## PL.30 FATHERS' EXPERIENCES OF PREGNANCY, LABOUR AND DELIVERY

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A fathers presence during labour is now commonplace in modern obstetric practise. We sought to evaluate fathers' experiences of pregnancy, labour and delivery. A survey was distributed to fathers in the postnatal period, and comprised of 17 questions. The questions were quantitative and multiple-choice in nature. No qualitative data was sought. A total of 1000 completed questionnaires were submitted for analysis. The mean age of fathers in the study was 33.8 years. Approximately 70% of the population were married, while 27.3% were in long term relationships. A significant percentage of the fathers were employed (88.1%) in paid work. Less than 8% were unemployed. First time fathers constituted the largest group (53.7%). Planned pregnancies constituted 77.9% with 2.5% as a result of fertility treatment. Seventy percent of fathers were 'overjoyed', 18.4% were 'pleased' and 11.3% responded either neutrally or negatively to the news of the pregnancy. Fathers were found to be likely to be present at ultrasound scans (89.1%) but less likely to be involved in antenatal education classes (48%). Almost all fathers were present at the delivery (97.2%). Nearly half of the fathers (49.6%) planned to attend the delivery because they really wanted to witness the birth, 43% attended to support their partner. At every stage of the pregnancy fathers perceived midwifery staff to have communicated better when compared to medical staff.

Our quantitative survey found that in general fathers involvement with the pregnancy process and their attendance at the birth to be a positive experience. Communication processes can be improved to better support the father in his role during this time.

## PL.31 A SIMPLE CLASSIFICATION SYSTEM FOR MATERNAL TRAUMATIC INJURIES ASSOCIATED WITH SECOND STAGE CAESAREAN SECTION

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**Background** Caesarean section at full dilatation can be a technically demanding procedure and has a consistent association with laceration injuries to uterus, cervix and vagina. Recent Scottish Morbidity data showed 25% of women delivered by emergency caesarean section and experiencing massive obstetric haemorrhage (MOH) were delivered in the 2nd stage of labour. 16.3% of all the MOH cases were caused by extensions of the uterine incisions and/or broad ligament haematomas.

It is therefore surprising that to date a universally accepted formal classification system for maternal injuries (similar to that of obstetric anal sphincter injuries) relating to this scenario, is yet to emerge.

**Aim** To design a simple classification system and to apply this in a review of second stage deliveries at a UK University hospital

**Method** A retrospective analysis of the labour and operation notes of 60 patients delivered by caesarean section at full dilatation during a 9 month period in 2010. Uterine extensions were graded as: Grade 1 [easy to suture, no increase in operating time], Grade 2 [increased operating time and total blood loss] or Grade 3 [involvement of uterine artery, cervix, vagina, or bladder].

**Results** 25% [15/60] had uterine extensions of which 53% were Grade1, 27% were grade 2 and 20% were grade 3. It was easy to grade the extensions retrospectively. Grade 3 extensions resulted in longer operating times and higher blood transfusion rates.

**Conclusion** A simple classification of uterine extensions can improve the consistency of contemporaneous documentation and has potential as a research tool.

## PL.32 UMBILICAL ARTERY BLOOD ANALYSIS AT THE TIME OF DELIVERY: A COMPARISON BETWEEN BABIES BORN BY DIFFERENT MODES OF DELIVERY

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**Introduction** Umbilical cord arterial blood samples are taken routinely following delivery at many obstetric units in the UK. Whilst the pH of cord blood has been extensively investigated, other parameters have not. In this study we compared several parameters in cord blood between infants born by different modes of delivery.

**Methods** Umbilical artery cord blood samples taken immediately following delivery from 469 infants were analysed to compare pH, base deficit, lactate, glucose, p02 and pCO2. These values were then compared using one-way ANOVA testing to determine if significant differences existed between the different mode of delivery groups.

**Results** Significant differences in the mean base excess, lactate, glucose and pO2 levels were observed between the different mode of delivery groups. Infants delivered by emergency Caesarean section for fetal compromise had the lowest pO2 and lowest glucose level of all mode of delivery groups, as well as the smallest base deficit and lowest lactate levels. No significant difference was observed in pH levels between the different mode of delivery groups.

**Conclusions** Umbilical artery pH at delivery is one mechanism used to evaluate the fetal condition at the time of delivery. We found no variation in umbilical artery pH between the different mode of delivery groups. This may have been due to resuscitative measures following the diagnosis of fetal compromise. However, despite this, significant differences in p02 and glucose levels remained. Further investigation of these parameters may allow better fetal assessment both intra-partum, and at the time of delivery.

## PL.33 CAN WE IMPROVE WOMEN'S OPERATIVE VAGINAL BIRTH EXPERIENCE?

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**Background** Obstetric practise is emotive, challenging and has long term impact both in terms of delivering new life but also for the mother where much of her experience occurs in labour and delivery.

**Aim of this study** To investigate the non-technical skills for operative vaginal delivery that have an impact on women's birth experience when having an OVD.

**Method** Sixteen women who had an OVD of a term baby underwent a semi structured interview 6–8 weeks postnatal. The interview recordings were transcribed verbatim. Thematic coding of data was carried out. Consistency of interpretation was ascertained by two researchers.

**Results** One of the key themes identified by women was a 'feeling of loss of control' and a 'need for explanation' of events to enable empowerment and reinforce control back to the woman. Women reported that 'loss of control is very worrying and overwhelming'. This want of ownership to the process of operative delivery is further highlighted by the 'need for partnership

between the healthcare provider and the woman', 'enabling autonomy' and 'avoiding a paternalistic relationship'. Greater information for OVD in antenatal classes was suggested in order to counteract a common theme of negative perceptions of an operative delivery.

**Conclusion** Vulnerability of the women's feelings highlights the importance of non technical skills in ensuring a woman feels trust, is empowered and in control. These non-technical skills need to be taught, learnt and practised to ensure a woman's experience if safe, positive and pays justice to the delight of having a child.

## PL.34 A TWO YEARS AUDIT OF INCIDENCE, RISK FACTOR, MATERNAL AND NEONATAL OUTCOME OF UMBILICAL CORD PROLAPSE AT AL CORNICHE HOSPITAL ABU DHABI UAE

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To determine the incidence, risk factors, obstetric management, maternal and neonatal outcome of umbilical cord prolapse (UCP) in order to improve the obstetric services

**Methodology** This is retrospective audit of all the cases of Umbilical cord prolapsed at Corniche Hospital during January 2009 and December 2010.

**Results** Twenty three cases diagnosed as umblical cord prolapse. The hospital based incidence of cord prolapse was 1:760. The mean Dignoses-Delivery Interval (DDI) was 18.5 Minutes. Eleven mothers (47.8%) delivered within this period of time. Eighty two percent women were multiparous. 86.9%were singleton pregnancies while 13.1% were (three sets) of twin gestations. Fifteen pregnancies (65.2%) were of more than 37 weeks of gestations. In 26.15% (n = 6) cases, fetuses were presented as breech. In majority of the case (n = 17) general anaesthesia was given (74%) for emrgency caesarean section (LSCS) and in 4 cases (17%) spinal anaesthesia was chosen for caesarean delivery. Tewnty two (95.65%) women were delivered by LSCS and one women had successful vaginal delivery after UCP.

Twenty three babies (80.7%) had apgar score at 5 minutes >7. Umblical cord PH was done in 65.2% (n = 15) of the cases. Arterial cord PH was recorded as less than 7.2 in 53.3% (n = 8) of the neonates. Sixteen babies required admission to NICU. We had 5 early neonatal deaths (19.2%) in our case series.However, there was no case of stillbirth or HIE directly related to cord prolapse.

**Conclusion** Cord prolapse is a rare but true obstetric emergency associated with high perinatal morbidity and mortality but with quick diagnosis and prompt multidisciplinary team management the outcome can be improved.

## PL.35 OUTCOMES FOLLOWING INDUCTION OF LABOUR(IOL) IN THE EAST OF SCOTLAND

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**Objectives** To review delivery outcomes for IOL at Term in Ninewells Hospital Dundee and to determine whether maternal factors, indications and gestational age influence outcomes.

**Methods** Data were collected from all IOL at Term between 01/01/11–31/08/12. Information on outcomes was collected from the local maternity database (Torex Protos Evolution).

**Results** 1802/7499 (24%) had IOL. Median age was 29 years (Range = 15–48 years) and median BMI was 25.7 kg/m$^2$ (Range = 15–66 kg/m$^2$). 1020/1802 (56.6%) were primiparous. Median gestational age was 40 weeks (Range 37–43 weeks). 664/1802 (36.8%) of IOL were for post-dates pregnancy, 280/1802 (15.5%) were for prolonged pre-labour rupture of membranes (PROM), 194/1802 (10.7%) were for hypertensive disease, 132/1802 (7.3%) were for suspected fetal growth restriction (FGR) and 106/1802 (5.8%) were for diabetes.1057/1802 (58.6%) had spontaneous vertex delivery, 360/1802 (19.9%) had operative vaginal; delivery (OVD) and 385/1802 (21.3%) had caesarean section (CS). BMI > 30 kg/m$^2$ was associated with increased risk of CS (RR = 1.23.95%CI = 1.01–1.50, p = 0.03), and this was independent of gestational age and indication. Women who had IOL for post dates pregnancy had higher rates of CS (RR = 1.25.95%CI = 1.05–1.50, p = 0.01) and OVD (RR = 1.28.95%CI = 1.06–1.54, p = 0.01). Women who had IOL for suspected SGA fetus had lower rates of CS (RR = 0.51, 95%CI = 0.31–0.83, p = 0.003) Women who had IOL for PROM had lower rates of OVD (RR = 0.57, 95%CI = 0.43–0.76, p < 0001).

**Conclusion** The majority of women who have IOL at Term will have a vaginal delivery. Nevertheless the risk of operative intervention increases significantly in women who have IOL at 41 weeks gestation and beyond. due to IOL for post dates pregnancy. This data will be useful in counselling women requiring IOL at Term.

## PL.36 CATEGORY 1 CAESAREAN SECTIONS AND DECISION TO DELIVERY INTERVAL: ARE WE MISSING TARGET?

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**Background** NICE guidelines recommend decision-to-delivery interval (DDI) of 30 minutes for all category 1 Caesarean Sections (Cat1 CS).

**Methods** A retrospective analysis of 50 Cat1 CS carried out in a busy district hospital.

**Results** 44% of all Cat1 CS were done for suspected fetal compromise on CTG, followed by 30% for persistent fetal bradycardia > 6 minutes. 64% deliveries happened during night shift and 34% were undertaken by junior registrars. Decision to perform Cat1 CS was directly taken by consultant in 36% of cases with consultant being first surgeon in 78% of these cases mostly as resident on-call during nights. Mean decision-to-delivery interval was 18.8 minutes with 87% deliveries performed within targeted 30 minutes. 42% of Cat1 CS were performed under general anaesthetic with shortest mean DDI of 14.3 minutes compared to spinal anaesthesia (25 minutes) and epidural top-up (16.7 minutes). 16% had massive PPH > 1.5 litres however average hospital stay was 3 days. 26% babies were admitted to SCBU with 61% being severely acidotic with cord pH < 7.0 or base excess > 12. Mean DDI in these babies was 24 minutes.

**Conclusion** Targeted DDI of 30 minutes is difficult to achieve in 100% of cases. Use of General anaesthesia shortens the DDI interval but has its own implications. Resident on-call consultant night shifts increase direct consultant input and may influence outcomes. A significant number of babies required admission to SCBU with proportion of acidotic babies remaining high. Further measures are required to improve Decision-to-Delivery interval to improve perinatal outcomes.

## PL.37 MATERNAL ADIPOSITY AND CAESAREAN SECTION

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Maternal obesity and rising caesarean section (CS) rates are important obstetric issues. High visceral fat (VF) is associated with an increased risk of medical conditions outside pregnancy and gestational diabetes mellitus. The purpose of the study was to assess risk