## Bladder Flap Haematoma: An Under-Recognised Caesarean Section Complication

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## Introduction

A bladder flap haematoma (BFH) occurs in the vesicouterine space and is an unusual complication following caesarean section (CS) without bladder peritoneal closure. Its exact incidence is unknown. It forms adjacent to the incision in the lower uterine segment if there has been inadequate haemostasis. They are considered common if they occur after a CS with visceral peritoneal closure<sup>1</sup> or if they are less than 4cm in size.<sup>2</sup> BFHs are distinct from subfascial haematomas, which occur extraperitoneally in the prevesical space, posterior to the rectus sheath.<sup>2</sup> Clinical manifestations can include signs of mass effect, hypovolaemia or infection. In most described cases, BFHs declare themselves acutely within the postoperative period.<sup>3</sup> We report a case of a BFH with insidious symptom onset over many months following CS without bladder peritoneal closure.

## Discussion

In this case, the initial 10cm haematoma found on USS post CS was thought to represent the BFH that was resected one year later.

BFHs can encapsulate, persist and masquerade as other pathologies such as cysts, endometriomas or extraperitoneal haematomas.
It is important to distinguish a BFH from a subfascial haematoma, as the former may require peritoneal incision for drainage.<sup>2</sup> In this case, both imaging modalities failed to accurately identify the location of the haematoma. This is a known shortfall with complex gynaecological pathology and should be considered in the preoperative workup and counselling.

**Key Points** 

- BFHs may masquerade as alternate pathology on imaging
- Accurate location of the BFH is important in planning surgical approach
- BFHs should be considered in patients with persistent

symptoms post CS

References

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A 41-year-old G5P1M3T1 female patient initially presented to ED five weeks after her CS with abdominal pain. At this time, an ultrasound scan demonstrated a 10cm haematoma anterior to the uterus and superior to the bladder, 3cm deep to the skin, and a 7cm superficial haematoma along the scar line. These were managed conservatively with antibiotics and appeared to reduce in size across serial ultrasounds over the next two months.

This was not re-investigated until a year later during an IVF cycle, when the patient developed abdominal and lower back pain radiating to the hips and legs with faecal and urinary urgency post oocyte collection and ovarian cyst drainage. USS at this time showed a 9cm hypoechoic area in the left adnexa. A diagnostic laparoscopy at her referring hospital revealed no haematoma in the pelvic cavity however a large mass was palpated on vaginal examination. A postoperative MRI showed a left-sided haematoma of 9cm, thought to be possibly ovarian in origin. She was referred from a peripheral hospital to our tertiary laparoscopic gynaecology service for consideration of drainage of a suspected broad ligament haematoma. At laparoscopy the uterus was found to be densely adherent to the anterior abdominal wall and resected down to the mid pelvis where a BFH was found. This was an organized, fibrinous collection. It was incised and drained, left open to heal by secondary intention with a topical haemostatic agent applied to the base.



**Figure 1:** USS post egg collection – 89mm hypoechoic area in left adnexa **Figure 2:** MRI post diagnostic laparoscopy – 92mm left adnexal lesion



Figure 3: dense adhesion, Figures 4-6: resection of BFH