Endometriosis of Inguinal Canal – A Case Report

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ABSTRACT

Endometriosis is a common gynaecological condition, characterised by the presence of endometrial tissue in sites other than the uterine cavity (excluding adenomyosis) that frequently presents with pain. Endometriosis occurring in the inguinal canal or attached to the round ligament is very uncommon. It classically presents as a groin mass and can coincide with other pathologies such as inguinal hernias, raising diagnostic difficulties. We report a case of right inguinal endometriosis with right inguinal hernia in a 19 years old girl.

KEYWORDS: Endometriosis, Painless, Inguinal hernia, Teenage girls

INTRODUCTION

Endometriosis, a major contributor to pelvic pain and subfertility [1] is characterized by endometrial-like tissue outside the uterus, primarily on the pelvic peritoneum, ovaries, and rectovaginal septum, and in rare cases on the diaphragm, pleura, and pericardium. Endometriosis affects 6 to 10% of women of reproductive age, 50 to 60% of women and teenage girls with pelvic pain, and up to 50% of women with infertility [2]. Although first reported in the British Medical Journal in 1949 [3], endometriosis occurring in the inguinal canal or attached to the round ligament is very uncommon. It classically presents as a groin mass and can coincide with other pathologies such as inguinal hernias, raising diagnostic difficulties [4].

During embryological development, the processes vaginalis is a peritoneal evagination into the inguinal canal and in the female it accompanies the round ligament or the gubernaculum. In both sexes it obliterates completely by the first year of life. When it fails to obliterate completely, it can result either in a congenital hernia or a hydrocele. In such cases, the canal provides the most likely pathway for the endometrial tissue to implant into superficial inguinal tissues extending as far as 96% into the inguinal region.

Endometriosis of the inguinal canal can be difficult to detect, with the correct preoperative diagnosis made less than 50% of the time [5]. The presumptive diagnosis is most often confused with conditions such as incarcerated hernia, lymphadenopathy, suture granuloma, neuroma, abscess, hydrocele of the inguinal canal, primary or metastatic cancer, lymphoma, lipoma, hematoma, sarcoma, and subcutaneous cyst [5,6]. We report a case of endometriosis of right inguinal canal associated with hernia.

CASE REPORT

A 19 year old girl presented with lower abdomen pain of 7 days duration with previous history of dysmenorrhoea. Her menarchae was at age of 13 years. On examination abdomen was soft non tender, expansible cough impulse was present at right inguinal region. Ultrasonogram abdomen was normal. Patient was advised for hernia surgery.

Patient underwent surgery, on exploration of right inguinal region indirect sac was present, pink coloured cystic swelling measuring 4×2 cm attached to sac(fig. 1). Near the...
Histopathology reported as endometriosis (fig. 2). Post surgery 2 months patient is asymptomatic.

**DISCUSSION**

The predominance of right-sided inguinal endometriosis remains unknown. The asymmetrical lymphatic drainage in favour of the right inguinocrural region might explain this phenomenon. Very often, the final diagnosis is made only after the pathology, either from biopsy or at exploration, and demonstrates the histological presence of endometriosis [5].

A history of periodic menstrual pain and tenderness associated with an inguinal mass is important in distinguishing this condition from other inguinal pathology [6]. Diagnostic modalities such as radiological studies, ultrasound, and computed tomography scan have not been specifically helpful in the diagnosis [5].
On the other hand, magnetic resonance imaging is more accurate since it can identify the presence of iron in the haemosiderin deposits contained in an endometrioma[7]. Fine needle aspiration biopsy has also been shown to aid in the diagnosis of a case of endometriosis associated with an inguinal hernia [7,8]. Perez-Seoane et al. [8] believe that this procedure should probably be the first step in the diagnosis of inguinal endometriosis due to its ease in performing and accuracy in results [8]. It has been proposed that extrapelvic endometriosis that is distant to the uterus tends to lose its hormonal receptors and response, hence the lack of cyclic symptoms.

CONCLUSION
The differential diagnosis of a swelling in the groin is broad. Inguinal endometriosis may be asymptomatic or may present with cyclic symptoms of pain and swelling of the inguinal region. The disease is diagnosed using pathologic findings and surgical excision is the definitive treatment.

REFERENCES

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