

General anaesthesia for elective caesarean section in a tertiary referral obstetric centre



25

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Introduction:

The Royal College of Anaesthetists (RCoA) recommend that <5% of elective caesarean sections (ELCS) should be performed using general anaesthesia (GA).¹ In the Princess Royal Maternity Unit (PRMU), rates of GA for ELCS are unknown.

Aims

To determine: (i) the prevalence of planned GA in women undergoing ELCS in PRMU, ii) indication for GA in these women, (iii) resuscitation rates/Apgar scores of neonates born to these mothers.



Figure 2 - Non-medical factors contributing to MR for GA

Methods:

Caldicott approval was obtained for retrospective case note review of patients undergoing ELCS under planned GA from 1/1/17-31/12/20 at PRMU. We identified women who underwent GA for elective caesarean section over the past four years using the theatre utilisation system (OPERA). Community Health Index numbers were used to access electronic health records (Clinical Portal and Badgernet) and information collected on; demographics; comorbidities; indications for ELCS/GA; and neonatal outcomes. Descriptive statistics were performed on anonymised data using Excel.

Results

50/3924 (1.3%) of ELCS were performed under GA during the 4-year study period. The most common indication for GA was maternal request, accounting for 20/50 (40%) of cases. The prevalence did not increase during the study period. Neurological (mainly previous back surgery) and haematological conditions accounted for the majority of remaining cases (Figure 1). Half of women requesting GA for ELCS had ELCS at maternal request. Women requesting GA were three times as likely to have a psychiatric diagnosis or have a history of obstetric problems (eg PPH, 3rd degree tear). Needle phobia and "prior" experience were the most common reasons for requesting GA (Figure 2).



Table 1 - Neonatal outcomes

	Neonates (n=39)
Resuscitation	11 (28.2)
Admitted to SCBU	4 (10.3)
Admitted to NICU	1 (2.6)
Apgar Score 1 min	9.0 (1-9)
Apgar Score 5 min	9.0 (5-10)
Apgar score <7 (1 min)	14 (35.9)
Apgar score <7 (5 min)	7 (18.0)
Data for categorical variable presented as n (%).	
Data presented as median (range)	

Conclusions:

Rates of GA for ELCS are within the <5% target recommended by the RCoA and are not increasing. The most common indication for GA was maternal request. Women in this group were more likely to have a history of psychiatric or obstetric problems. Mechanisms to support these women in their decision making should be explored locally.

We had data for 39 neonates (Table 1). Eleven (28.2%) neonates required resuscitation, 7 (18%) had Apgar <7 at 5 mins, and 5 (12.8%) required admission to the neonatal unit. Data were limited by their retrospective nature and small sample size.

Declaration of interests

The authors declare no potential conflicts of interest with respect to research or authorship of this poster.

References:

1. Raising the Standards: Quality Improvement Compendium. Obstetric practice.

Available at: https://rcoa.ac.uk/sites/default/files/documents/2020-

08/21075%20RCoA%20Audit%20Recipe%20Book_16%20Section%20B.7_p241-