

ANAESTHETIC OUTCOMES IN PREGNANCY COMPLICATED BY SARS-CoV2

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Introduction

In December 2019, the emergence of a novel coronavirus (SARS-CoV-2) was reported in China. The World Health Organisation formally recognised this outbreak as a pandemic in March 2020. Despite a large number of case reports and series on COVID -19 in pregnancy, there is a paucity of information about anaesthetic outcomes. We aimed to conduct a secondary analysis for anaesthetic outcomes from a large systematic review of COVID-19 in pregnancy[1].

Methods

All manuscripts in the largest systematic review to date of COVID-19 in pregnancy were reviewed[1]. Those that did not describe the clinical course or outcome in the mother were excluded. The remaining studies were analysed for details of anaesthesia, including anaesthesia for caesarean section (CS) and labour analgesia.

Results

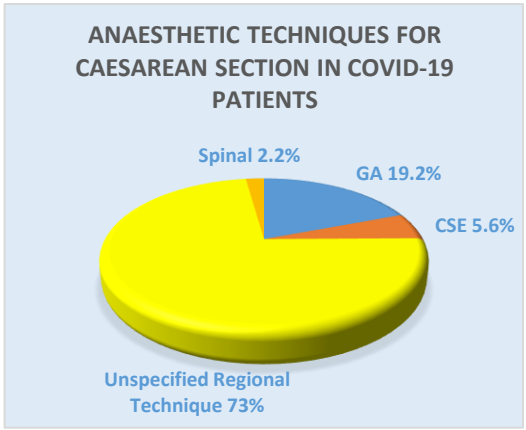
A total of 86 manuscripts were reviewed. Three papers not in the English language were excluded. A further 16 manuscripts in which maternal clinical course or outcome were not a primary focus of the case report or series were also excluded, leaving 67 manuscripts, and a total of 2260 patients. Of these 67 manuscripts, 15 explicitly discussed the provision of anaesthesia, in 182 patients. Anaesthesia for CS was described in 180 patients; 34 (19%) of these patients received general anaesthesia, 144 (80%) received neuraxial anaesthesia, and two (1%) patients received general anaesthesia after initial neuraxial anaesthesia.

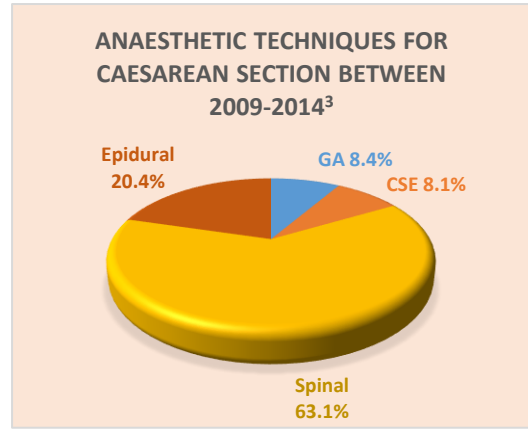
In 30 of the 34 patients who had a CS under general anaesthesia, it is unclear if the general anaesthetic was administered for maternal respiratory distress or as a primary choice for CS. Of the 144 patients who had regional anaesthesia for CS, 130 (90%) had an unspecified neuraxial technique, ten (8%) received a combined spinal and epidural and four (2%) had a single shot spinal.

Epidural for labour analgesia was described in two patients. One of these patients delivered spontaneously and one via emergency CS, with the mode of anaesthesia for CS not described. There were no reports of anaesthetic complications.

Discussion

Information to date suggests that the provision of anaesthesia for labour and CS does not require significant modification. Early concerns that COVID-19 may be commonly associated with thrombocytopenia and prohibit neuraxial anaesthesia appear unfounded[2]. However, descriptions of thrombocytopenia in patients with even mild COVID-19 would support routine assessment of platelet counts before neuraxial anaesthesia. General anaesthesia appears to have been used more frequently for emergency CS, possible reflecting care of women with severe respiratory compromise.





A comparison of techniques used for caesarean section in patients with Covid-19 compared with techniques used between 2009 and 2014[3]. The majority technique used in both studies shows regional anaesthesia as the preferred choice.

References

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