

Retained products of conception in the postnatal patient: Ultrasound features and treatment.

A retrospective, cross sectional survey, evaluating current management and outcomes of postnatal women presenting with retained products of conception (RPOC).

INTRODUCTION

Postpartum haemorrhage is one of the leading causes of morbidity and mortality in the post-natal period, worldwide accounting for up to 25% of maternal deaths. One of the main causes for secondary PPH is RPOC, which complicates up to 1% of deliveries. Clinical signs can be varied and non-specific, including bleeding, abdominal pain, an enlarged uterus or open cervix. Ultrasound scan is considered the gold standard for the diagnosis of retained products. Current literature agrees that echogenic masses and increased vascularity strongly suggest RPOC. However, specific values for endometrial thickness are more contested. Surgical evacuation, the gold standard for treatment, has small but serious risks such as infection, bleeding, uterine perforation, persistent retained products and Asherman's syndrome. Postpartum patients are more likely to suffer from these due to the recovering state of the endometrium. Our literature review revealed no gold standard for the management or guidelines currently in use and no consensus on the ultrasound definition of retained products specifically in the postpartum cohort. Varied management of these patients and unclear diagnostic criteria often leads to in prolonged management and unnecessary surgical procedures in this patient group, with a theoretical increased risk of surgical complications.

AIMS

Evaluate local practice and produce guidelines for the standardised investigation and management of RPOC in the postnatal patient.

Based on current literature review, there is no consensus on specific ultrasound characteristics that define RPOC in the postnatal patient or the best practice for their management.

Our local objectives were as follows;

- Produce a guideline for the diagnosis and management of retained products in postnatal women.
- Develop a proforma aimed at all medical professionals involved in the care of these patients.
- Aim to reduce unnecessary uterine instrumentation.

METHODOLOGY

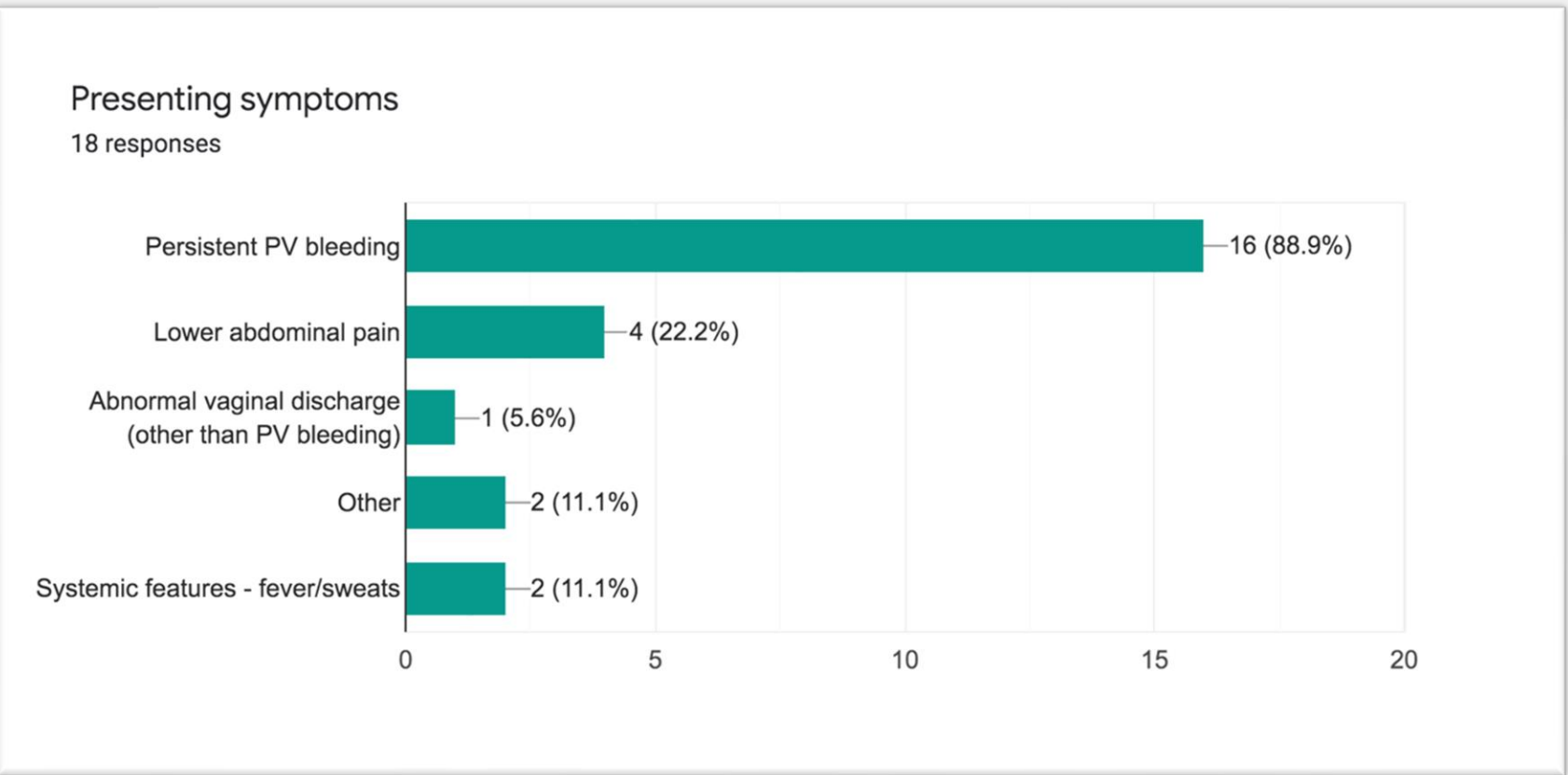
Retrospective collection of data over a 1-year period via intranet systems identifying all women who were investigated for suspected RPOC postnatally or underwent a surgical evacuation for retained products of conception in the post- natal period (defined as first 6 weeks post-partum).

Inclusion criteria: All patients diagnosed with RPOC on ultrasound within 6 weeks of delivery. All included patients had a live birth at a viable gestation (24 weeks).

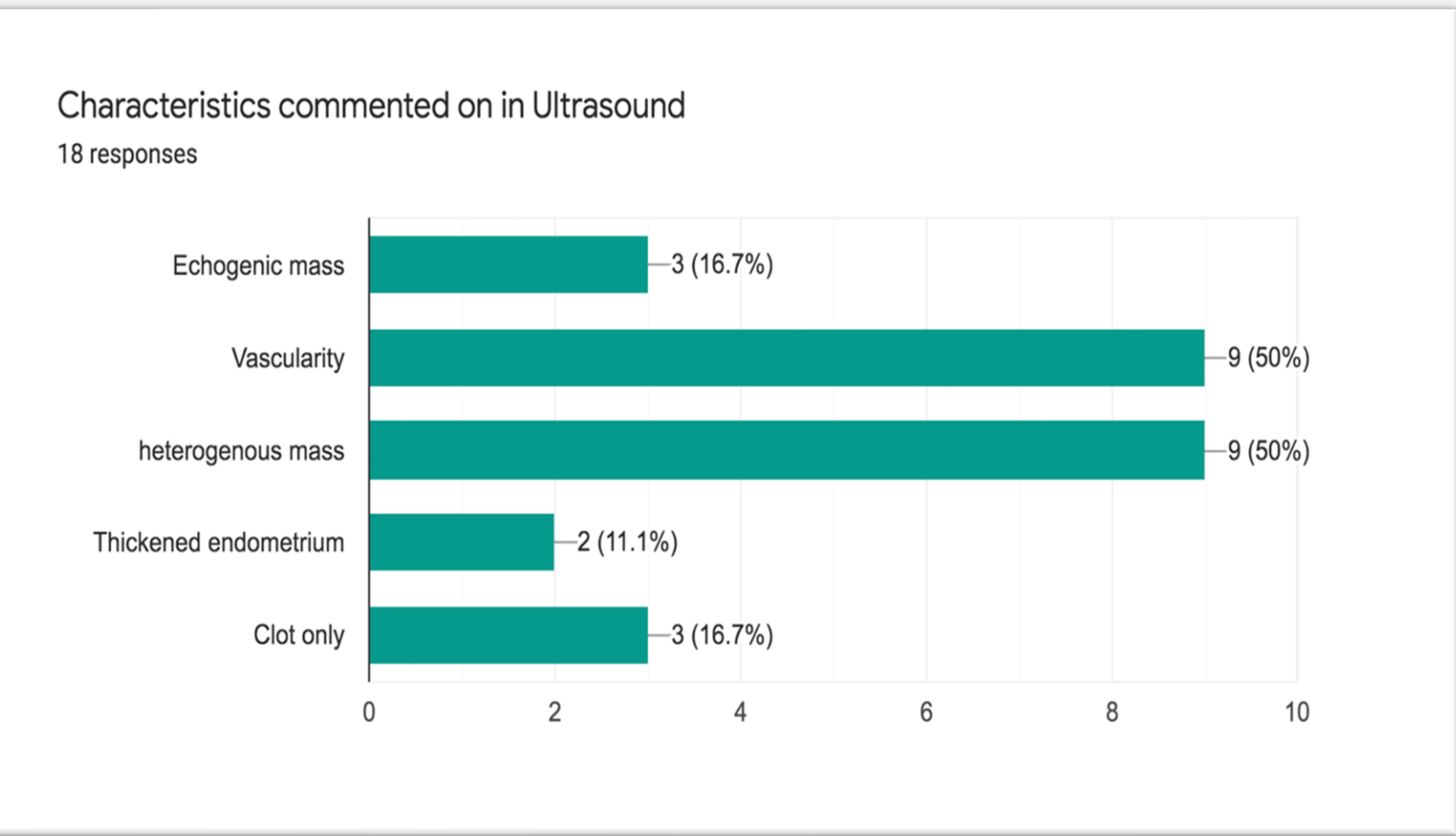
Exclusion criteria: First trimester losses or terminations; manual removal of retained placentas immediately after delivery; patients coded as postnatal RPOC with normal ultrasound findings.

TOTAL SAMPLE SIZE: 207
PATIENTS MEETING INCLUSION
CRITERIA: 18

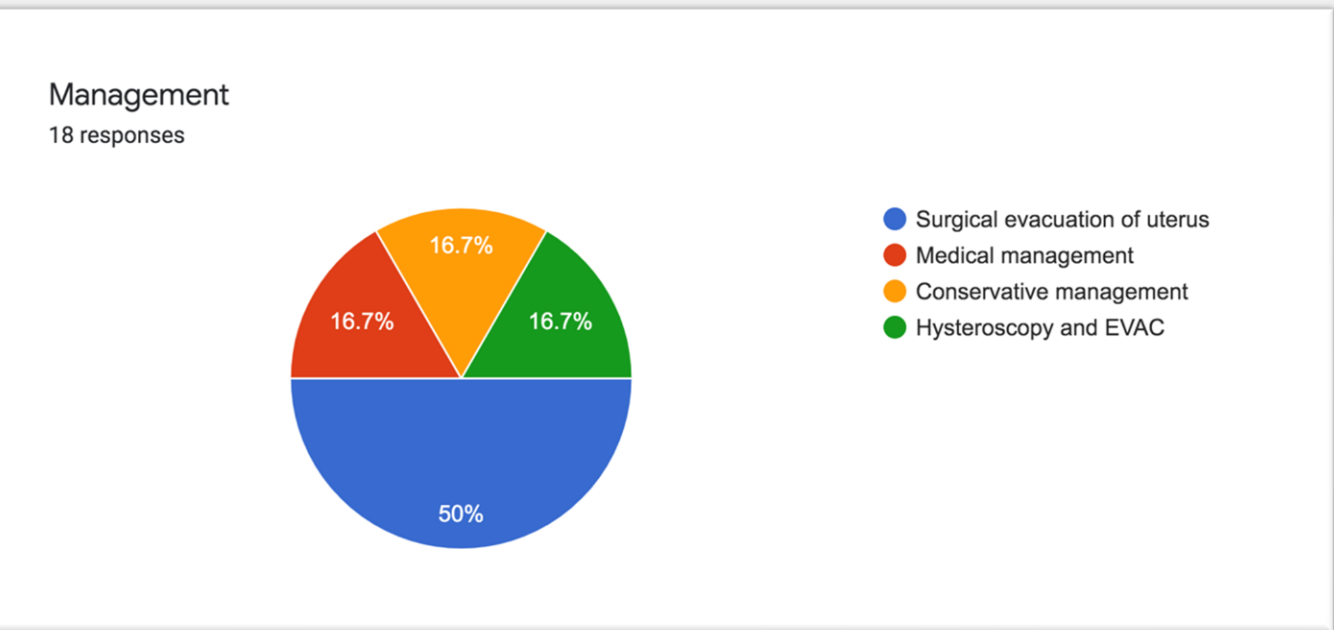
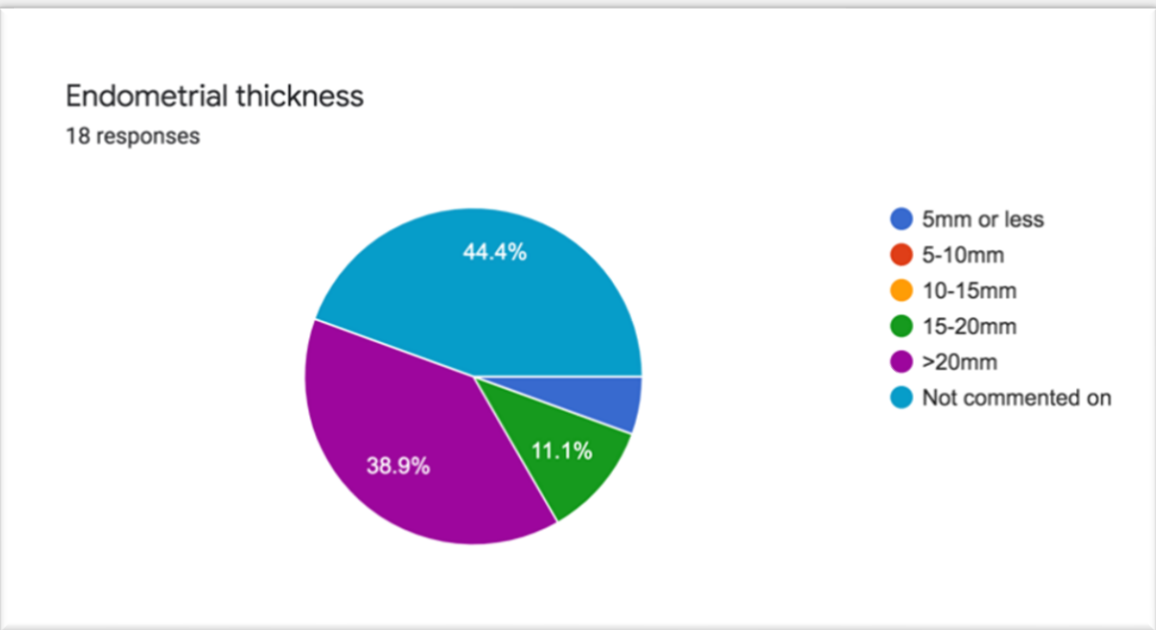
RESULTS



78% of patients had doppler imaging used to check for abnormal vascularity.



1 patient suffered from a uterine perforation, 3 patients had persistent RPOC after treatment.



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ANALYSIS

- 78% of patients presented with PV bleeding as their primary symptom.
- Overall women with suspected RPOC are investigated correctly with a departmental USS.
 - However, endometrial thickness and presence of vascularity were not consistently commented upon.
- Surgical management was the most common management option, and remains a safe procedure in general.
- However 1 patient from our 18 person sample size suffered from a uterine perforation, a serious complication that highlights the importance of careful selection for this procedure in the postnatal patient group.

Ultrasound criteria identified from study findings that strongly correlate with suspected RPOC:

- Endometrial thickness of over 10mm plus other features such as echogenic/ heterogenous mass with vascularity.
- ET of >15mm alone in the post-partum uterus is a good indicator of RPOC

RECOMMENDATIONS AND FUTURE PRACTICE

- Patients being investigated for RPOC postnatally have endometrial thickness commented on and doppler imaging.
- Introduce a departmental guideline specifying new ultrasound criteria (use of doppler and commenting on specific endometrial thickness) to be used in every patient presenting postnatally with suspected RPOC with the aim to ensure consistent practice.
- Prospective audit of new guidelines reviewing the care of postnatal women presenting with RPOC. Prospective data collection may increase sample size and re-audit will explore if new guidance reduces morbidity, minimises complications and improves outcomes.

LIMITATIONS

- Difficulties identifying patients for inclusion due to multiple systems in use.
- Women passing products at home after medical management do not have correlating histology.
- Covid 19 may have impacted number of women presenting acutely to hospital (with perhaps only the most symptomatic patients presenting) resulting in a potentially higher correlation between USS findings and confirmed RPOC on histology.

KEY LITERATURE

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