

aspects reviewed included mode of delivery, birth weight, parity and if episiotomy was performed.

**Results** The incidence of OASI was 4.5% of all vaginal deliveries. There were 2 missed cases of OASI. Among the OASI cases, 32% laboured in the pool as analgesia or had a water birth. 62% had a normal vaginal delivery, 14% had a water birth and 24% had an instrumental delivery. Majority had a normal fetal weight (82%). 88% has no episiotomy performed. Patients who had a water birth were more likely to sustain an OASI compared to normal vaginal delivery (5.47% water births versus 3.66% normal delivery).

**Conclusion** The increased incidence of OASI in the unit may be due to the increased detection rate by obstetricians. Water birth is a potential risk factor for OASI but this area needs further research.

#### PL.88 SYNTOCINON INFUSION: A PROSPECTIVE AUDIT AT ST JOHN'S HOSPITAL (NOV 2010 – APRIL 2011)

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**Introduction** The use of oxytocin infusion in the induction and augmentation of labour is an essential component of intra-partum care in obstetrics worldwide but can be associated with potentially serious complications. These complications include uterine hyperstimulation leading to abnormalities in the CTG, uterine rupture especially in labouring women with previous uterine scar, fluid overload and postpartum haemorrhage (prolonged usage). In the light of these potentially serious but avoidable complications, it is imperative to use it judiciously in accordance with clinical guidelines.

**The Aim** of this audit was to determine the adherence of the unit to the designated clinical guideline in the use of syntocinon infusion in labour and to ascertain and analyse the underlying reasons for the complete stoppage of infusion and the reduction in the dosage of infusions.

**Results and Discussions** Majority of patients on syntocinon infusion carried on to delivery without having syntocinon stopped (99.08%) or reduced (66.9%). A significant number though still had syntocinon reduced at least on 1 occasion (33.1%).

The commonest reason for reducing rate of infusion was hyperstimulations (42/51), followed by other reasons such maternal distress, stopping to site epidural and "tissued venflon" representing (12/51) and prolonged and persistent decelerations.

**Conclusions** The use of syntocinon infusion to augment or induce labour at St John's Hospital conforms to the established Pan-lothian guideline.

It is acceptable practise to reduce the rate of infusion when there is uterine hyperstimulation and to stop the infusion completely in the event of prolonged bradycardia and pathological CTG (NICE guideline).

#### PL.89 FUNCTIONAL EFFECTS OF OESTRADIOL ON CYTOKINE RESPONSES OF HUMAN ECTOCERVICAL EPITHELIAL CELLS TO TOLL-LIKE RECEPTOR 2 AND 4 LIGANDS

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We have demonstrated that the pattern recognition toll-like receptors (TLR) 2&4 are upregulated during pregnancy in human cervical epithelium. We sought to determine whether oestradiol ( $E_2$ ) alters the immunological responses of cultured human ecto-cervical epithelial cells (HECECs) to the ligands of TLR2 (peptidoglycan, PGN) and TLR4 (lipopolysaccharides, LPS).

**Methods and Material** Fresh ectocervical tissues were collected from hysterectomy specimens, epithelia isolated and cultured after collagenase and trypsin digestion, cell purity being validated by immunofluorescence. The expression of TLRs 2&4, and  $E_2$  receptor genes (ERs  $\alpha$ & $\beta$ ) were demonstrated by flow cytometry and RT-PCR respectively. HECECs were co-incubated with varying  $E_2$  concentrations (0.1, 1, 10, 100 nM) and PGN (50  $\mu$ g/ml) or LPS (100 ng/ml) for 10 min, 2 hrs and 18 hrs. Cytokines were assayed in supernatant fluid by Cyto-Bead Array.

**Result** In response to PGN, HECECs co-incubated with  $E_2$  released lower levels of IFN- $\gamma$ , IL-6 and IL-8, whilst after 18 hrs, RANTES expression increased to low  $E_2$  but decreased to high  $E_2$ . In response to LPS, HECECs co-incubated with  $E_2$  demonstrated increased expression levels of IL-10, IL-12p70, RANTES and TNF $\alpha$  at 10 min and 2 hrs. IL-6 and IL-8 levels increased at 2 hrs but were suppressed or unchanged after 18 hrs. Markedly increased levels of RANTES were detected after 18 hrs, an effect obtunded by culturing HECECs in  $E_2$ .

**Discussion** The complex immunomodulatory effects of  $E_2$  on cultured HECECs appear to vary with bacterial ligands and duration of exposure, suggesting direct non-genomic vs. genomic mechanisms. The resulting cytokine profiles may contribute to cervical remodeling during pregnancy.

#### PL.90 DOCUMENTATION AND ASSESSMENT OF CONTINUOUS INTRAPARTUM ELECTRONIC FETAL HEART MONITORING

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**Objectives** To assess the effectiveness of an intrapartum CTG interpretation tool.

**Background** Intrapartum electronic fetal monitoring is used as a method of evaluating fetal well-being in labour. NICE guidance on the classification of intrapartum CTG's includes definitions and descriptions of individual fetal heart rate features and an overall grading system.

To improve documentation and reduce unnecessary interventions, a regional CTG evaluation tool (sticker) was introduced summarising this guidance.

**Method** Retrospective review of 101 intrapartum CTG stickers from 24 patient charts assessing standard of documentation and accuracy of CTG classification.

**Results** All 4 features were assessed and assigned an overall grading in 82/101 (81%) of cases, of which 74/82 (90%) were concordant with independent analysis of overall grading. The CTG was upgraded from normal to suspicious in 3/82 (4%) cases and downgraded from suspicious to normal in 5/82 (6%) cases.

Original FHR documentation was incomplete in 19/101 (19%) cases of which 8/19 (42%) were independently graded as suspicious.

**Conclusions** There was suboptimal completion of CTG stickers as only 81% (82/101) had all 4 features assessed and were assigned an overall grading.

In cases where the CTG stickers were fully completed, 91% (75/82) were independently graded as normal. Whereas, when the features were incomplete, 42% (8/19) were graded as suspicious following independent analysis which seemed to indicate a difficulty with interpretation and categorisation of decelerations and a reluctance of staff to commit to an overall grading if the CTG was not normal.

#### PL.91 THE ETHICS DECISION CONCERNING PREMATURE NEWBORN: REFLECTIONS OF DOCTORS AND NURSES

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**Background** In recent years there has been an increase of birth of premature babies and also in the increased survival of extremely premature with very low birth weight. The process of enabling these newborns requires multiple and complex care that are associated with significant ethical issues.

**Objective** To explore the experience of health professionals on ethical decision making in the care of the premature babies.

**Methods** We conducted a qualitative study of phenomenological nature, in the area of the constructivist paradigm, interviewing 13 doctors and 14 nurses who work in NICUs (Neonatal Intensive Care Units) located in the Centre region of Portugal.

**Results** On the deep discursive reflections, we understood the concerns and conflicts in difficult decision making, given the duty to revive in the limit of viability, the unquestionable respect to the human life and also the ethical duty and morally justified to limit or discontinue care, as response to the criterion of "best interests of the child". We underline some ambiguity surrounding the decision making to withhold treatment in situations of unfavourable prognostic, an understandable attitude ethically grounded in respect for life. They evidenced concerns about dying with dignity, yet there are no standards/recommendations for neonatal palliative care.

**Conclusions** We believe that reflection on practise could help to consolidate a culture of ethics on health professionals who work with premature infants and their parents.

We emphasise the importance of protocols and criteria that guide clinical practise regarding these situations.

**PL.92 MANAGEMENT OF MACROSOMIA IN NON DIABETIC WOMEN IN DISTRICT GENERAL HOSPITAL. IS INDUCTION OF LABOUR JUSTIFIED?**

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**Background** Macrosomia refers to newborn with an excessive birth weight. Fetal macrosomia has been defined as birth weight of 4000–4500 g or greater than 90% for gestational age after correcting for neonatal sex and ethnicity. Based on these definitions, macrosomia affects 1–10% of all pregnancies. Attempts at perinatal diagnosis of macrosomia have proven difficult and are often inaccurate. Thus, a diagnosis of fetal macrosomia can only be confirmed retrospectively.

Due to lack of data on management of macrosomia and associated perinatal outcomes in women without diabetes, we designed a retrospective study to examine the association between induction of labour (IOL) and mode of delivery (MOD) in low-risk women with neonatal macrosomia.

**Methods** Retrospective study was carried out over 1 year period (1<sup>st</sup> March 2011 – 29<sup>th</sup> Feb 2012) looking at singleton births of macrosomic neonates from non-diabetic women at term. Outcome measures include MOD, 5 minutes Apgar, neonatal injury.

**Results and Conclusions** 232 women delivered neonates with birthweight of >4000 grammes. 18 women had elective CS, 90 women had spontaneous labour and 144 women were induced. 24 women were induced due to suspected macrosomia. Of all the 24 women who had IOL for suspected macrosomia, 38% had emergency CS, 38% had normal delivery and 25% had instrumental delivery. Higher rate of CS (38% vs 8%) was noted in women who were induced for suspected macrosomia compared to women who had spontaneous labour, and there is no significant difference in the 5 min Apgar and neonatal injury in the two groups.

**PL.93 CARING FOR THE PARTURIENT: VALORISATION OF CARE RECEIVED DURING LABOUR, DELIVERY AND POSTPARTUM**

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**Background** Childbirth is a remarkable experience in the life of women and her family, so health professionals (obstetric doctor and nurse), should adopt a set of practises that promote healthy labour and birth, including respect for the physiological process and dynamic of each birth.

**Objective** To analyse the relationship between sociodemographic and obstetric variables with the valorisation of care received during labour and postpartum.

**Method** A quantitative, cross-sectional, descriptive and correlational study, consisted of 386 women interned in the obstetrics service of the Portuguese public hospitals who received a questionnaire consisting of sociodemographic variables, care provided, action before pain, social and familial support, attention to wellbeing and attention to postpartum/discharge.

**Results** The puerperal women were aged between 19 and 37 years, mostly married (79.5%). 34.5% have secondary education, 70.2% perform a work activity and 50% are primiparous. Parity, surveillance of pregnancy, preparation for childbirth and parenting time and hours in labour (this inversely), influence the importance of the care received in relation to the action before the pain and attention to the wellbeing.

**Conclusion** The orientation of obstetric care according to the woman allows for active participation in her birth plan, a sense of control, improves her self esteem and their level of satisfaction with the care received.

**PL.94 THE DECLINING RATE OF VBAC IN A DUBLIN TERTIARY CENTRE**

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Promotion of VBAC has been an area of interest since the 1950's when the TOLAC trial emerged. We looked at rates in a tertiary referral centre, comparing the difference in VBAC rate among Para 1 (One previous LSCS) in 2011 and 2005. The results reveal a declining VBAC rate. The rate fell from 33.1% in 2005 to 23% in 2011.

In 2011, 56% had elective LSCS. Of those who laboured, 52% (n = 166) had VBAC, 47.6% (n = 151) had Emergency LSCS. This was in comparison to 2005: 42% had Elective LSCS. Of those who laboured, 56.2% (n = 189) had VBAC, 43.75% (n = 147) had Emergency LSCS.

**PL.95 OBSTETRIC PRACTISES DURING CHILDBIRTH: EXPECTATIONS, PERCEPTIONS AND SATISFACTION OF WOMEN**

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Knowing what the woman expected to find and what she found in relation to obstetric practises, enables us to meet the needs, if we assess their satisfaction we will know if we can fill.

**Objectives** To determine if the expectations and satisfaction of women in relation to obstetric practises during the labour, delivery and postnatal influence their perception. To assess the expectations and satisfaction of women in relation to obstetric practises. Analyze the relationship between expectations and satisfaction.

**Methods** A quantitative, descriptive, analytic and correlational cross-sectional, with a sample of 405 mothers. The evaluation protocol includes the scale of importance and perception of Obstetric Practice (Roman Espinaco, Garrido Oliver, 2008) and the Questionnaire Experience and Satisfaction with Childbirth (Costa *et al*, 2004).