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## CORRESPONDENCE

### COVID-19 and obstetric anaesthetic services in a tertiary maternity care unit



The ongoing COVID-19 outbreak was declared a pandemic by the World Health Organization on March 11, 2020. Specific healthcare strategies and guidelines have been evolving since then to curb the impact of the pandemic. Almost overnight, all elective anaesthetic services were stopped and resources were diverted to provide support to services caring for critically ill patients with COVID-19.

At the onset of the pandemic, numerous media reports predicted maternity services would be affected, with concerns that labour epidural services would be particularly impacted.<sup>1</sup> A nation-wide snapshot survey in the UK, published in May 2020, reassured the public that the provision of epidural analgesia to labouring women was not being adversely affected by the COVID-19 pandemic.<sup>2</sup> The Royal College of Obstetricians and Gynaecologists recommended epidural labour analgesia in suspected or confirmed COVID-19 patients in order to minimise the need for general anaesthesia for urgent delivery.<sup>3</sup>

Our tertiary referral centre for maternity care in the region cares for approximately 8200 childbearing women annually, making it one of the largest maternity services in the UK. Consultant anaesthetist-delivered care is available on site for 12 h during the daytime (0800 h–2000 h) and on-call overnight (after 2000 h)

when Staff Grade, Associate Specialist and Specialty Doctors are present on site. We hypothesised that there would be no significant difference in the provision of obstetric anaesthetic services in our maternity unit in the pre COVID-19 period compared with during the pandemic.

We analysed retrospective data obtained from the anaesthesia dashboard and cases register to test our hypothesis. All anaesthetic interventions over three months of the reference period from October 1 to December 31, 2019 (pre COVID-19) were compared with a three-month pandemic period from March 12 to June 11, 2020 (COVID-19). Data included were the number of labour epidurals performed, the epidural response times and the type of anaesthesia used for elective and emergency obstetric interventions.

There was no significant difference between the number of labour epidural analgesia techniques performed before and during the pandemic (Table 1). Achieving an epidural response time of <30 min was >90% during both periods, which conforms to the National Institute for Health and Care Excellence guidelines and Royal College of Anaesthetists (RCOA) audit standards.<sup>4</sup> There was an overall reduction in the emergency general anaesthetic rate, as was recommended in the recent guidelines during the COVID-19 pandemic.<sup>5</sup> There was a slight increase in the proportion of general anaesthesia for elective caesarean section, primarily because of patient indications that precluded provision of neuraxial anaesthesia. Fewer than 5% of elective

**Table 1** Number of obstetric anaesthetic interventions pre COVID-19 and during the COVID-19 pandemic

	Pre COVID-19	COVID-19
<i>Elective CS</i>		
Total	186	172
General anaesthesia	2 (1.1%)	4 (2.3%)
Neuraxial anaesthesia	184	168
<i>Emergencies (excluding category I CS)</i>		
Total	470	394
General anaesthesia	31 (9.1%)	11 (4.2%)
Neuraxial anaesthesia	439	383
<i>Category I CS</i>		
Total	67	58
General anaesthesia	18	08
Neuraxial anaesthesia	49	50
<i>Epidural analgesia</i>		
Total	518	489
Epidural response time <30 min	500 (96.5%)	470 (96.1%)

CS: caesarean section.

caesarean sections and fewer than 15% of emergencies were performed under general anaesthesia, which is also in accordance with the RCOA audit standard.<sup>4</sup>

We conclude that the COVID-19 pandemic did not cause any significant disruption or diminution in the obstetric anaesthetic case load or service provision in our maternity unit. The delivery of obstetric anaesthetic services for the duration of the pandemic was managed entirely by consultant anaesthetists, including for out-of-hours emergencies, since Staff and Associate Specialist grade doctors were redeployed to the critical care units. Healthcare workers went outside their comfort zone to face the challenges that were posed by the pandemic in continuing maternity services uninterrupted. A national multicentre data analysis with a larger sample population has been proposed as a means of verifying our findings.

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