

Prophylactic Internal Iliac Balloon Placement prior to Caesarean Section In Patients with Placenta Accreta – Maternal and Foetal Outcomes

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Location: E350

PARTICIPANTS:

Patrick Nicholson MBBCh (Presenter): Nothing to Disclose

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CITE THIS ABSTRACT

PURPOSE

The incidence of abnormal placental implantation has been increasing steadily over recent years. The most serious clinical consequence is massive obstetric haemorrhage. Hysterectomy is commonly required to control such bleeding. In our institution, we prophylactically place internal iliac balloons in these patients, before an elective caesarean section. Following delivery, these are then inflated if needed to allow the obstetrician to gain control of the hemorrhage. We sought to retrospectively assess both maternal and foetal outcomes from this procedure in our unit.

METHOD AND MATERIALS

A retrospective chart review of all patients with abnormal placentation who underwent prophylactic internal iliac balloon placement prior to elective caesarean section.

RESULTS

Over a 44-month period, 21 patients with placenta accreta or a variant thereof underwent caesarean section after first undergoing prophylactic placement of bilateral internal artery balloons. Technical success was achieved in 100%. The average gestational age was 37 weeks 6 days, and mean gravidity was 2.8. Mean number of previous caesarean sections was 2.4, while mean maternal age was 35 years. The mean intraoperative blood loss was 1.4 litres, and the mean number of blood units transfused was 2. Mean duration of surgery was 90 minutes, mean total length of hospital stay 7.5 days, while the mean duration of ICU/HDU stay was 1.2 days. The balloons were inflated in 80% of cases, and no patient underwent subsequent hysterectomy. There were no early or delayed maternal complications due to the procedure. A total of 23 live infants were delivered. Mean infant Apgar scores at 1 and 10 minutes were 8.9 and 9.6 respectively. There were umbilical cord pH values available in 11 of the cases - median cord pH was 7.27. None of the infants developed complications which could be attributed to maternal iliac balloon placement.

CONCLUSION

Prophylactic placement of arterial balloons prior to caesarean section in patients with placenta accreta is technically feasible, well tolerated and leads to satisfactory maternal and foetal outcomes with minimal complications.

CLINICAL RELEVANCE/APPLICATION

Prophylactic internal iliac balloon placement is a potentially life-saving, fertility preserving procedure which is safe for both mother and baby, and highlights the role of the interventional radiologist in the multidisciplinary management of these patients.