

Histopathological finding of placenta accreta spectrum after vaginal birth with severe postpartum haemorrhage.



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BACKGROUND

- Postpartum haemorrhage (PPH) is an important cause of maternal morbidity and mortality.
- Histopathological findings of placentas from pregnancies complicated by severe PPH (blood loss ≥1000mL) may help explain cause and therefore assist counselling about future pregnancies.
- Placenta accreta spectrum (PAS) can be a cause of severe PPH and is estimated to recur in 13.3 22.8 percent.

METHODS

- Retrospective review of vaginal births complicated by severe PPH at a single tertiary centre in 2017.
- Review of routinely collected data as part of local risk quality and safety audit procedures.
- Cases with histopathological findings suggestive of PAS were reviewed by a senior pathologist and were classified as PAS as defined by presence of myometrial smooth muscle fibres directly adjacent to villi without intervening decidua or as basal plate myometrial fibres (BPMF).
- The outcomes of these pregnancies are reported.

RESULTS

- 204 cases of severe PPH following vaginal delivery were recorded.
- Placental histopathology was requested for 50 (24.5%) see adjacent diagram
- Findings suggestive of PAS in 10.
- PAS in 7 cases. BPMF in 3 cases.
- See table below for summary of risk factors, interventions and outcomes for each PAS case.



	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7
Risk Factors							
Antenatal Risk Factors for PAS	Prior MROP, prior PPH, APH	Prior PPH	Low-lying placenta on morphology		Prior uterine surgery	Low-lying placenta on morphology	
Interventions							
MROP	Х	Х	Х	Х	Х	Х	Х
Bakri balloon		Х	Х		Х	Х	
Intraoperative blood transfusion (No. units)		1	4	2	1	2	
Blood transfusion >24 hours after (No. units)		2			2		
EBL (mL)	1500	2300	3000	3000	3000	1600	1100
**APH – Antepartum Haemorrhage; MROP – Manual Removal of Placenta; EBL – Estimated Blood Loss							

CONCLUSION

Due to limited sampling, absence of features of PAS on histological examination does not exclude the diagnosis. Sending placenta for histopathology may help explain the cause of PPH and assist in predicting recurrence of PPH; therefore, aiding counselling and management for subsequent pregnancies.

REFERENCES

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