A very unusual case of primary inguinal endometriosis: a case report and review of the literature.

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What is inguinal endometriosis?

- Inguinal endometriosis remains a rare occurrence with a reported incidence of >1%.
- It was first described in 1896 and is thought to arise due to the presence of endometrial tissue within the extraperitoneal portion of the round ligament.
- We present the unusual case of a 25-year-old, with no previous gynaecological or surgical history, who presented with a 2cm endometriotic nodule in her right inguinal region, which was successfully treated with complete surgical excision.

Case Report

- A 25-years old nulliparous patient presented to the gynecology clinic with a cyclically painful right-sided groin lump. Symptoms were worsening despite the COCP and examination revealed a 2cm tender groin lump.
- US scan confirmed a 2cm irregularly shaped hypoechoic lesion (Figure 1) and subsequent MRI described a low intensity speculated mass in the right inguinal lesion likely to represent an endometriotic nodule (Figure 2).
- US-guided biopsy confirmed endometriosis and excision under GA was offered in view of her worsening symptoms.
- A linear incision was made over the nodule and the overlying superficial tissue dissected off. Following identification of the femoral vessels the mass was explored and found to be arising from the right round ligament. This was fully excised using diathermy and the proximal stump was sutured to surrounding tissue. A 3-layer closure was then undertaken.
- Histology confirmed endometriosis and the patient made a good post-operative recovery.

Differential diagnosis of an inguinal lump

- Hernia
- Lymphadenopathy
- Granuloma
- Abscess
- Haematoma
- Lipoma
- Sarcoma
- Right sided inguinal endometriotic lesions are more common possibly due to the asymmetrical lymphatic drainage.

Imaging

US findings are variable

- Round or oval cystic masses, representing cyclical bleeding are found in most cases. Hypoechoic solid or combined cystic and solid masses have also been described

Figure 1: Hypoechoic groin lesion

MRI is more sensitive than CT

- 2 MRI patterns for inguinal endometriosis have been described
  - Type 1 - cystic hyperintense lesions, on both T1- and T2-weighted images.
  - Type 2 - solid components, showing a high signal intensity on T1-weighted images and either hypointensity or moderate hyperintensity on T2-weighted images

Figure 2: Low signal intensity 2cm speculated mass (arrow) with a corresponding enhancing post gadolinium

Conclusion

Inguinal endometriosis remains a rare phenomenon, but the diagnosis must be considered in those presenting with a painful groin lump. Although there is no standardised management plan, the generally accepted approach is complete surgical excision as medical management is rarely curative. Meticulous surgical technique is essential to ensure complete resection with adequate margins to avoid recurrence.