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Big Bleeding Belly: A Rare Case of Spontaneous Rupture of Leiomyoma

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INTRODUCTION

Uterine leiomyomas, myomas or fibroids are tumours which occur in the myometrium of the uterus. They are mostly benign, commonly found in women of reproductive age. Many patients remain asymptomatic, however the most common symptoms which occur in 25% of cases are abnormal uterine bleeding (AUB), dysmenorrhoea and chronic pelvic pain. AUB often causes anaemia, iron deficiency and associated lethargy (1). Individuals can also present with dyspareunia, torsions, bladder and bowel symptoms, infertility and recurrent miscarriage (2). Leiomyomas are one of the common indication for hysterectomies in Australia (3).

These tumours can significantly decrease a persons quality of life (4) and in rare cases carry significant morbidity and mortality (1, 2). Hemoperitoneum due to bleeding leiomyomas is exceptionally rare but carries the potential for catastrophic consequences. This case report serves as a critical illustration of such an unusual and perilous event.

INVESTIGATIONS

Bloods reported a significant Hb drop from 98 g/L -> 80g/L. A Bedside focused assessment with sonography for trauma (FAST) ultrasound in ED revealed extensive hemoperitoneum and an enlarged multi-fibroid uterus. Abdominal Computerised Tomography (CT) reported an enlarged uterus measuring 13.4 x 9.5 x 17.0cm (TV x AP x CC) with presumed fibroids and features favouring acute haemorrhage. There was large volume hemoperitoneum with no other source of bleeding identified.

The histology sample weighed 1036g and reported multiple leiomyomas with associated ischaemic changes. Cervical intraepithelial neoplasia 3 was found and completely excised with clear margins.

CASE

A 42-year-old patient presented to the Emergency Department (ED) with severe sudden onset abdominal pain, in hypovolemic shock. She had no acute precipitating illness, symptoms or trauma. Her obstetric and gynaecological history included the known history of a multi-fibroid uterus with significant AUB, for which she was awaiting definitive surgical management for. She has three children, two born via vaginal delivery and the third via caesarean section.

She presented in hypovolemic shock tachycardic 110bpm, tachypnoeic RR 50 and hypotensive 95/60mmHg. She was afebrile and had normal oxygen saturations on room air. Her abdomen revealed a previous Pfannenstiel incision. It was distended and tender on light palpation however not peritonitic. The multi-fibroid uterus extended to the umbilicus. Her BMI was 21.

The patient was transfused with 3x units of red blood cells and urgent explorative laparotomy was performed. An Infraumbilical midline incision was made and 1950mLs of blood was suctioned out of the peritoneum. The uterus was enlarged with a fundal subserosal fibroid which had evidence of bleeding from the posterior aspect where there were many engorged vessels. Bilateral ovaries and fallopian tubes, appendix and liver appeared normal. A total abdominal hysterectomy was performed. The specimen was removed and sent for histology. A total estimated blood loss of 2250 ml was lost.

Post operatively her Hb stabilised, and she was discharged 4 days later. She was well at the 8 week follow up. The wound had healed well. There were no adverse events to report at this follow-up.

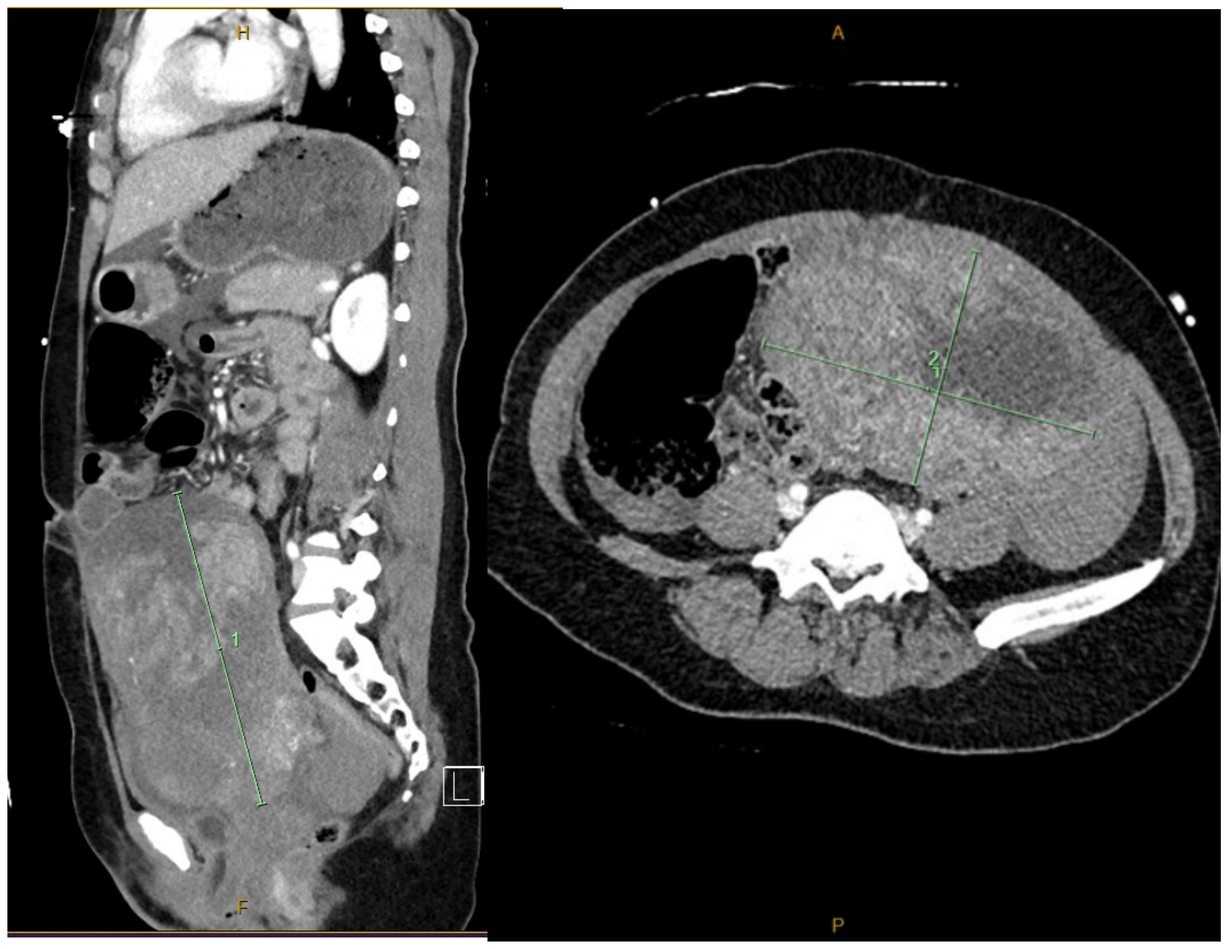

Fig1: CT scan showing multi-fibroid uterus and hemoperitoneum

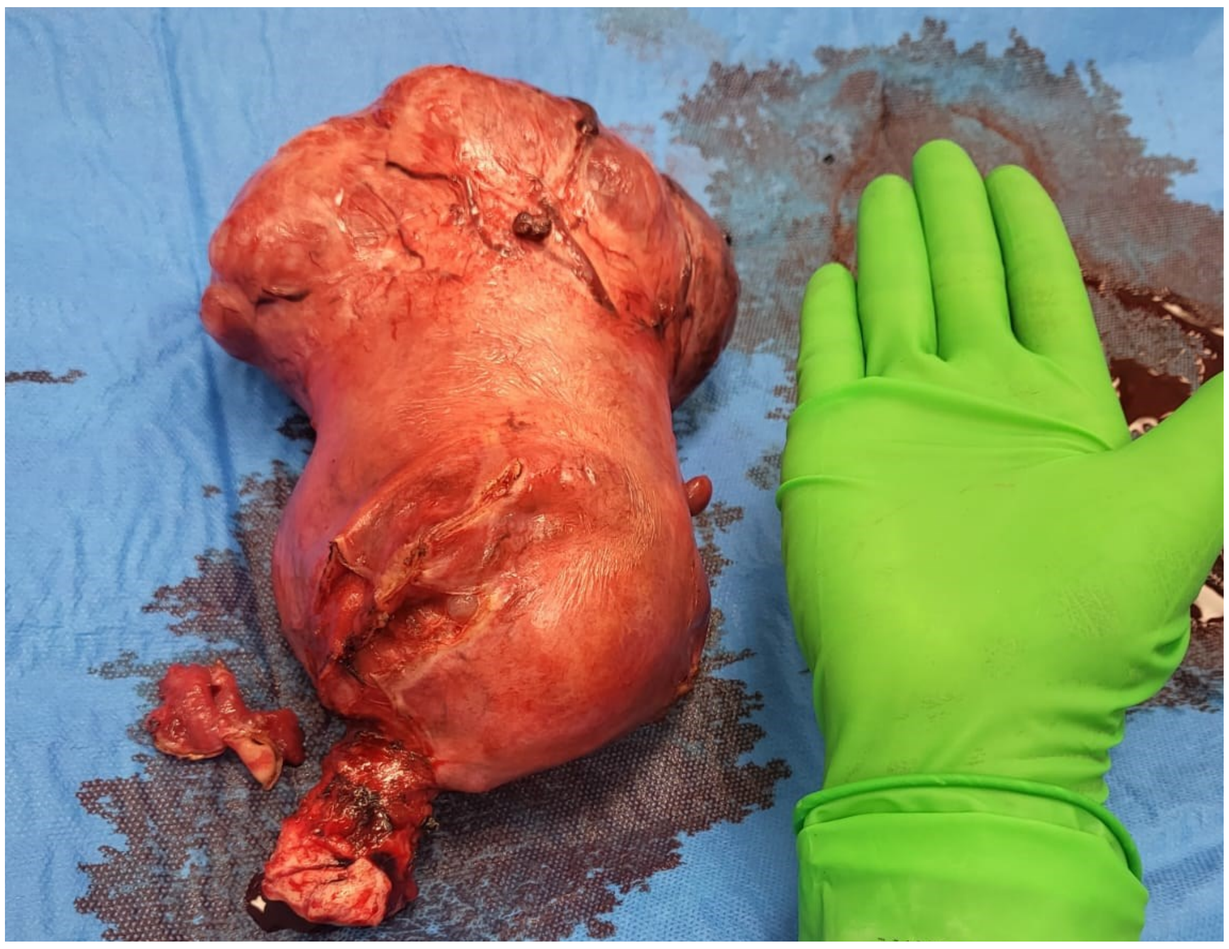

Fig 2: Multi-fibroid uterus

DISCUSSION

Hemoperitoneum from a bleeding degenerating fibroid is an exceedingly rare complication. The atypical presentation of abdominal pain and the presence of a multi fibroid uterus poses diagnostic challenges. This case underscores the significance of considering fibroids as a potential cause of acute abdominal pain and bleeding. Timely surgical intervention, supported by a multidisciplinary approach, is essential for optimal patient outcomes. Further research is warranted to better understand the risk factors and optimal management strategies for patients with uterine fibroids, aiming to prevent similar complications in the future.

CONCLUSION

Bleeding Fibroids are a rare but important differential to consider with hemoperitoneum of unclear origin in women. They can bleed rapidly causing acute decline leading to significant morbidity and mortality. Urgent resuscitative measures and rapid access to multiple imaging modalities allow for good patient outcomes. Treatment modality will depend on the woman's need for fertility preservation.

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