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Int J Obstet Anesth, 50 (2022) 103310 doi:10.1016/j.ijoa.2022.103310

## **P.15** Comparing the Delta and Omicron waves - are calmer waters ahead?

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**Introduction:** The SARS-CoV-2 pandemic has disproportionately affected obstetric patients, with outcomes differing between viral variants. The Delta variant was associated with more severe disease than previous variants [1]. The Omicron variant exhibits increased transmissibility and became predominant by mid-December 2021 [2]. We aimed to compare outcomes between women presenting in Delta and Omicron waves at our tertiary obstetric centre.

**Methods:** Caldicott Guardian approval was obtained and ethical approval waived. All women admitted to Princess Royal Maternity, Glasgow, between 01/05/2021–30/11/2021 (Delta) and 01/12/2021–27/01/2022 (Omicron) with a positive SARS-CoV-2 test were included. Women were assigned a primary diagnosis of COVID-19 if admitted for >24 h due to symptoms of SARS-CoV-2 infection. Advanced respiratory support was defined as continuous positive airway pressure, high flow nasal oxygen or ventilation.

**Results:** Forty-eight women had confirmed SARS-CoV-2 infection during the 7-month Delta wave, compared with 29 in the 2-month Omicron wave. Women were more likely have COVID-19 as a primary diagnosis in the Delta compared with Omicron wave (Table). Patients admitted during the Omicron compared with Delta wave were less likely to require advanced respiratory support or be admitted to critical care. There were two emergent deliveries performed in critical care during the Delta wave, and none in the Omicron wave.

 Table:
 Characteristics and outcomes of women admitted with a positive SARS-CoV-2 test.

	Delta (n = 48)	Omicron (n=29)	P value
Age (years)	31 [27–34]	28 [26-35]	0.30
Gestation at SARS-CoV-2 diagnosis (weeks)	34 [25–38]	36 [33–38]	0.09
Primary diagnosis of COVID-19	29/48 (60%)	10/29 (34%)	0.03
Zero vaccines at time of admission	42/48 (88%)	21/29 (72%)	0.10
Oxygen therapy	20/48 (42%)	7/29 (24%)	0.12
Advanced respiratory support	7/48 (15%)	0/29 (0%)	0.04
Admission to critical care unit	9/48 (19%)	0/29 (0%)	0.01
Delivered in critical care unit	2/48 (4%)	0/29 (0%)	0.50

Data are median [IQR] or n (%); analyses with Student t-tests, Wilcoxon rank sum, Fisher exact and Chi-squared testing.

**Discussion:** We observed reduced disease severity during the Omicron wave: women admitted during this time were more likely to have SARS-CoV-2 as an incidental diagnosis, with reduced requirements for advanced respiratory support and critical care. The increased number of cases likely reflects the high transmissibility of this variant, having implications for resource management and service provision. Our data are from a single centre, and we await further data on the effect of the Omicron variant in obstetric patients.

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Int J Obstet Anesth, 50 (2022) 103311 doi:10.1016/j.ijoa.2022.103311

## **P.16** Breaking down the barriers to COVID-19 vaccination in the obstetric population

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**Introduction:** In January 2022, a joint campaign between the Royal College of Midwives and the Royal College of Obstetricians and Gynaecologists was launched urging pregnant women to get vaccinated against COVID-19. Data from the UK Health Security Agency showed poor uptake in this group, while 96.3% pregnant women who were hospitalised or admitted to intensive care with COVID-19 between May 2021 and October 2021 were unvaccinated.

**Methods:** We initiated a survey in antenatal clinics across Heartlands, Good Hope and Solihull Hospitals in the form of a questionnaire asking patients current vaccination state and rationale for current vaccination status. Any concerns were addressed and the vaccination was offered to patients and their birth partners by a team of staff available to administer vaccine on site. The survey was approved by our hospital's audit department.

**Results:** The questionnaire was answered by 165 patients across all three sites. 71 patients (43%) were not vaccinated at the time of interview. In this group, four patients (5.6%) accepted to be vaccinated on site, 47 patients (66.2%) declined vaccination, 18 patients (25.4%) would consider future vaccination as they are better informed, and one patient was not eligible for vaccination due to recent COVID-19 infection. Concerns about vaccine safety during pregnancy, vaccine side effects and being against vaccinations were the most cited reasons for not getting vaccinated. With the remaining patients, 94 (57%) had at least one dose. In this group, 22 patients (23.4%) accepted the vaccination, 28 patients (29.8%) were not eligible (either they had recent COVID-19 infection or had received booster vaccine), 28 patients (29.8%) declined having a vaccine, and 21 patients (22.3%) were considering getting the next dose postnatally. Concerns regarding vaccine safety during pregnancy and potential vaccine side effects were the reasons for declining further vaccination doses.

**Discussion:** Face-to-face conversation contributed to improving knowledge about vaccine safety during pregnancy, and 26 patients received the vaccine at the clinic after this intervention. With the project ongoing, we aim to give more women informed choices over receiving the COVID-19 vaccination.

Int J Obstet Anesth, 50 (2022) 103312 doi:10.1016/j.ijoa.2022.103312