The topic of the meeting in May was paediatric day surgery, in particular, post anaesthesia care when the child is at home and returned to the care of their parents.

1. Postoperative management of day case anaesthesia: a review
   Richard Howard, GOSH

Postoperative pain, PONV and behavioural disturbance after day surgery in children are common and should be improved:

- **Pain:**
  - Balanced analgesia, avoiding long acting opioids, and utilising local anaesthetics wherever possible
  - Anaesthetic ‘plan’ to include an oral loading dose of analgesia as premedication, then ‘by the clock’ administration of analgesics whilst pain present.
  - Better support for parents: Procedure specific information, ‘take home packs’, telephone advice, homecare support teams, audit of outcomes

- **PONV:**
  - Identify ‘at risk’ procedures (squint surgery, tonsillectomy, adenoidectomy, orchidopexy, hernia repair) or children (>3 years of age, opioid use, post pubertal females)
  - Combination therapy for at risk patients: ondansetron, dexamethosone

- **Behavioural disturbance:**
  - Good preoperative preparation, sensitive perioperative care, exemplary pain management

2. Audit of information for parents after day surgery
   Isabeau Walker, GOSH

An audit of hospitals represented in the Thames PAG group was carried out. Respondents were asked to complete a questionnaire and to send copies of information given out to parents. The proposed standards were that parents should receive written discharge information to the standard dictated by the Audit Commission, they should be given procedure specific information on pain management, a prescription of take home analgesics
including combination analgesics and specific instructions regarding the timing and appropriate duration of administration of analgesics. There was a 36% response rate to the audit.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Target achieved (% units responding)</th>
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<tbody>
<tr>
<td>Written discharge information</td>
<td>100%</td>
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<tr>
<td>Procedure specific information on pain management</td>
<td>67%</td>
</tr>
<tr>
<td>Take home analgesic prescribed</td>
<td>73%</td>
</tr>
<tr>
<td>Combination analgesics prescribed</td>
<td>60%</td>
</tr>
<tr>
<td>Specific instructions (timing, appropriate duration of administration)</td>
<td>20%</td>
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Examples of poor advice were obtained:
- If your child feels uncomfortable then some paracetamol may help (for dental extractions, circumcision, tonsillectomy or orchidopexy – i.e. standard advice, irrespective of procedure).
- Give your child the pain relief that you usually give them at home (for tonsillectomy, orchidopexy, hernia repair)

Examples of excellent practice were obtained:
- You will have been given analgesics, please give them regularly for the first few days, then reduce the frequency
- Give regular pain relief for the next 14 days (paracetamol/ibuprofen/codeine post tonsillectomy)
- You should give paracetamol, but you may also give ibuprofen/codeine in addition...

The conclusions of the audit were that procedure specific information could be improved, it would be helpful to standardise recommendations for take home prescriptions and the outcomes should be re-audited after implementation.

3. Post operative analgesia following day stay surgery: University Hospital Lewisham
   Helen Harker, SpR South East London School of Anaesthesia

This audit was repeated on three occasions. The findings indicate that postoperative pain control and perioperative organisation has improved by the process of audit and re-audit:
<table>
<thead>
<tr>
<th>Year of audit</th>
<th>Principle findings</th>
<th>Principle recommendations</th>
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<tbody>
<tr>
<td>1995</td>
<td>Preop. fasting too long, discharge times too long (waiting for ttos), unacceptable pain scores e.g. post circumcision</td>
<td>Routine combination analgesia</td>
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<tr>
<td>1999</td>
<td>Improvement in fasting times/discharge times, pain score improved but 28% children had unacceptable analgesia in hospital, 40% at least moderate pain at home</td>
<td>Improvement in advice to parents</td>
</tr>
<tr>
<td>2002</td>
<td>6% children inadequate pain relief in hospital, 12% moderate or severe pain at home, NSAIDs used in 70% cases. Children discharged with analgesics twice as likely to receive them regularly than those relying on medication in the home</td>
<td>Improve provision of ttos and advice on pain management at home</td>
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4. The predictive value of a history of motion sickness on the development of post-operative nausea and vomiting in children aged 1-16 years

Mark Thomas, GOSH

Summary

Background: A history of motion sickness is often regarded as a risk factor for postoperative nausea and vomiting (PONV) in adult practice. The evidence base for this in paediatrics is not so strong. The aim of this study was to establish the predictive value of such a history on the development of PONV following elective surgery.

Methods: We prospectively studied 70 consecutive children (50 day-case and 20 in-patients). In each case a history of motion sickness was sought and any ensuing vomiting was noted. In children of verbal age any incidences of nausea were also noted. Children were followed for 24 hours post-operatively by telephone interview for day-cases and by personal visit for in-patients. The anaesthetic technique was noted but not controlled.

Results: 14 children (20%) gave a history of motion sickness. Overall 20 children vomited (28.6%). With a positive history of motion sickness the incidence of PONV was 64% (9/14) and with a negative history of motion sickness the incidence of PONV was 19.6% (11/56). The overall positive predictive value was 64.3% and the negative predictive value was 80.4%. This gives a sensitivity of 45% and a specificity of 90%.

Conclusions: A positive history of motion sickness is not as strong a positive predictor for the development of PONV in children as we previously thought although a negative history is much better predictor of the lack of ensuing PONV.