

**Aim** To assess the safety and efficacy of a second 10 mg dinoprostone (Prostaglandin E2) pessary inserted 24 hours after initial failure of cervical ripening.

**Methods** A pilot retrospective study of women at a North London teaching hospital, over a 7 month period. Women who failed initial induction were managed using a repeat pessary of prostaglandin E2. Primary outcomes of interest included establishment of active labour, mode of delivery, Bishop score and any adverse events.

**Results** 34 women having induction of labour were given a second pessary following failed initial induction. Medical records were available for 19 of these. 12 women (63%) achieved active labour following insertion of the 2<sup>nd</sup> dinoprostone pessary, and 10 of these (83%) delivered vaginally. Two cases of uterine hyperstimulation resolved on removal of the pessary. There was a significant difference in Bishop score pre-pessary insertion between the women who achieved active labour (83.3% had score  $\geq 3$ ) compared to those who failed to labour (0% had score  $\geq 3$ ), ( $p < 0.05$ ).

**Conclusion** Successful induction of labour can be achieved safely with second dinoprostone pessary following failed initial induction of labour if the Bishop score prior to insertion is  $\geq 3$ . A larger study will follow, in order to add power to this data.

**PL.45 HIGH-SENSITIVITY C-REACTIVE PROTEIN (HS-CRP) IN AMNIOTIC FLUID OBTAINED AT CAESAREAN SECTION: A FEASIBILITY STUDY**

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**Introduction** The most important risk factor for post-partum maternal infection is caesarean section (CS). High-sensitivity C-reactive protein (HS-CRP) accurately detects low concentrations of CRP as a predictor of inflammation in blood. This study evaluated the feasibility of measuring HS-CRP in amniotic fluid (AF) and maternal serum at CS.

**Methods** This was a prospective observational study of women undergoing elective and emergency CS. AF was obtained at CS by direct needle aspiration from intact amnion. Samples were processed for HS-CRP, bacterial count and culture. Maternal serum CRP was measured before and 3 days after CS.

**Results** Seventy-nine women undergoing CS participated. In 5 (6%), AF could not be analysed; it was either not obtained or could not be processed due to thick meconium. Of the remainder, 47% (35/74) women underwent elective and 53% (39/74) emergency CS. There was a significant difference in AF HS-CRP levels from elective versus emergency CS (median 68.6 ng.ml vs 192.3 ng.ml;  $p = 0.009$ ). There was no difference in serum HS-CRP levels between elective and emergency CS. Almost 60% (44/74) of AF samples showed bacterial colonisation. There was no difference in AF or serum HS-CRP levels between patients with sterile amniotic fluid compared to those with bacterial colonisation. However serum HS-CRP levels were higher where AF samples at emergency CS showed bacterial growth ( $p = 0.03$ ).

**Conclusion** This study proves the feasibility of measuring HS-CRP in <1 ml amniotic fluid in both elective and emergency settings. AF HS-CRP levels were significantly higher in emergency compared to elective CS. However, analysis of HS-CRP was limited by AF consistency.

**PL.46 A RETROSPECTIVE REVIEW COMPARING THE EFFICIENCY AND OUTCOMES OF PROPESS AND PROSTIN GEL AS A METHOD OF INDUCING LABOUR**

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**Introduction** Induction of labour is a common procedure affecting 1 in 5 pregnancies in the UK. The induction of labour process in Lothian was changed in August 2010 from prostin gel to propress pessary. This study aims to compare the efficiency and outcomes of propress and prostin for induction of labour.

**Method** A retrospective case note review was carried out with 278 randomly selected patients who received induction of labour with propress since August 2010 compared with 278 randomly selected patients from the same timeframe the year previously who received induction of labour with prostin. The groups were split into prim and parous and the outcomes were statistically compared between the groups using mann-whitney and t-tests.

**Results** Both propress and prostin had a similar failed induction rate. Propress had a significantly longer average length of stay in hospital, a higher chance of requiring second round prostin and a significantly longer time from induction to delivery compared with the prostin group. However the number of patients requiring oxytocin in labour was significantly less in the propress group. There was no difference in the mode of delivery between groups.

**Conclusion** Further research is needed to determine where the time delay is in the length of stay in hospital and the study needs to be re-audited once the 24 hour rest period is re-introduced in the propress group. Should we go back to prostin?

**PL.47 WITHDRAWN BY AUTHOR**

**PL.48 DO WE PERFORM MEDIOLATERAL EPISIOTOMY AT THE OPTIMUM ANGLE?**

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**Introduction** Dr Foster reported obstetric anal sphincter injuries (OASIS) incidence in Norwich as 3.72% for spontaneous vaginal deliveries and 10.76% for instrumental deliveries against expected incidence of 3.6% and 7.6% respectively. The Norfolk and Norwich Improving Patient Safety (NNIPS) programme supported an OASIS reduction project. One factor thought important in OASIS is the angle of mediolateral episiotomy; larger angles are associated with a lower incidence (Eogan *et al*, 2005).

**Study Aim** To measure episiotomy angles to confirm optimal episiotomy angle of  $> 45^\circ$  from midline.

**Setting** A large UK university teaching hospital delivering 6000 babies annually.

**Cohort** Women with episiotomy delivered in June to July 2011.

**Methods** Two independent measurements were taken before discharge from the postnatal ward using acetate paper placed over the perineum and the angle traced on the paper measured from anus (6 O'clock) to the episiotomy – mean angle was calculated for each patient.

**Results** Twenty nine women agreed to measurement - 14 were delivered by forceps, 4 by ventouse and 11 had spontaneous vaginal deliveries. 21/29 (72%) had episiotomy angles  $< 45^\circ$  compared with 8/21 (28%) who had angles  $> 45^\circ$ . We found no OASIS in this cohort.

**Conclusion** We were not performing episiotomies at the optimum angle. We implemented:

An education campaign for maternity health professionals, using the slogan "Straight at 8" meaning cut towards 8 O'clock.

Sharpening of episiotomy scissors as bluntness was identified by staff as an important issue.