Placenta Accreta Spectrum: A Review of Surgical Techniques and Outcomes at a Tertiary Maternity Centre

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BACKGROUND

Placenta accreta spectrum (PAS) is associated with major obstetric haemorrhage, caesarean hysterectomy and significant maternal morbidity. Increasing caesarean section rates have contributed to a rising incidence of PAS. Current guidelines recommend antenatal diagnosis and planned multidisciplinary management within tertiary maternity centres. Audit of surgical practice is essential to ensure optimal patient outcomes.

AIM

To evaluate the surgical management and maternal outcomes of women with PAS managed at a tertiary maternity centre.

METHOD

- Retrospective clinical audit
- Histologically confirmed PAS cases
- Medical records, imaging and operative reports reviewed
- Outcomes assessed included operative management, blood loss, transfusion, complications and histopathology

SURGICAL MANAGEMENT

Twelve women underwent surgery for PAS. Most underwent planned multidisciplinary management following antenatal diagnosis. Operative planning included senior obstetric, anaesthetic, neonatal and, where indicated, interventional radiology and urology involvement.

Surgical techniques

Placenta Accreta Spectrum surgical management summary (n=12)

Surgical technique	Audit findings
Abdominal approach	Vertical/midline laparotomy: 12 cases (100%)
Uterine incision	Classical: 7 cases (58%) Fundal: 4 cases (33%) Classical fundal: 1 case (8%)
Caesarean hysterectomy	Performed: 12 cases (100%)
Bilateral salpingectomy	Documented: 8 cases (67%)
Interventional radiology balloons	Used/planned: 9 cases (75%) Not used: 3 cases (25%)
Urology involvement / stenting	Prophylactic ureteric stenting documented: 6 cases (50%) Additional urology involvement occurred where urinary tract injury was identified
Cell salvage	Cell saver use/return documented: 6 cases (50%)
Additional operative procedures	Cystoscopy, ureteric catheterisation/stenting, bladder repair or ureteric reimplantation were performed selectively according to operative findings
Overall surgical approach	Predominantly planned multidisciplinary caesarean hysterectomy with individualised IR and urology support

Counts derived from audit data collection sheet; edit numbers if final case inclusion changes.

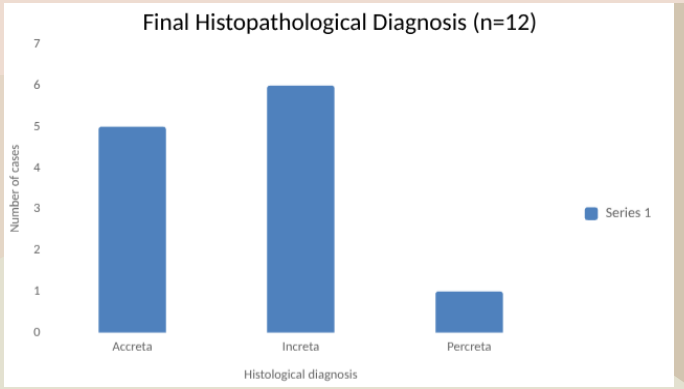
MATERNAL OUTCOMES

Maternal outcomes included estimated blood loss, transfusion requirements and intraoperative complications. Overall outcomes reflected successful multidisciplinary surgical management despite complex operative cases.

Maternal Outcomes	Results
Estimated blood loss	Average: 2.4 L Range: 450–6500 mL
Blood transfusion	5 cases (42%)
Estimated blood loss >2 L	6 cases (50%)
Cell saver	6 cases (50%)
Major urinary tract injury	4 cases (33%)
Return to theatre	2 cases (17%)
Major postoperative complication	4 cases (33%)
Maternal mortality	0 cases (0%)

HISTOLOGICAL FINDINGS

Histopathology confirmed PAS in all cases. Antenatal imaging demonstrated good correlation with final pathological diagnosis, although the depth of invasion varied in some women.



DISCUSSION

Early diagnosis enabled planned multidisciplinary surgery and adherence to contemporary PAS management recommendations. Surgical outcomes were comparable with those reported by other tertiary centres.

CONCLUSION

- Planned multidisciplinary care facilitated safe surgical management.
- Caesarean hysterectomy remained the predominant treatment.
- Ongoing audit supports continuous quality improvement.

REFERENCES: RANZCOG Placenta Accreta Spectrum Guideline. ; ACOG Obstetric Care Consensus No. 7. ; FIGO Consensus Guidelines. ;Silver RM, et al. ;Morlando M, et al.