Pregnancy and COVID 19 : A Case series at Royal Derby Hospital

M Elkhyat, F Eltinay, B Elwir*, S Botros

Anaesthetics, Royal Derby Hospital, University Hospitals of Derby and Burton NHS Trust, UK, * Emergency medicine, Royal Derby Hospital, University Hospitals of Derby and Burton NHS Trust, UK

Introduction: Recent data show pregnancy to be a risk factor for more severe COVID-19, anatomic changes occur in pregnancy which may affect the management of the patient with COVID-19. The upper airway becomes edematous and friable in pregnancy making intubation more difficult.[1] Pregnancy is a prothrombotic state, as is COVID-19.[2] An increased incidence of preeclampsia has been described in women with COVID, but some features of COVID-19 infection may mimic preeclampsia. Elevated liver enzymes, thrombocytopenia, and a prolonged Aptt can be seen with both diseases.

Methods: A retrospective audit of pregnant females with COVID-19 required ICU admission between March 2020- January 2022 at Royal Derby Hospital, with results from cases analysed as respect to need for intubation, mode of delivery, medical management as dexamethasone and tocilizumab and past medical history.

Results: 7 cases needed ICU care, one case was morbidly obese, all cases needed dexamethasone, none required ECMO, all delivered by LSCS, one neonatal death.



Cases	PMH	Intubated	Mode of delivery	Medication received	Gestational age
1	Asthma	4 Days	CAT 2 LSCS	Dexamethasone Tocilizumab	27 weeks
2	No PMH	3 Days	CAT 2 LSCS	Dexamethasone Tocilizumab	30+3 weeks
3	No PMH	N	CAT 2 LSCS	Dexamethasone	38 weeks
4	No PMH	1 Day	CAT 2 LSCS	Dexamethasone	36 weeks
5	No PMH	1 Day	CAT 2 LSCS	Dexamethasone Tocilizumab	33+2 weeks
6	Depression, high BMI	12 days	CAT 2 LSCS	Dexamethasone Tocilizumab	28 weeks
7	No PMH	2 Days	CAT 3 LSCS	Dexamethasone	37 Weeks

Discussion: Proven therapies (such as corticosteroids and tocilizumab) should be offered to pregnant and breast-feeding women as in the non-pregnant population. Women should receive multidisciplinary care with input from senior physicians and early escalation when required.

References:

1. Callaghan WM, Creanga AA, Jamieson DJ. Pregnancy-related mortality resulting from influenza in the United States during the 2009-2010 pandemic. Obstet Gynecology 2015; 126:486–490.

2. Schwartz DA, Graham AL. Potential maternal and infant outcomes from (Wuhan) coronavirus 2019-nCoV infecting pregnant women: lessons from SARS, MERS, and other human coronavirus infections. Viruses 2020; 12:194