

# Abdominal wall lumps, not always a hernia!

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## Clinical Background

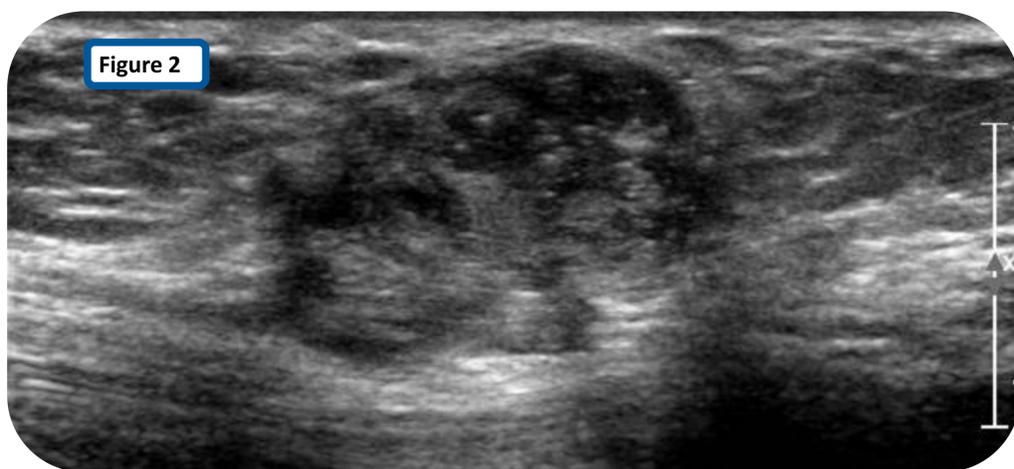
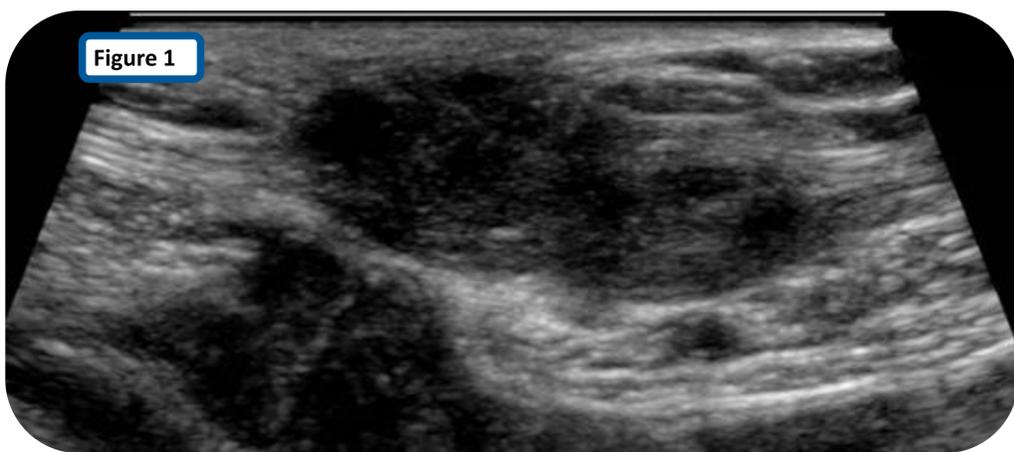
The patient was a 26 year old female who presented to their GP with a 6 month history of pelvic pain with a palpable lump on the caesarean section scar. There was also a previous history of endometriosis.

## Ultrasound

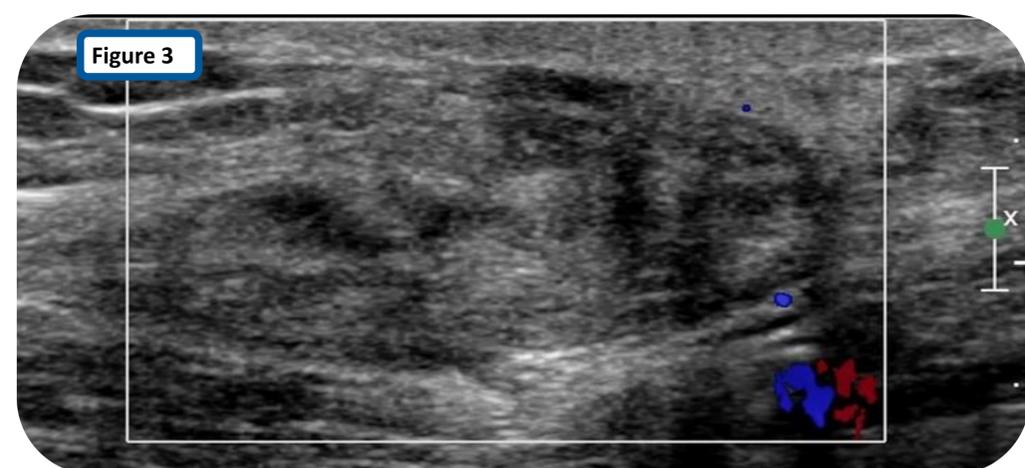
The Ultrasound scan reported a heterogeneous mass arising from the left rectus abdominis muscle and involving the subcutaneous tissues [Figures 1 and 2]. There was a small amount of peripheral vascularity although no central Doppler [Figure 3]. The patient indicated during scanning the mass had not significantly increased in size over 6 months although did become painful and fluctuates in size during menses. Given this additional clinical history and as the mass was directly under the caesarean section scar, an endometrial deposit was suspected. There was no evidence of an abdominal wall or incisional hernia. The patient was referred for an MRI scan.

## MRI and Histology

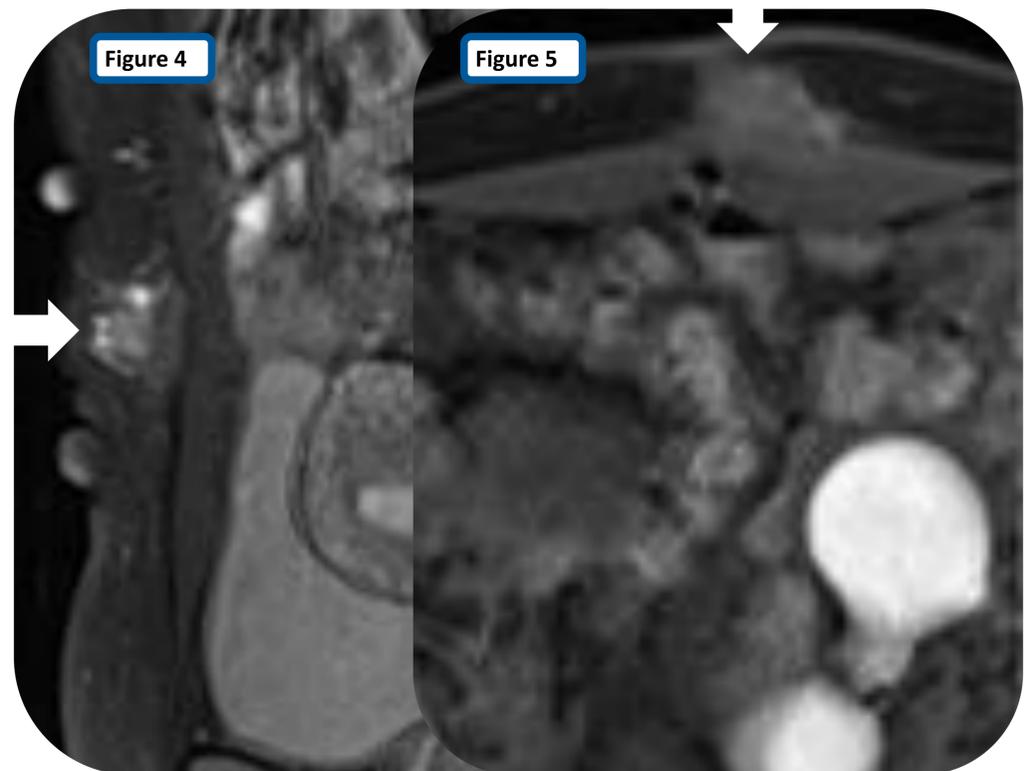
The MRI scan detected a mass involving both the rectus abdominis muscle and subcutaneous tissues [Figures 4-5]. Appearances were indeterminate but given the history the differential included endometriosis. The patient was referred to the Sarcoma MDT and had an Ultrasound guided biopsy. The histology reported fibrous tissue containing deposits of endometriosis. The patient had an excision biopsy and following this, there was complete resolution of the symptoms.



**Figure 1 and Figure 2:** Well-defined heterogeneous mass containing echogenic foci directly under the caesarean section scar. This is located in both the left rectus abdominis muscle and subcutaneous tissues.



**Figure 3:** Transverse image of the lower abdominal mass demonstrated no internal vascularity.



**Figure 4** (Proton density fat saturated sagittal image) and **Figure 5** (T2 axial fat saturated image) demonstrating a heterogeneous mass in the left rectus abdominis muscle.

## Discussion

Abdominal wall lumps are commonly encountered in clinical practice. For patients with a lump under the caesarean section scar, the differential diagnosis includes a desmoid tumour, metastatic malignancy, hernia, suture granuloma and endometriosis (1). Endometrial tissue outside the uterus is not uncommon in the peritoneal cavity, although can occur in the abdominal wall following obstetric and gynaecology surgery (2). The incidence of scar endometriosis is around 0.08% (3). Endometrial deposits are more common in the dermis and subcutaneous tissues compared to the muscle and fascia (4). One study reported Ultrasound has a high detection rate of 97.4% (147/151 cases) in detecting abdominal wall endometriosis, although the size of the lesion reported on Ultrasound was significantly smaller than that measured intra-operatively (5).

## References

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