

**PL.80 ELECTIVE C-SECTIONS: A FUTURE DAY SURGERY CASE?**

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The number of women opting for elective caesarean sections has steadily increased within the last few years. Our aim is to assess whether the Enhanced Recovery Programme (ERP), a national programme aiming to improve the outcome of elective caesareans by active patient participation, could lead to quicker recoveries and earlier discharges whilst maintaining the best standard of care.

**Method** A paper-based questionnaire was distributed to the women opting for an Elective Caesarean from 03/09/2012 to 20/11/2012.

The questionnaire aimed to assess the ERP by questioning patients' timing of eating, drinking and mobilisation post-operatively, attendance to the STOP discharge meeting, time of catheter removal and discharge time.

**Results**

- The majority had their first meal within 2 hours, or 4–6 hours, with the rest being 6+ hours.
- Most of the women had their catheter removed on time.
- The majority were unaware of the STOP discharge meeting and so did not attend.
- The majority were discharged on the 2<sup>nd</sup> day.

**Conclusion**

- The study revealed that only about a quarter of patients are able to go home on the 1<sup>st</sup> day after the Caesarean, while more left on the 2<sup>nd</sup> day.
- Only very few had their evening meal whilst seated and only a third attended the STOP Discharge meeting. Both of these should be aimed to be increased under guidance of the ERP.

Based on these results, the study shows a need for further ERP adherence to assist recovery of women following a Caesarean section.

**PL.81 CAESAREAN SECTION AT THE QEHL: 10 YEARS ON FROM "SENTINEL", WHERE ARE WE?**

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**Objective** At the time of the National Sentinel Caesarean Section Audit the caesarean section rate (CSR) was rising by 1% per year. This audit aims to compare our current practise with that described in the Sentinel audit.

**Design** Retrospective Study.

**Setting** The Queen Elizabeth Hospital Kings Lynn.

**Population** Caesarean sections from three months of 2011–12.

**Methods** Case note review.

**Main outcomes** The primary outcomes were the caesarean section rate (CSR), the indications, appropriateness of the indication, and whether fetal blood sampling, external cephalic version (ECV), vaginal birth after caesarean (VBAC) were offered

**Results** The CSR was unchanged at 22% (18% "Sentinel"), forceps 7% (2.9–5.7%) and Ventouse 5% (5.7–9.7%) with 1:1 midwifery care in 92% of deliveries. The primary CSR was 66%. The electives were 34% (37%) and emergencies 66% (63%).

Only 4.2% of indications were debatable and in Grade 2 (G2) and 3 (G3) caesareans. The G2 caesareans indications were 30.7% for abnormal cardiotocograph and 53.5% for failure to progress (FTP). Only 6.7% had fetal blood sampling (FBS). Elective caesarean indications included, declined vaginal birth after one caesarean (32.1%),

vaginal birth after two caesareans not offered (18.9%) and declined external cephalic version (13.2%).

**Conclusions** The CRS has remained static over the last decade despite occasional peaks. The majority of caesareans during these peaks were justified. The CSR could be improved by reducing the primary indications by increasing the use of FBS and better management of failure to progress, and secondary indications by improved counselling for VBAC and ECV.

**PL.82 AN AUDIT OF COMPLIANCE WITH CURRENT GUIDELINES ON THE MANAGEMENT OF THIRD AND FOURTH DEGREE TEARS IN THE ROTUNDA HOSPITAL**

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3<sup>rd</sup> and 4<sup>th</sup> degree tears occur in 1% of vaginal deliveries. In the Rotunda the rate in the first six months of 2012 was increased at 3%. The aim of this audit was to assess compliance with current Rotunda guidelines and where non-compliance was identified assess if complications arose as a result.

A retrospective chart review of all third and fourth degree tears was performed. There were 51 cases during this time period and 47 charts were available for review. The comparison standard was the Rotunda Hospitals "Guidelines for Management of Episiotomy and Repair of Perineal Trauma" Sept 2010.

There were 51 cases in total. 45% were following Spontaneous vertex delivery, 27% following ventouse delivery, 14% following combination of ventouse and forceps and 14% forceps alone. 100% were repaired under regional anaesthesia. Only 66% received the correct dose and duration of antibiotics. 95% received laxatives post delivery with only 51% received appropriate non-opiate analgesia. 44.6% of patients were reviewed by senior staff and 81% received physiotherapy. 87% were followed up in the perineal clinic.

Review of current perineal repair form should be performed to include headings more specific to third/fourth degree tears. A sticker highlighting that the patient has had a third/fourth degree tear should be placed on the front of drug Kardex. This may help avoid prescription of opiate analgesia. All women receive an information leaflet on discharge. Women should have senior staff review day 1 postpartum. It should be re-audited in six months.

**PL.83 TRENDS IN CAESAREAN SECTION IN THE EAST OF SCOTLAND**

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**Aims** In Tayside in 2012 we observed an increase in the rate of caesarean section (CS). Our aim was to determine the cause of this and to develop strategies that might prevent further increase.

**Methods** A prospective longitudinal audit was performed. All women who required CS in July 2012 were included. Robson's classification (RC) was used to categorise women. Women who had CS in July 2007 were identified using the local maternity database (Torex Protos Evolution) and these were also categorised for comparison.

**Results** In 2007 77/353 (21.8%) and in 2012 86/377 (22.8%) required CS (p = N/S). For both groups the most frequent category was RC5 (multiparous, ≥37 weeks, previous CS). In 2007 27/77 (35%) were RC5 and in 2012 35/86 (40%) were RC5. In 2007 the next category was RC10 (≤36 weeks) (12/77, 15.5%). However in 2012 this accounted for 3/86 (3%) (p = 0.03). In 2012 the second largest group was RC2 (primiparous induced/CS prior to labour). This had increased from 7/77 (9%) in 2007 to 19/86 (22%) in 2012 (p = 0.03).

For both groups the next category was RC6 (primiparous breech). In 2007 1/77 (1%) were RC6 and in 2012 6/86 (7%) were RC6 ( $p = N/S$ )

**Conclusions** In Tayside the main indication for CS is previous CS. Promoting vaginal birth after caesarean (VBAC) might halt the rise in CS. We have introduced an information leaflet that promotes VBAC. There are a significant number of primiparous women having CS prior to the onset of labour or following induction of labour. Effective counselling and decision making will ensure that these women are managed appropriately.

#### REFERENCE

Robson's classification of Caesarean Section.

#### PL.84 SHORT-TERM CULTURE OF HUMAN ECTO-CERVICAL EPITHELIAL CELLS FOR GENOMIC, PROTEOMIC AND FUNCTIONAL STUDIES

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**Background** Understanding cell physiology is limited by reliance on tumour-derived immortalised cell lines. Primary cell culture models may offer more relevant mechanistic insight into cell physiology but are often difficult to establish and maintain.

**Aims** We sought to develop an optimal method for the isolation and short-term culture of Human primary Ecto-Cervical Epithelial Cells (HECECs).

**Methods and Material** Fresh ecto-cervical tissues were obtained at hysterectomy and epithelia isolated and cultured (using MEM D-Valine media to prevent fibroblast proliferation) using three explants methods: i) tiny fragments of epithelium; ii) dissociated cells cultured after digestion using Collagenase IV and trypsin; and iii) digested tissue clumps. The epithelial phenotype of cultured cells was verified by double immunofluorescence sequential staining to detect cytokeratin, specific antigen for epithelial cells. The expression of oestrogen ( $ER\alpha$ ,  $ER\beta$ ) and progesterone receptors ( $mPR\alpha$ ,  $mPR\beta$ ,  $PR\gamma$  and  $nPRA\&B$ ) genes were investigated by RT-PCR. Flow cytometry was employed to detect TLR2 and TLR4, receptor targets for our proposed of pattern recognition in the cervix.

**Results** Cultures were successfully established using all three methods but cell growth was best from digested tissue clumps, which was employed for subsequent experiments. Primary cells were sub-cultured at least twice. Exclusion of fibroblasts from cultures was confirmed by absence of staining to CD90. We confirmed the expression of all ER and PR genes, as well as TLR2, TLR4 in HECECs.

**Conclusion** HECECs cultured from explants of digested tissue clumps, employing our protocol, yield pure epithelial cell populations, uncontaminated by stromal fibroblasts, suitable for molecular investigations.

#### PL.85 UMBILICAL VEIN INJECTION IN THE MANAGEMENT OF RETAINED PLACENTA-CLOSING THE AUDIT LOOP

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**Background** NICE intrapartum guidelines introduced in 2007 recommended use of umbilical vein Oxytocin injection for management of retained placenta and discredited the use of intravenous Oxytocin infusion (with the exception of its association with postpartum haemorrhage). A local audit in 2009 assessing practise of management of retained placenta revealed high rates of intravenous Oxytocin use and lower rates of intra-umbilical Oxytocin injection. This led to the introduction of local guidelines unified with NICE in 2012. We present the finding of re-audit to assess adherence to local guidelines in particular to the use of Oxytocin in the management of retained placenta.

**Method** The retrospective audit was carried out between 1 May 2012 and 31 August 2012 with 33 cases identified. Data was collected on patient demographics, rates of intravenous and umbilical vein Oxytocin injection use, amongst other parameters.

**Results** There was a reduction in use of intravenous Oxytocin infusion from 57% to 15% suggesting improved adherence to NICE guidance, but interestingly also showed a reduction in use of umbilical vein injection Oxytocin from 28% to 18%.

**Conclusion** This reduction in use of umbilical vein injection can be postulated to be due to the lack of robust evidence supporting this intervention. This is consistent with recent Cochrane review in 2011 that showed a non-statistically significant rate reduction of MROP with umbilical vein injection of Oxytocin. Additionally, newer WHO guidelines introduced in 2012 no longer advocate use of umbilical vein Oxytocin injection as first-line intervention for retained placenta.

#### PL.86 AUDIT OF PLACENTA ACCRETA AND ITS ANTENATAL IMAGING

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**Introduction** Maternal and fetal morbidity and mortality from placenta accreta are considerable and associated with high demands on health resources. Identifying women at risk antenatally can improve their management and reduce complications of this condition before delivery.

**Aim** To ascertain the usefulness of MRI scan in predicting the risk of placenta accreta.

**Method** An audit of maternity notes of women diagnosed with placenta praevia (PP) between Aug 09 and Aug 12. Women with PP and a previous caesarean were considered to be at greater risk of placenta accreta and were audited against the RCOG Greentop Guidelines for antenatal imaging with MRI.

**Results** Of the 72 cases identified, there were eight cases of anterior PP with a history of caesarean section. A further set of notes was of a woman with multiple caesarean sections and mainly posterior PP but the anterior edge of placenta overlying the anterior lower segment.

Of these nine 'high risk' women, 5 women had an MRI scan performed antenatally. In these cases there were 3 true negative MRI scans and 1 was a false negative, with evidence of placenta accreta at delivery. There was 1 reported false positive with no accreta at delivery.

**Discussion** The use of MRI scanning has not been used in all high risk cases. Where used, the predictive value has been 60%. Detailed analysis of features of abnormal placentation is required to improve the predictive value of MRI scans.

#### PL.87 WATER BIRTHS: A POSSIBLE RISK FACTOR FOR OBSTETRIC ANAL SPHINCTER INJURY

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**Background** Obstetric anal sphincter injury (OASI) has steadily increased worldwide in recent years. There has been controversy over water birth and the midwifery practise of "hands off" technique contributing to the increase of OASI injury. Chesterfield Hospital has a high water birth rate (12%) with a rising incidence of OASI. Hence this audit was carried out to identify the possible causes in this rise including water birth as a risk factor.

**Methods** This retrospective audit was performed over period of 13 months. The standard used was the expected incidence of OASI was 1% of all vaginal deliveries (RCOG green-top guidelines). The