm infants' mothers. It would be important to screen depressive symptoms and detect attachment styles in

mothers of preterm infants to offer support in the postpartum period.

## 1292 DIFFERENCES IN POSTPARTUM POLICY AFTER MATERNAL USE OF SELECTIVE SEROTONIN-REUPTAKE INHIBITORS DURING PREGNANCY

doi:10.1136/archdischild-2012-302724.1292

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**Background and Aim**  $\pm 10\%$  of women has a depression during pregnancy and selective serotonin reuptake inhibitors (SSRI) are frequently used. After the use of SSRI's approximately 30% of neonates show adverse effects. We studied different policies in the Netherlands in term neonates after maternal SSRI use and findings of standard 48-hour monitor observation and glucose testing.

**Methods** A questionnaire about local policy in neonates after maternal SSRI use was performed in all Dutch hospitals. Next to this we describe the occurrence of incidents and hypoglycemia in a 5.5-years cohort of term neonates ( $n=138$ ), in which standard monitor observation and glucose testing was performed.

**Results** The questionnaire response rate was 79%. Standard observation is conducted in 96% of the hospitals, 77% on the maternity ward and 23% on the neonatology ward, using a monitor. The majority ( $n=53$ , 73%) observes neonates for 48 hours (range 12–72 hours). Standard glucose testing is performed in 12% of hospitals. Ambulatory follow-up is performed in 30% of hospitals. Our cohort study showed that if no incidents occurred during the first 24 hours of observation, no incidents will occur thereafter. Glucoses were below cut off value in 12% mainly at 1 hour after birth, resolving with oral feeding.

**Conclusions** There are many differences in postnatal care for neonates born after maternal SSRI use. Based on our cohort study it seems unnecessary to prolong monitor observation after 24 hours if no incidents occurred. Standard glucose testing should not be performed.

## 1293 UMBILICAL ARTERY INTIMA-MEDIA AND WALL THICKNESS IN INFANTS OF DIABETIC MOTHERS AND ITS RELATION TO MATERNAL HYPERGLYCEMIA

doi:10.1136/archdischild-2012-302724.1293

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**Background** Children who are large for gestational age at birth and exposed to an intrauterine environment of either diabetes or maternal obesity are at increased risk of developing metabolic syndrome. This can be explained by exposure to high glucose and insulin levels in utero causing altered fetal adaptation and changes in normal fetal programming.

**Objectives** The aim of the study was to evaluate preclinical atherosclerosis begins in utero.

**Methods** We measured the umbilical artery wall thickness (ruWT) in the third trimester by obstetric ultrasound and umbilical artery intima media thickness (uIMT) in pathologic specimens of the umbilical cords obtained shortly after delivery and we investigated the relation between the these measurements and serum insulin, c-peptide level in cord blood and homeostasis model assessment of insulin resistance (HOMA-IR) in infants of diabetic mother (IDM). Study group divided into two groups as; large for gestational age (LGA)/IDM group, appropriate for gestational age (AGA)/IDM group and compared with control group.

**Results** The LGA/IDM group had significantly higher insulin ( $p<0.001$ ), c-peptides ( $p=0.018$ ) and HOMA-IR levels ( $p<0.001$ ) compared to AGA/IDM group and controls. LGA/IDM group had significantly higher ruWT ( $p=0.013$ ) and uIMT ( $p<0.001$ ) values compared to AGA/IDM group and controls. LGA/IDM group has increased umbilical artery intima-media and wall thickness which correlates with severity of maternal hyperglycemia.

**Conclusions** Measurement of ruWT in third trimester is feasible, reproducible and strongly correlated with pathological measurements.

## 1294 IS MATERNAL DEPRESSIVE SYMPTOMATOLOGY EFFECTIVE ON EXCLUSIVE BREASTFEEDING DURING POSTPARTUM 6 WEEKS?

doi:10.1136/archdischild-2012-302724.1294

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**Aim** The aim of this prospective study was to examine the relationship between exclusive breastfeeding and postpartum depressive symptomatology. Our hypothesis was that mothers with depressive symptoms initially, fail exclusive breastfeeding.

**Methods** One hundred ninety seven mothers attended the study. The participants were interviewed two times. The first visit was within the first 48 hours after birth. The Edinburgh Postnatal Depression Scale (EPDS) was completed by the participants. The second interview performed 6 weeks. Participants answered methods of breastfeeding for 6 weeks, any methodological problems and nipple pain. EPDS was completed by the participants in 6 weeks. Newborns were term infant.

**Results** All the participants divided into two groups as exclusive breastfeeding and mix-feeding (partial breastfeeding and/or bottle feeding). Both groups were compared in terms of features, such as mode of delivery, parity, prevalence of depressive symptomatology (at 48-h and 6 wk) and delayed onset of lactation within first 48. Statistical significance was found for only two variables which delayed onset of lactation within first 48-h and gestational age.

**Discussion** Contrary to our expectation, effect of higher maternal depressive symptomatology was not demonstrated on exclusive breastfeeding during 6 weeks after delivery. However, the important finding of this study that delayed onset of nutrition within the first 48 hours affects negatively exclusive breastfeeding during 6 weeks after delivery.

**Conclusion** Clinicians especially should pay attention that lactation difficulty during the first week postpartum. Early lactation difficulties are associated with greater risk of early termination of breastfeeding and lower breastfeeding success.

## 1295 CORD BLOOD THEOPHYLLINE LEVELS AND RESPIRATORY MORBIDITIES IN PRETERM INFANTS

doi:10.1136/archdischild-2012-302724.1295

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**Background** Methylxanthines such as caffeine and its metabolites, which are taken by pregnant women via daily foods, are completely transferred to the fetus through placenta. Caffeine has been shown to improve respiratory functions and decrease bronchopulmonary dysplasia in preterm infants. However respiratory effects of prenatal caffeine exposure are not known completely in newborn infants.

**Aim** We aimed to investigate whether there is a relationship between cord blood theophylline levels (which is a main caffeine