

Critical Care Management of Obstetric Patients: the importance of the Multidisciplinary Team

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Aim

To review care provided to critically ill obstetric patients admitted to a General Intensive Care Unit in a London hospital with a high-risk obstetric and maternal medicine service over a two year period.

Methods

A retrospective review was conducted of electronic health records to identify care provided to obstetric patients admitted to the intensive care unit after 22 weeks gestation or in the first six weeks following delivery.

The Trust Electronic Health Record Systems were searched for all obstetric admissions to the intensive care unit between 31 March 2019 and 1 April 2021.

The British Journal of Anaesthesia Maternal Critical Care Checklist and the RCOG/RCOA/RCM Care of the Critically Ill Woman in Childbirth standards were used to inform data collection criteria.

Results

- **49 cases** were identified; 11 women were still pregnant at the time of admission (24-41 weeks gestation) and 38 were in the early postnatal period.
- **Reasons for admission** included Covid-19, massive obstetric haemorrhage, severe pre-eclampsia, sepsis, cardiac failure, and other medical comorbidities.
- An **obstetric consultant** was informed within one hour in 84% of admissions; 67% of admissions had a consultant obstetrician review within 12 hours. 72% of admissions had a **daily review** by the obstetric team led by the obstetric consultant.
- 100% of admissions had daily review led by the Intensive Care Consultant.
- 68% of postnatal admissions had a daily **midwifery review** up to 14 days. 36% of the postnatal admissions had a review by the **breastfeeding** team documented within 24 hours. However, only 50% of admissions had documentation regarding (a) maintaining physical contact and interaction between mother and baby and (b) supporting expression of breast milk and breastfeeding.
- 21% of admissions had documented consideration of ICU **Psychology** referral.
- Critical care **stepdown** to obstetric teams was documented in 64% of cases.

Learning points were identified from this review to help inform local practice guideline development:

- Documentation checklist development
- Teaching around drug use in pregnancy and breastfeeding
- Handover / stepdown pathway
- Formalisation of psychological support pathway
- Training around support for interaction between mother and baby – enhanced use of video links to the neonatal unit
- Importance of ensuring staff debrief for challenging cases

Conclusions

- A multidisciplinary approach is essential to delivering high quality critical care in the obstetric population
- Clear documentation of discussion with appropriate members of the MDT is important in ensuring a shared understanding of the complex decision-making in critical care obstetric situations
- An integrated approach to care can help support maternal psychological wellbeing and support interaction between mother and baby during admission