Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Decision-making on the labour ward during the COVID-19 pandemic

The coronavirus disease-2019 (COVID-19) pandemic has brought challenges to the management of intrapartum care at both an individual level for women with suspected infection and on a wider level as a result of reorganisation of services and altered departmental protocols.[1] We undertook a preliminary analysis of the way in which provision of care in our unit affected obstetric outcomes and anaesthetic practice.

Mode of delivery and anaesthetic interventions during a nine-week period at the height of the COVID-19 pandemic (March 23, 2020 to May 24, 2020) were compared with those during a nine-week period prior to the pandemic (October 21, 2019 to December 2, 2019). During the COVID-19 pandemic we saw a significant difference in the mode of delivery (Table 1). The rate of spontaneous vaginal delivery (SVD) fell from 56.2% to 49.0%; the rates of operative vaginal delivery (OVD) and caesarean delivery (CD) both increased. Our analysis was underpowered to detect a significant change in the categorisation of urgency of CD between the two periods, but there was a trend towards an increase in category 2.

In the pre-COVID-19 period, the general anaesthetic (GA) rate for CD was 3.7%. Ten CDs were carried out under GA and four other procedures were performed under GA, including manual removal of placenta, laparotomy for postpartum haemorrhage, and drain removal. During the pandemic, the GA rate was 2.0%, and GA was used only for CD and not for other indications. The proportion of category 1 CDs performed under GA was 25.0% before the pandemic and 5.3% during the pandemic. Overall, our numbers for GA are too small for meaningful statistical analysis.

This is a small study and numbers are insufficient to draw any solid conclusions. A number of factors may be responsible for the decrease in SVD, increase in OVD and increase in CD during COVID-19. At the height of the pandemic in the spring of 2020, when population prevalence was high and rapid testing was not readily available, many labouring women were treated as suspected SARS-CoV-2 infection. The Royal College of Obstetricians and Gynaecologists (RCOG) guidelines do not recommend a particular mode of delivery in women with COVID-19, although OVD should be considered to shorten the second stage in women who become exhausted.[2] We speculate that obstetricians might have been more likely to expedite delivery particularly because at the time it was not clear how labour might impact the course of COVID-19. Evidence of changes to obstetric decision-making and early delivery has been highlighted in a survey by Peña et al.[3]

Anaesthetic practice may also have changed due to COVID-19. The decreased use of GA in obstetric

Table 1 Outcomes prior to and during the COVID-19 pandemic

	Prior to pandemic	During pandemic	*P*-value
Deliveries total, n	868	858	-
Mode of delivery			
Spontaneous vaginal	488 (56.2)	420 (49.0)	0.01
Operative vaginal	112 (12.9)	133 (15.5)	
Caesarean	268 (30.9)	305 (35.5)	
Caesarean urgency			
Category 1[a]	16 (6.0)	19 (6.2)	0.33
Category 2[a]	77 (28.7)	109 (35.7)	
Category 3[a]	31 (11.6)	31 (10.2)	
Category 4[a]	144 (53.7)	146 (47.9)	
General anaesthesia, total, n	14	6	–
Caesarean delivery[a]	10 (3.7)	6 (2.0)	
Category 1[b]	4 (25.0)	1 (5.3)	
Category 2-3[b]	3 (2.8)	2 (1.4)	
Category 4[b]	3 (2.1)	3 (2.1)	
Other	4	0	

Data presented as n or n (%). *P*-values are calculated using the chi-square test.[a]Percentages are of the total number of caesarean deliveries. [b]Percentages are of the total number of general anaesthetics in each category of caesarean delivery.

anaesthesia has been recently described by Dixon et al.[4] Due to the level of personal protective equipment (PPE) needed for instrumentation of the airway,[5] GA may no longer be the quickest option in cases of suspected fetal compromise.[2] Furthermore, because GA is an aerosol-generating procedure, and therefore poses a greater risk to staff, we decided to reserve GA for maternal indications only. During this period, the RCOG advised that time taken to don PPE would impact delivery time in an emergency and should be taken into account in decision-making.[2] Our local Trust guidelines emphasise that donning of appropriate PPE should not be compromised by the urgency of the case. Women were warned that it might not be possible to achieve a decision-to-delivery interval of 30 min in case of fetal compromise. We recommend that women at risk of requiring operative intervention actively be offered neuraxial labour analgesia to reduce the risk of requiring GA for intrapartum CD.

The increased anaesthetic workload during the height of the pandemic necessitated additional anaesthetic cover. At any given time there was a minimum of two anaesthetists on duty, one of whom was a consultant. Cover has since reverted to the pre-COVID arrangement, with one duty anaesthetist registrar overnight and a consultant on call from home. If the increase in OVD and CD persists, a review of anaesthetic staffing levels is prudent.

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