NOAD REPORT

Data for 2007
Analysis October 12th 2009

Introduction.

Five years ago, the National Obstetric Anaesthesia Database (NOAD) subcommittee of the OAA decided to simplify the requested data in order to achieve a higher response rate of units than in previous years. A dataset of 16 items related to number and mode of delivery, use of regional analgesia for labour and type of anaesthetic for Caesarean section was produced. From 2006, a further 5 items were added to the initial dataset. These items were related to analgesia for labour pain: initiation and maintenance. Data on primiparity were no longer requested. In spring 2005, 2006, 2007, data for 2004, 2005 and 2006 respectively was requested. Fifty-two percent of maternity units send in data for the year 2004 and 74% of all units send in data for the year 2005. This increased to 82% in 2006.

Two e-mail messages were sent to all lead obstetric anaesthetists of 223 NHS maternity hospitals: the first in August 2008 and the second in November 2008, requesting an excel file to be completed and returned to the NOAD central data collection. Towards the end of 2008 and early 2009, a telephone reminder was made to most hospitals that had not sent in a completed dataset. In early 2009, further e-mail reminders were sent to all non-compliant units on a regular basis until the end of August 2009. We also were able to update (partially) the OAA’s list of lead clinicians and correct e-mail addresses.

Data collection for the year 2007 was closed on October 10th 2009. Up until that moment, 180 units had responded and sent in their (partially) completed dataset. This was a response rate of 81% of all units. These units represent 605,844 mothers that delivered in 2007. Seventy-eight units hospitals were capable of completing the whole dataset.

Mode of delivery.

All units were capable of sending in complete data on the number of mothers that delivered and on the number of Caesarean sections that were performed, except for 1 unit that only returned data on the number of deliveries. A total of 605,844 mothers delivered in 2007 in 180 units. The smallest unit had 150 deliveries and the largest 10,925.

The Caesarean section rate was 24.0% (144,341 C-sections / 602,346 deliveries in 179 units). The vaginal delivery rate was 76.0%. The highest C-section rate of a single unit was 34.6%, the lowest in a single unit was 9.8%. Three units did not sent in data related to elective C-sections. The number of category 4 (elective) Caesarean sections was 58,473 in the remaining units 177 units (having performed 142,114 C-sections). This means that 41.1% of C-sections were planned in these units.

Eleven units did not give data on the number of instrumental vaginal deliveries. The 169 units that did give information represent 572,176 deliveries. The Caesarean section rate in these units was 24.0% (142,114 C-
Regional analgesia for labour.

Seven units did not produce data on the number of patients that received regional analgesia for labour. The units that did report data represent 575,917 deliveries. In these units, 127,754 patients received regional analgesia for labour (22.2% regional analgesia rate). In 3 units no regional analgesia service was offered to patients (Units with 150, 250 and 1,119 deliveries annually). The highest regional analgesia rate in a single unit was 47.0%. The latter unit performed 5,129 deliveries. We could not establish a correlation between the rate of Caesarean deliveries and the regional analgesia rate.

A total of 147 units produced data on the way regional analgesia for labour was initiated. These hospitals represent 486,621 deliveries and 110,072 regional analgesia techniques for labour pain relief. The vast majority of patients received conventional epidural analgesia (104,998 patients; 95.4%), a minority received CSE (4,094 patients; 3.7%) and a further 1,021 patients received other techniques to initiate analgesia (0.9%).

A total of 152 units send in data related to the maintenance of labour analgesia. These hospitals represent 503,140 deliveries and 112,844 regional analgesia techniques for labour pain relief. Intermittent top-ups were given in 44,953 patients (39.8%), a continuous epidural infusion was given in 43,930 patients (38.9%) and patient controlled epidural analgesia (PCEA) was used in 22,599 mothers (20.0%). Missing data was found to be for 1,362 patients (1.2%). Of the patients that received PCEA, 14,380 received PCEA with a background infusion and the remainder (8,219) received pure PCEA.

Anaesthesia for Caesarean section.

A total of 119 units replied with complete datasets concerning type of anaesthesia used for Caesarean section, apart from information on de novo general anaesthesia, which was not filled in by many units. These hospitals represent 396,726 deliveries and 94,859 Caesarean sections. We received information with respect to type of anaesthesia on 94,376 sections. So 483 reported C-sections were missing in terms of anaesthesia type. Single shot spinal was used in 56,260 patients (59.6%), epidural catheters were topped-up in 20,866 patients (22.1%), general anaesthesia was used in 9,583 patients (10.1%), de novo CSE’s were used in 6,872 patients (7.2%) and 795 patients received a de novo epidural catheter (0.8%).

Accidental dural puncture (ADP) and blood patch (BP).

A total of 132 units send in data related to ADP and BP, representing 444,708 deliveries and 165,867 neuraxial block performed. In 916 patients an ADP occurred (ADP rate of 0.55%). In 612 patients (67%) a blood patch was required.