



# Unforeseen Case of Uterine Leiomyosarcoma in a Young Woman Following Miscarriage

Hillary Nguyen<sup>1</sup>, Tanushree Rao<sup>1</sup>

<sup>1</sup>Obstetrics & Gynaecology Department, Liverpool Hospital

## BACKGROUND

Uterine leiomyosarcoma (LMS), a rare malignancy, is typically seen in older patients. Young women experiencing abnormal uterine bleeding (AUB) often are not evaluated for this condition due to its infrequent occurrence in this demographic.

## CASE

A 32-year-old nulliparous woman presented with AUB and passage of cystic-looking products eight months after a first-trimester miscarriage. Despite two hysteroscopies conducted due to recurrent bleeding episodes, no retained products of conception (RPOC) were identified. A pelvic ultrasound unveiled a large heterogeneous fibroid measuring 70x40x54mm, which further led to an MRI investigation, suggesting possible LMS.

## RESULTS

Anticipated laparoscopic procedure was replaced by an open abdominal myomectomy. An uncapsulated, liquified 5cm intra-myometrial mass in the anterior wall of the uterus was removed, partly using a suction cannula. Histopathology confirmed high-grade adenosarcoma with sarcomatous overgrowth. Postoperative chemotherapy and interval surgical debulking were conducted. Despite showing no signs of metastatic disease on post-treatment CT scans, recurrence risk persists due to peritoneal involvement in the initial surgery.

## DISCUSSION

LMS is a rare malignancy with a reported incidence of 0.36-0.64 per 100 000 women, with an ability to mimic benign uterine fibroids.<sup>2</sup> This case reinforces the necessity for thorough examination of persistent AUB in young women post-miscarriage beyond RPOC considerations, including rare conditions like LMS, even in the presence of benign fibroids.

This case also stresses the importance of adaptability in surgical management. Changing from laparoscopic to open abdominal surgery enabled complete removal of the tumour, improving the prognosis, and reducing the risk of tumour spillage and spread, particularly important in sarcomas. This highlights the significance of flexible surgical decision-making based on pre-operative findings.

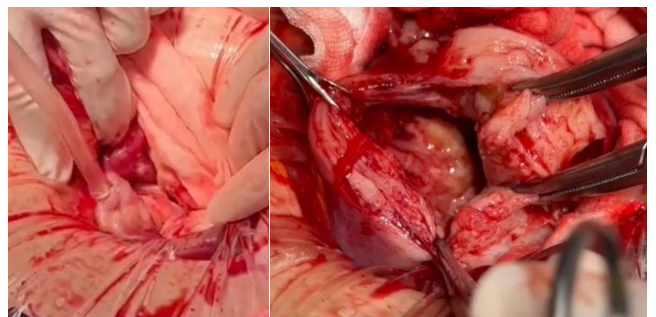


Image 1. Intraoperative image of open abdominal myomectomy – excision of the intra-myometrial mass

## REFERENCES

2. Harlow, BL, Wiss, NS, Lofton, S, 'The epidemiology of sarcomas of the uterus', *J Natl Cancer Inst.*, 1986, vol. 76, pp. 399-402.