P15 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 (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

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

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.

References