

Abdominal Wall Endometriosis In Caesarean Scar – A Case Study

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INTRODUCTION

Abdominal wall endometriosis (AWE) is ectopic endometrium found superficial to the peritoneum. It is a relatively rare condition with a reported incidence of 0.03% – 3.5% (1). Usual presentation of AWE consists of a painful palpable mass which may become symptomatic around menstruation, and is typically associated with a previous surgical site. Following a Caesarean section the incidence of AWE ranges from 0.2–0.8% (1, 2), and surgical removal of the endometriosis nodule typically results in relief of chronic pain associated with the lesion (3, 4). AWE is often misdiagnosed as a lipoma, hernia or haematoma leading to delays in surgical intervention (5).

CASE

35 year old female referred from her GP for an anterior abdominal wall mass within the caesarean section scar. The subcutaneous nodule was associated with localised severe cyclical abdominal pain, lasting 10 days each month from day 2 of menstruation. On examination there was a 6cm fixed tender mass extending inferiorly from the caesarean scar to the pubic symphysis.

The patient has a past medical history of three previous caesarean sections and uterine didelphys with left renal agenesis. The patient has had two laparoscopies for endometriosis, most recently 6 months prior to her presentation where it was noted the uterus was densely adherent to the anterior abdominal wall, and was complicated by post-operative pulmonary embolism. The patient is using Implanon for contraception.

Ultrasound investigation confirmed uterine didelphys bicollis and a lower abdominal wall heterogeneous mass measuring 41x36x24 mm with mild hyper vascular solid lesions. An MRI was completed which identified an enhancing lesion (4.9 cm) suspicious for abdominal wall endometriosis.

Figure 2: MRI of the Anterior Wall Endometriosis

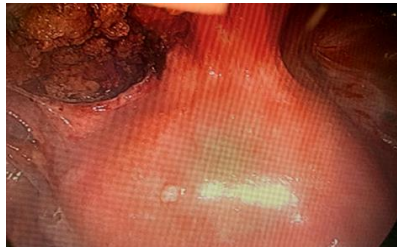


Figure 1: Uterus adherent to anterior abdominal wall

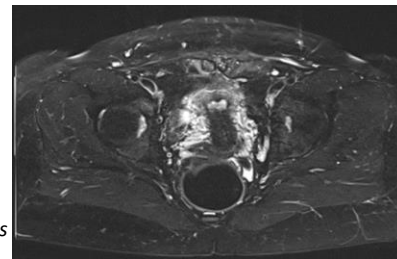
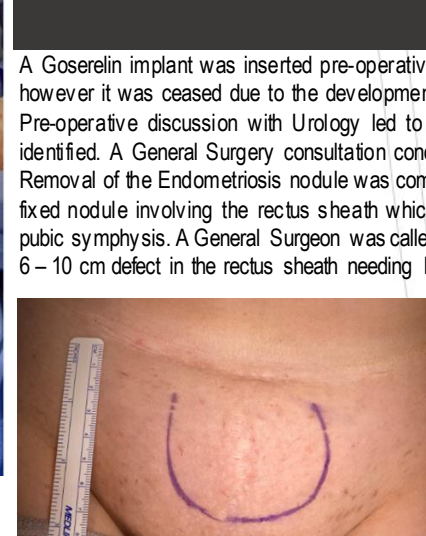


Figure 3: Resection down to Rectus Sheath for removal of Abdominal Wall Endometriosis



INTERVENTION

A Goserelin implant was inserted pre-operatively for 3 months to aid in mass regression and symptom control, however it was ceased due to the development of severe hypertension requiring dual anti-hypertensive agents. Pre-operative discussion with Urology led to a flexi-cystoscopy being performed and no bladder lesion was identified. A General Surgery consultation concluded that a mesh repair post removal of AWE may be required. Removal of the Endometriosis nodule was completed with incision through existing Pfannenstiel scar. There was a fixed nodule involving the rectus sheath which extended inferiorly from the level of the Pfannenstiel scar to the pubic symphysis. A General Surgeon was called for assistance in excision of macroscopic disease resulting in a 6 – 10 cm defect in the rectus sheath needing Biomesh for closure.

RESULTS

Histopathology confirmed subcutaneous endometriosis
Dimensions: 60 x 55 x 20mm
Patient expressed significant reduction in pain during menstruation two months post operatively.

Figure 4: Pre operative measurement of mass, post Goserelin for 3 months.

DISCUSSION

Research has found that 96% of patients with AWE present with a mass, 87% present with pain and 57% present with cyclical symptoms (6). Surgical excision of AWE is the current standard of care and results in cure of AWE 95% of the time (6). Wide excisions are recommended to decrease the risk of recurrence, which occurs in 5 – 9% of cases (7, 8). In patients where fascia and muscle need to be excised leaving a larger deficit, the risks associated with mesh for repair (infection, seroma, skin necrosis and herniation) need to be considered prior to the intervention (9, 10). To determine the extent of disease, imaging such as Ultrasound, CT and MRI can be used to allow pre-operative planning and a multi-disciplinary approach.

Pre-operative use of Gonadotrophin releasing hormone analogues, combined oral contraceptives and progestogens are thought to reduce the size of the AWE and are useful post procedure to reduce the risk of recurrence and delay new growth (12).

In women with cyclical pain and a history of caesarean sections, it is important to have a high index of suspicion for abdominal wall endometriosis as earlier identification can lead to less disease sequelae.

References:

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