Recognition and Treatment of Severe COVID-19 in Pregnancy: Lessons from a Cohort of 69 Infected Women and an Evidence-Based Guideline

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Abstract

Objectives: To determine clinical and laboratory features of pregnant woman with COVID-19 who require respiratory support. To recommend a management strategy that optimises maternal and fetal outcomes. Design: An observational cohort study of 7000 maternities between 1st March and 1st July 2020. Setting: Five maternity centres across a maternal medicine network in north-central London, UK Population: 69 pregnant women with confirmed acute SARS-COV2 Methods: Review of electronic healthcare records Main Outcome Measures: Clinical and laboratory features, maternal and fetal outcomes. Results: Respiratory support was needed by 15/69 . This cohort was more likely to present with dyspnoea (10/15 vs 10/54, p<0.001), a lower lymphocyte count (0.9?0.1 vs 1.4?0.1 x 109 cells/L; p<0.01) and hypokalaemia (3.8?0.1 vs 4.0?0.1 mmol/l, p<0.05). Radiological evidence of lung consolidation did not identify women in need of respiratory support. Women on respiratory support underwent childbirth at an earlier gestation than those who did not (36+4 vs 39+5 weeks, p<0.001), and required emergency c-section (6/15 vs 8/54, p<0.05). Childbirth did not improve respiratory function in those with severe disease, with 3 women remaining on invasive ventilation despite childbirth. Conclusions: Routine clinical data can identify pregnant women at risk of severe COVID-19. Pregnant women should be offered the same treatment as non-pregnant patients but iatrogenic childbirth should not be the default for women with severe disease. We propose a management pathway for pregnant women with severe COVID-19.

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