

Category : **Respiratory: mechanical ventilation**

A106 - Extracorporeal membrane oxygenation in pregnant women with covid-19: a case series

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Introduction:

Extracorporeal membrane oxygenation (ECMO) is important in the management of severe cardiac and pulmonary dysfunction when conventional methods fail. To study the outcome of pregnant women with severe COVID-19 ARDS who required ECMO.

Methods:

All patients were pregnant, admitted with COVID-19 and received ECMO in the intensive care unit (ICU) at Jahra hospital from September 2020 to May 2021 were included in this study and followed prospectively

Results:

29 pregnant women were in the ICU, 18 needed invasive ventilation. Out of those 18 patients, 10 required invasive ventilation, followed by ECMO. One patient died after abortion during ECMO and 9 patients discharged home.

The median age was 32 years (IQR, 27 to 40) and a median Acute Physiology and Chronic Health Evaluation II score was 27 (IQR, 23 to 30). The gestational age at delivery was 33 weeks (range, 22 to 36 weeks).

The indications for ECMO were severe COVID-19 ARDS (n = 8). One patient had massive pulmonary embolism, requiring VA-ECMO and local thrombolysis.

All patients were endotracheally intubated for a median of 3 days (IQR, 2 to 5 days) before starting ECMO.

Four patients delivered while on ECMO. One patient died who had reduced right ventricular function and was managed with VA-ECMO, dobutamine, and noradrenaline.

One patient aborted her fetus while on ECMO, and 9 patients underwent CS.

The 9 patients recovered and were successfully weaned from the combination of early mechanical ventilation and ECMO.

Conclusion:

ECMO has been used successfully in pregnant women with severe COVID-19 and severe hypoxia in our ECMO center. The high maternal and fetal survival rates in this prospective observational study suggest that the benefits of managing maternal and fetal hypoxia due to COVID-19 with ECMO outweigh the potential risks

References:

Allotey J, Stallings E, et al. Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: living systematic review and meta-analysis. *BMJ* 2020; 370:m3320.