

Perioperative outcomes in surgical patients with preeclampsia

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Background and Aims

- Preeclampsia is a serious hypertensive disorder occurring in pregnant people who often need caesarean section surgery for childbirth
- Data on perioperative outcomes in people with preeclampsia undergoing caesarean section surgery are limited
- The study aim was to describe the characteristics and perioperative outcomes of people with preeclampsia who underwent caesarean section surgery at a tertiary referral hospital in a high-income country

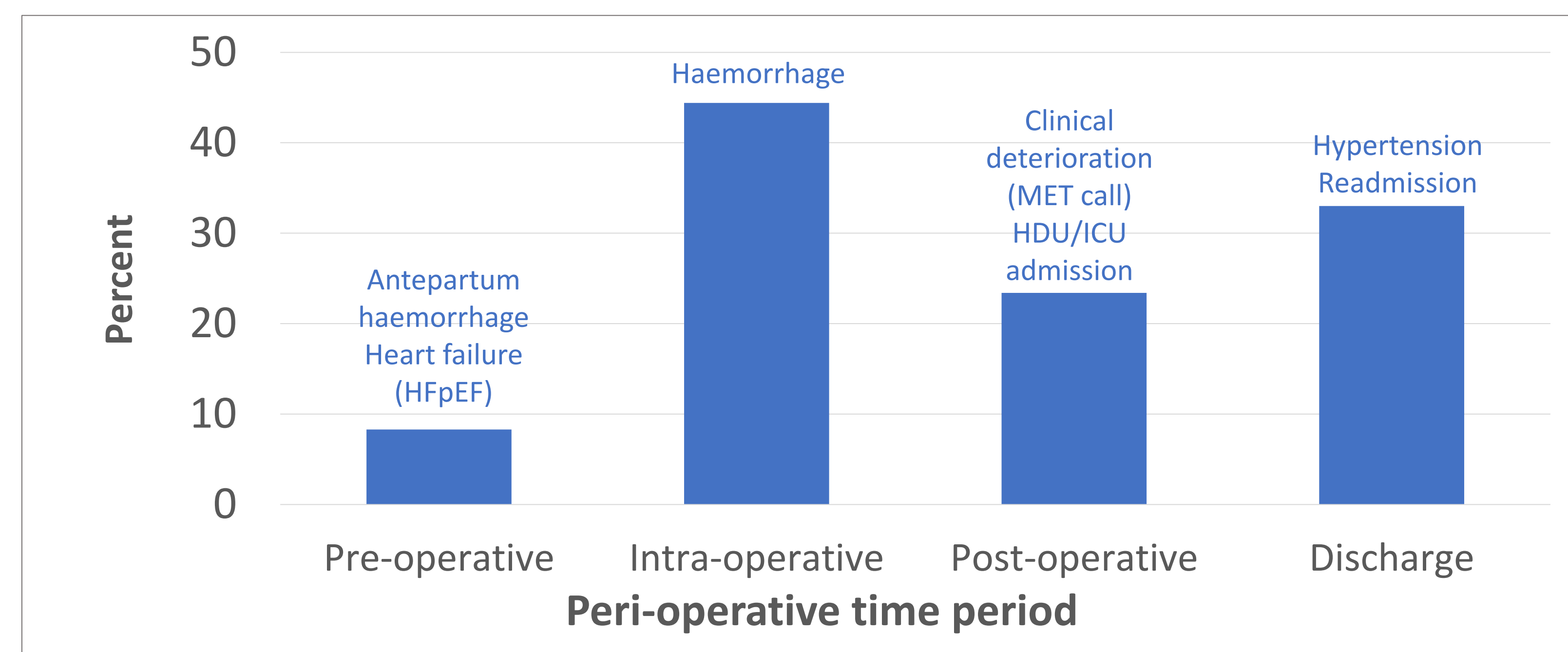


Methods

- After institutional ethics approval (RWH HREC AQA19/34) we conducted a six-month single centre cohort study (May 1 to December 31 2019)
- We included all patients with preeclampsia who underwent caesarean section surgery
- Pre, intra, and postoperative, and posthospital discharge, outcomes, as well as neonatal outcomes were recorded. We compared outcomes of patients with and without severe features of preeclampsia

Results

- During the six-month period 1919 patients had caesarean section surgery. 72 (3.6%) people with preeclampsia were included
- Mean (SD) preoperative age, body mass index, and gestation were 34 (5.7) years, 32 (7.1) kg/m², and 38 (3.2) weeks respectively. Mean blood pressure was 134/84 mmHg
- Nine (12.5%) people had pre-operative haemoglobin <110 g/L. Preeclampsia with severe features was present in 55 (76%) and 61 (85%) people underwent emergency surgery. The mean (SD) length of hospital stay was 6 (2.5) days
- Table 1 Percent of patients who had complications in the peri-operative period



HFpEF = preserved ejection fraction heart failure, MET = medical emergency team, HDU/ICU = high dependency unit/Intensive care unit

FETAL AND NEWBORN COMPLICATIONS

- Babies suffered significant complications with one unborn baby death (1.4%) (in severe preeclampsia group) and 28 (38.9%) babies (22 in severe preeclampsia group) being admitted to neonatal intensive care or special care nurseries

Key Messages

- People with preeclampsia are very high-risk perioperative patients suffering life-threatening pre, intra and postoperative complications, including death and severe morbidity of their babies
- Haemorrhage during caesarean section surgery occurs in nearly one in two people with preeclampsia

Conclusion and Future Work

- Education, risk reduction strategies, and large case-controlled studies are urgently needed in this neglected surgical population

