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Rapid Sequence Spinal
Encouraging open minded obstetric anaesthesia in the era of COVID-19

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Introduction

In 2010, Kinsella *et al* described the original rapid sequence spinal (RSS) technique as an alternative to general anaesthesia (GA) for category 1 caesarean section (CS).[1] The practice of RSS has been reconsidered during the COVID-19 pandemic to avoid 'aerosol generating procedures', namely intubation or extubation, in a parturient who is COVID-19 positive.[2] In appropriate cases, RSS may be performed to minimise the spread of COVID-19 to staff and to preserve the respiratory function of the patient.

Methods

Following audit department approval, an online questionnaire was developed using the SurveyPlanet platform© and disseminated via email to 202 members of the labour ward team in July 2020. This included anaesthetists and obstetricians of all grades, midwives and operating department practitioners (ODPs). Statistical analysis was performed using percentages and chi squared test, with significance set at $p<0.05$.

Results

Overall, 52 questionnaires were completed, giving a response rate of 25%. Of those who responded, 65% were anaesthetists (Fig.1), of whom 22.4% regularly practiced obstetric anaesthesia. From all the responses, 63.3% were familiar with the concept of RSS, with 31% reporting they had performed it themselves. Thirty percent understood positioning the patient was at the discretion of the anaesthetist and 61.8% were aware that it was acceptable to use opioids if it did not cause further delay to the block. Regarding block height, only 14.3% knew that T10 was the accepted minimum block (Fig.2). Non anaesthetists were more likely to choose a different block height to T10 (p=0.0013). When asked if they would consider using RSS in a category 1 CS, 82% responded they would. Non consultant anaesthetists were more likely to consider a RSS than consultant anaesthetists (p=0.0297). The free text comments recognised the intended safety benefits of the technique to both mother and baby irrespective of COVID-19.

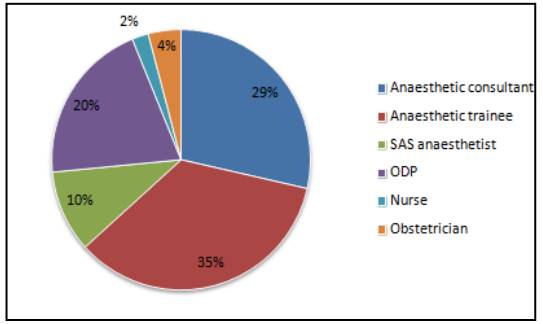


Fig. 1 – Multidisciplinary survey cohort

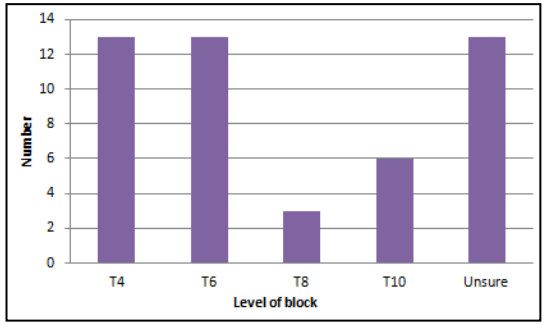


Fig. 2 – Minimum accepted block height

Discussion

Even though the need for a GA for CS may never be eliminated completely, the notion of providing regional anaesthesia in an emergency situation needs to be developed further. Although the low response rate was a reflection of an anonymous online survey, our work highlighted that RSS should not be considered an anaesthetic only concept and that the wider multidisciplinary team should be involved in the training and practice of the technique. The tendency for non consultant anaesthetists to consider RSS may reflect more frequent shifts on labour ward and different practices encountered in different units. We aim to build on this enthusiasm for RSS to develop a forum to deliver education and training to all staff on labour ward. We would hope to increase awareness, confidence and practice of the technique in the future, both during and outside of the pandemic.

References

1. Kinsella SM, Girgirah K, Scrutton MJL. Rapid sequence spinal for category 1 urgency caesarean section: a case series. *Anaesthesia* 2010; **65**:664 -669.
2. Varandas JS, Dias R, Mendes AB. New indication for an old anaesthetic technique: could we consider now rapid sequence spinal anaesthesia in a COVID-19 time? *Reg Anaesth Pain Med* 2021;**46**:192.