

General anaesthesia for elective caesarean section in a tertiary centre: a 2 year survey

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Introduction:

- Incidence of GA for Caesarean Section is on the decline.
- National Obstetric Data for 2012 reported **7.6%** of overall GA rate[1].
- RCOA advises that the incidence of GA should be < 50% in Category 1 and **< 5% in Category 4**[2].
- Aim of survey was to look at the factors leading to GA for elective caesarean sections in our trust and to act if any avoidable.

Methods:

- Retrospective study for a **2-year period** and looked at all GA cases for elective sections via electronic record system.
- Demographic and patient factors including BMI.
- Factors leading to GA for elective caesarean section and any attempts at regional anaesthesia.

Results:

- Incidence of GA for elective section was **1.8% (34 out of 1880 elective CS)**

Indication of GA	No of patients(%)
Failed regional	17 (50%)
Regional contraindicated	8(23%)
Patient request	7(21%)
Other	2 (6%)

Failed regional (82% patients received spinal and 18% CSE)	
Cause	**No of patients**
Technical difficulties	4 (24%)
Inadequate block	7 (21%)
Pain after start of Sx (Av 60min)	6 (17%)

Regional contraindicated

- Technical issues like spinal fusion, rods
- Coagulation issues
- Neurofibromatosis
- History of anaphylaxis to LA

Patient request

- Previous backache
- Needle phobia
- Anxiety

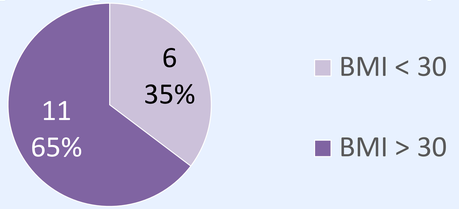
Other

- Prolonged/difficult surgery
- Haemodynamic instability

- Ultrasound was not used in any case to improve success rate.
- Only one patient was offered repeat epidural after inadequate spinal.

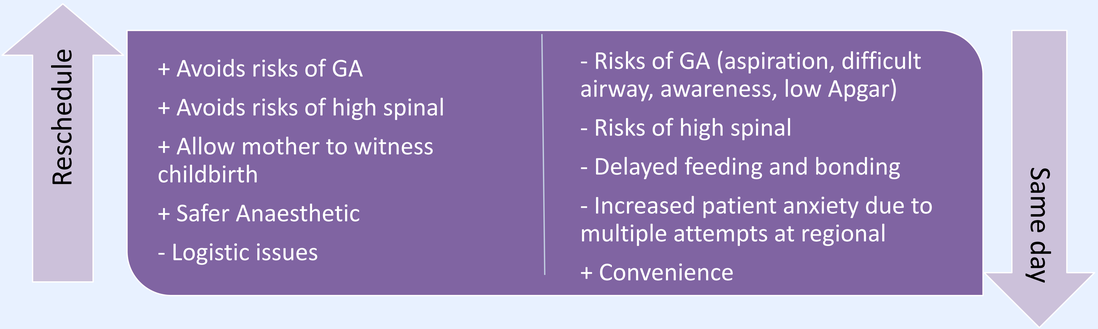
Results:

- 65% patients had high BMI > 30 in failed regional group.
- Although failure of regional was high in larger BMI group but it was **not statistically significant**
- (p-value 0.22 using Chi Square test).



Discussion:

- Despite low incidence of GA in elective sections avoidable factors include:
  - **Good preoperative counselling and patient education** allay patient anxiety and encourage shared decision making
  - **Enhancing use of ultrasound** for technically difficult regional
  - **Early identification of block failure and consideration for reattempting regional**
  - Should we consider **rescheduling the elective section** for another date?



References:

1. National Obstetric Anaesthesia Data for 2012 – A report http://www.oaa-anaes.ac.uk › assets › cms › files

2. M Chereshneva, C Johnston, JR Colvin, CJ Peden. Raising the Standards: RCoA quality improvement compendium. Caesarean section anaesthesia: technique and failure rate. London: RCOA; 2020. pp. 254-5