

Placenta Praevia and Cell Salvage; Does Location Matter?

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Introduction:

Placenta praevia is associated with major obstetric haemorrhage. Intraoperative cell salvage (ICS) is increasingly incorporated into patient blood management during caesarean birth; however, whether placental location influences blood loss sufficiently to guide selective ICS use remains uncertain.

Aim:

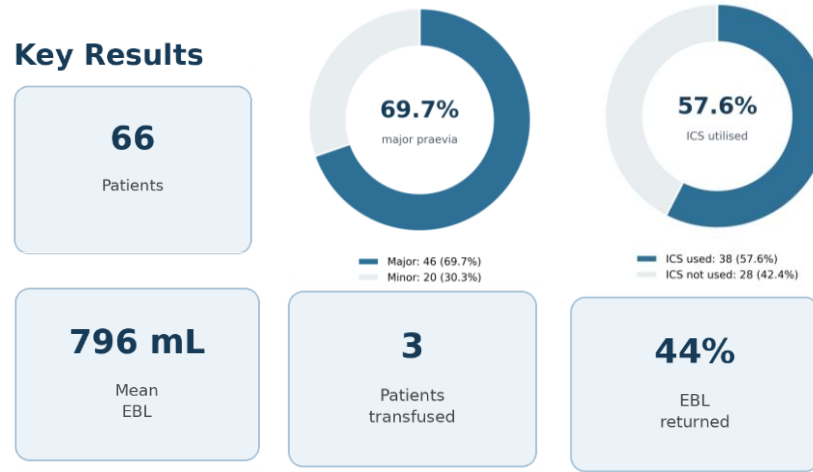
To determine whether placenta praevia classification and location influence blood loss and the utility of intraoperative cell salvage during Caesarean section

Method

A retrospective cohort study was completed utilising data from Caesarean sections at a single tertiary centre over a 10-year study period.

A total of 66 cases met inclusion and exclusion criteria for this study. Data was then analysed with primary outcomes including Estimated Blood Loss (EBL), ICS utilisation and return, Blood transfusions and Maternal outcomes. This data was then analysed with comparison of outcomes associated with placental classification and location.

Key Results



Discussion:

- Blood loss was significantly greater in major compared with minor placenta praevia ($p = 0.039$).
- Placental location was not significantly associated with blood loss ($p = 0.394$).
- Although anterior placentae demonstrated greater mean blood loss (1066mL) than posterior placenta praevia (689mL), this trend did not reach statistical significance.

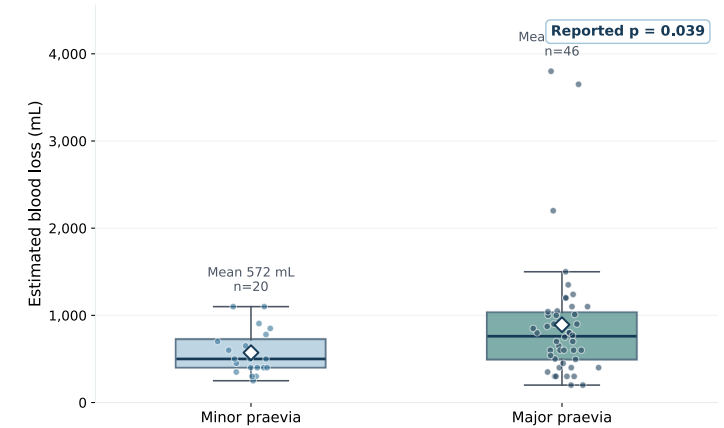
Clinical Implications:

Consider routine availability of ICS at caesarean section for Major Placenta Praevia.

Based on this study, placental location alone should not determine ICS utilisation

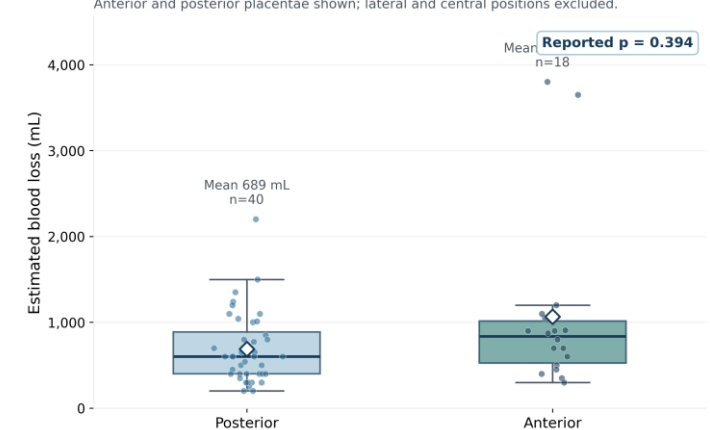
Estimated blood loss by praevia classification

Boxes show median and interquartile range; diamonds show the mean.



Estimated blood loss by placental location

Anterior and posterior placentae shown; lateral and central positions excluded.



References:

- Khan KS, Moore P, Wilson MJ, et al. Cell salvage and donor blood transfusion during cesarean section: a multicenter randomized controlled trial (SALVO). *BMC Pregnancy Childbirth*. 2020;20(1):664.
- Kumar S, de Gier R, Leung T. Intraoperative cell salvage use in cesarean section: audit of a tertiary Australian centre. *RANZCOG ASM Posters*. 2023.
- AIHW. *Australia's mothers and babies 2008*. Canberra: Australian Institute of Health and Welfare; 2010.