Maternal morbidity associated with late termination of pregnancy for fetal anomaly

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Objective

To evaluate the common and severe maternal morbidities associated with late medical termination of pregnancy (MTOP) at or beyond 20 weeks' gestation for fetal structural and/or genetic anomalies (PSANZ PDC Classififed[1]).

Design

A 10-year retrospective cohort study (January 2010 – December 2019) of 407 singleton pregnancies undergoing late MTOP at the Royal Women's Hospital (RWH), Melbourne - Australia's largest quaternary level maternity centre.

Method

Singleton pregnancies at or beyond 20 weeks' gestation with fetal structural and/or genetic anomalies for which termination of pregnancy had been requested were identified from the RWH Fetal Medicine Unit database. Women undergoing MTOP using misoprostol induction of labour (with or without feticide, with or without mifepristone) were included for analysis.

Results

The cohort comprised 191 primiparous and 216 multiparous women, of whom 75 (34.7%) had at least one prior Caesarean birth; a further 13 women had placenta praevia. The average maternal age was 31.2 years and BMI 24 kg/m2. The average gestation at time of MTOP was 23 weeks (IQR 22 – 26 weeks) and the average birthweight was 602 grams (IQR 420 – 976 grams). MTOP resulted in spontaneous unassisted vaginal delivery in 99% of cases (n = 403). The most common maternal morbidity observed was examination under anaesthesia (EUA) in theatre for manual removal of placenta or retained placental tissue (n = 65, 16.0%). The second most common morbidity was postpartum haemorrhage (n = 45, 11.1%), for which a small number (n = 10, 2.5%) required a blood transfusion. Eleven women (2.7%) required readmission to hospital for delayed uterine evacuation (n = 11, 2.7%).

Severe maternal morbidity (NPEC audit criteria[2]) occurred in 5 cases (1.3%), 2 with no pertinent risk factors, and included amniotic fluid embolism, cardiac arrest, major obstetric haemorrhage, uterine rupture, and ICU admission. There were no maternal deaths. Overall one quarter (n = 104, 25.6%) of women undergoing late MTOP had a common or severe morbidity.

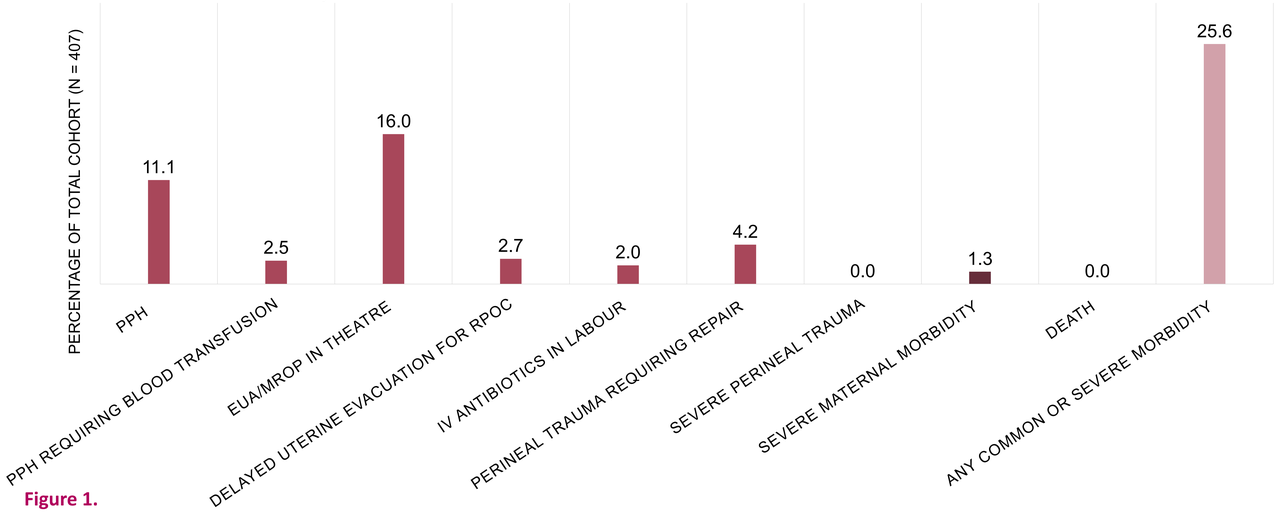

Figure 1.
Percentage of common, severe and combined maternal morbidity following late MTOP for fetal structural and/or genetic anomalies in a cohort of 407 singleton pregnancies over a 10-year study period. PPH = postpartum haemorrhage, EUA = examination under anaesthesia, MROP = manual removal of placenta, IV = intravenous

Conclusions

This cohort study provides insights into the common and severe maternal morbidities associated with late MTOP for fetal structural and/or genetic anomalies. The presence of previous caesarean section/s or low lying placentae are important risk factors for adverse outcomes, however rates of successful uncomplicated MTOP remain very high. Conversely, women with no risk factors rarely experience severe maternal morbidity. These data are useful for patient counselling in the fetal medicine setting.

References

1. Stillbirth Centre of Research Excellence and Perinatal Society of Australia and New Zealand (PSANZ). Clinical Practice Guideline for Care Around Stillbirth and Neonatal Death - Section 7: The PSANZ Classification System for Stillbirths and Neonatal Deaths. 2018. '
2. National Perinatology Epidemiology Centre. Confidential Audit of Severe Maternal Morbidity (SMM) in Ireland 2021 Form. University College Cork, Ireland; 2021.

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