

Rapidly Growing Ovarian Fibroma: A Benign Tumour with Malignant Mimicry

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Introduction

Ovarian fibromas are rare benign sex cord–stromal tumours, accounting for ~4% of ovarian neoplasms [1]. They usually affect perimenopausal and postmenopausal women and are often asymptomatic, found incidentally on imaging or during surgery [1,2]. While typically slow-growing and solid, some present atypically — with rapid enlargement, ascites, elevated CA-125, or features mimicking malignancy — posing significant diagnostic challenges [2,3]. Rarely, they are associated with Meigs’ syndrome (ascites, pleural effusion, and ovarian tumour) [3,4]. This case reports a postmenopausal woman with a rapidly enlarging ovarian fibroma and acute symptoms; despite initial suspicion of malignancy, histopathology confirmed a benign lesion, emphasising the need for careful evaluation of adnexal masses even when atypical.

Objectives

- ✔ To present a case of a rapidly enlarging ovarian fibroma in a postmenopausal woman, mimicking malignant ovarian pathology.
- ✔ To highlight the diagnostic challenges and management strategies when standard imaging (e.g., MRI) is limited or unavailable.
- ✔ To emphasise the importance of recognising atypical presentations of benign ovarian tumours and the role of histopathology in confirming the diagnosis.

Discussion

This case illustrates how benign ovarian fibromas can mimic malignancy, especially when they show rapid growth, necrosis, or adhesions [1–3]. Claustrophobia limited MRI, requiring reliance on ultrasound and CT, showing the importance of adaptable diagnostic strategies [2]. Intraoperatively, the presence of adhesions and peritoneal inflammation necessitated a multidisciplinary surgical approach [1]. Histopathology ultimately confirmed a benign fibroma with haemorrhagic infarction from torsion — reminding clinicians that necrosis and inflammation are not always malignant [4]. This reinforces the importance of maintaining a broad differential, tailoring management to individual cases, and planning conservatively yet proactively to ensure patient safety.

conclusion

Even benign ovarian fibromas can present atypically, resembling malignancy [1–4]. When imaging options are limited, adaptable diagnostic pathways and careful surgical planning become essential. Ultimately, histopathology remains the gold standard for diagnosis, guiding appropriate management and avoiding unnecessary aggressive interventions. Individualised, evidence-based care ensures optimal outcomes in complex adnexal cases.

Case Report

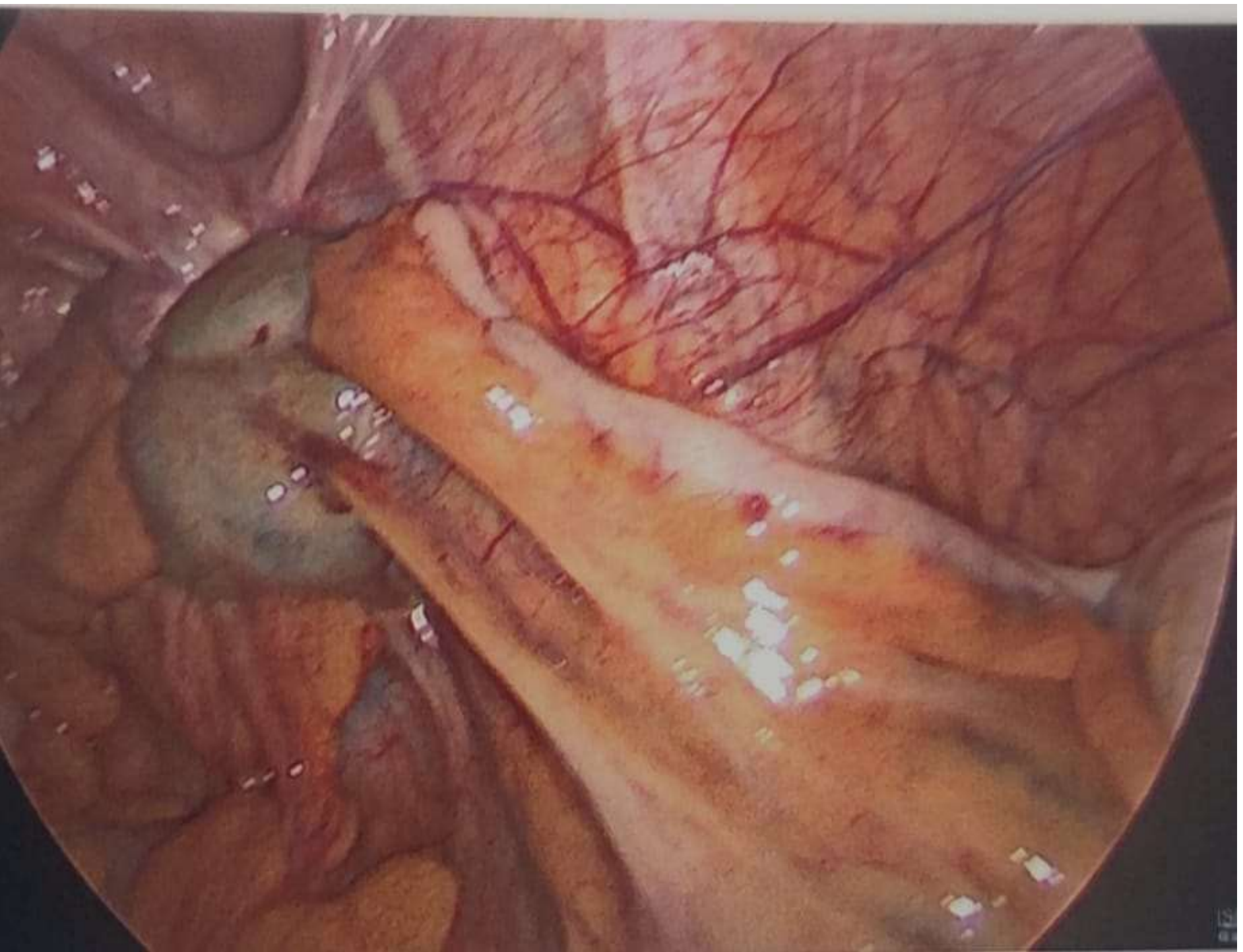
A 57-year-old postmenopausal woman was referred for evaluation of intermittent pelvic pain. Her medical history was unremarkable, and she reported no weight loss, bowel or urinary symptoms. Initial transvaginal ultrasound revealed a 4 cm heterogeneous right adnexal mass, suggestive of an ovarian fibroma. Serum tumour markers, including CA-125, were within normal limits.



Due to the patient’s severe claustrophobia, magnetic resonance imaging (MRI) could not be performed, and follow-up relied on serial ultrasonography and computed tomography (CT) scans. Over the course of 12 months, the adnexal mass showed rapid growth, increasing to 8.2× 6.4 × 7.4 cm. This raised clinical concern for malignant transformation, given its atypical behaviour.



The patient presented acutely to the emergency department with severe right iliac fossa pain. Repeat imaging showed further enlargement of the mass, with internal vascularity and free fluid in the pelvis, suggestive of ovarian torsion or malignancy. She underwent elective surgical management, consisting of total laparoscopic hysterectomy with bilateral salpingo-oophorectomy and peritoneal biopsies. Intraoperatively, a 10 cm necrotic right ovarian mass was found, densely adherent to the surrounding bowel, with a hyperaemic and inflamed peritoneal surface — findings that heightened the suspicion for malignancy. Extensive adhesiolysis was performed, and the mass was removed safely via mini-laparotomy.



Histopathological examination revealed a benign ovarian fibroma with areas of haemorrhagic infarction, consistent with torsion. There was no evidence of malignancy. The patient’s postoperative recovery was uneventful, and she was discharged in good condition with follow-up arranged.

Learning points

- ✔ Even typically benign ovarian fibromas can present with atypical features, such as rapid enlargement and inflammatory changes, mimicking malignancy.
- ✔ Diagnostic strategies must be adaptable when patient factors (e.g., claustrophobia) limit standard imaging options like MRI; careful clinical assessment and serial imaging can still effectively guide management.
- ✔ Intraoperative findings such as necrosis, adhesions, or peritoneal inflammation should be interpreted cautiously, as they may result from benign processes like torsion or infarction.
- ✔ Histopathology remains the gold standard for confirming the nature of adnexal masses and avoiding unnecessary overtreatment.

References

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