

Impact of COVID-19 pandemic on anaesthetic technique for caesarean section

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Introduction

COVID-19 is an international public health emergency leading to dramatic shifts in health care. The main challenges for obstetric anaesthesia have been rapidly changing theatre pathways, measures implemented to prevent spread of infection and use of personal protective equipment (PPE). We investigated how the pandemic and resulting measures influenced the choice of anaesthetic technique for caesarean section (CS) and compared practice to RCOA standards and pre -COVID performance at the University Hospitals of Leicester (UHL).

Methods

Data were collected retrospectively from the Euroking E3 database from both maternity units in UHL covering the period from 30 March 2020 to 18 May 2020 for all women undergoing CS. Findings were compared to RCOA standards for the proportion of regional anaesthesia (RA), conversion rates and targets for decision -to-delivery time. Results were also compared to a recent audit of local practice enabling us to directly identify the impact of the pandemic.

Results

Data from 395 patients were included. 97.5% of CS were performed under RA. Although there was an increase in the proportion of category 1 CS done under RA (87.1%), there was also an increase in the RA to general conversion rate (6.5%). Mean decision-to-delivery time was 28 min with 68% of deliveries done within the recommended 30 min interval. No significant changes in anaesthetic technique or conversion rates appeared in categories 2-4 CS.

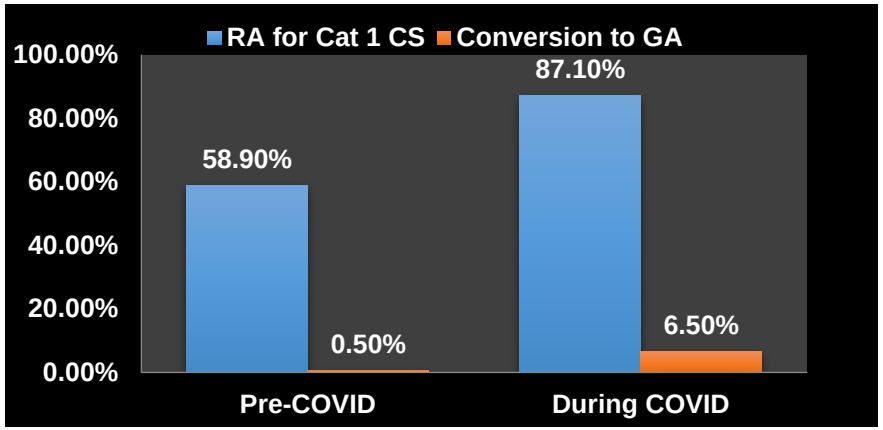


Fig. 1: Regional anaesthesia conversion for category 1 CS

Discussion

An unchanged proportion of RA in categories 2-4 CS reflected adherence to RCOA standards and widespread preference of RA. In the pandemic, the upward trend in RA for category 1 CS was attributed to early active encouragement of epidurals for labour and choosing regional as a default option unless contraindicated to minimise delays due to PPE. Failure to meet decision-to-delivery time standards is largely due to the pandemic-induced changes in theatre pathways and their rapid evolvement at the beginning of the pandemic. No shortterm clinical impact on the mothers or the neonates was noted during the audit period.

References

1. Bampoe S, Odor PM, Lucas DN. Novel coronavirus SARS-CoV-2 and COVID-19. Practice recommendations for obstetric anaesthesia: what we have learned thus far. Int J Obstet Anesth 2020;43:1-8.

2. RCOG. Coronavirus (COVID-19) Infection And Pregnancy: 2020. https://www.rcog.org.uk/coronavirus-pregnancy