

Unusual Presentation of Endometriosis

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ABSTRACT

A rare case of endometriosis in an umbilical hernia is presented. The clinical course and management of the patient with a literature review of the unusual site of endometriosis is discussed.

Keywords: Endometriosis, Umbilical hernia, Extrapelvic endometriosis.

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INTRODUCTION

Endometriosis is a condition in which endometrial stroma and glands are found outside of the uterine cavity. It is found in 8 to 15% of all menstruating women.

The endometrial tissue is generally found within the pelvic cavity and involves the ovaries, uterine ligaments, fallopian tubes, pouch of Douglas or pelvic side wall.

Extrapelvic sites also have been reported, including the abdominal viscera, abdominal wall, extremities, lungs and brain.

However, endometriosis in the umbilical hernia is very rare site of occurrence of the disease and accounts for only 0.5 to 1% of all endometriosis cases.¹

CASE PRESENTATION

A 42 years old lady, referred to the clinic for repair of an umbilical hernia.

She has a history of umbilical hernia for the last 5 years, but for the last 5 months, there is a history of tender umbilical hernia that had increased in size gradually, pain and size of hernia increases in relation to her menstrual cycle.

Her only history of abdominal surgery was a cesarean section to deliver twins 5 years earlier, which had left a low transverse incision scar.

Physical examination revealed 5 × 5 cm, irreducible umbilical hernia with dark skin discoloration, no other masses were observed in the abdomen or by the low transverse scar.

Surgical exploration revealed an umbilical hernia. Part of the irreducible omentum was excised. The hernia defect was repaired, the surgical specimen was sent to pathology for evaluation.

Microscopic sections revealed, histological features consistent with umbilical endometriosis, endometrial glands

and stroma with surrounding fibrosis and hemorrhage are identified in the material Figs 1 and 2.

The patient was discharged home the next day of the procedure, recovered well from surgery.

DISCUSSION

There are a variety of theories regarding the cause of endometriosis. None have been proven, nor does any one theory explain all the different manifestations of the disease.²

The retrograde theory, which contends that endometrial tissue reflexes through the fallopian tubes during menstruation and implants at ectopic sites, would explain the high percentage of cases occurring in the pelvis.

The presence of remote, extrapelvic sites is better explained by the metaplasia theory, which suggests that

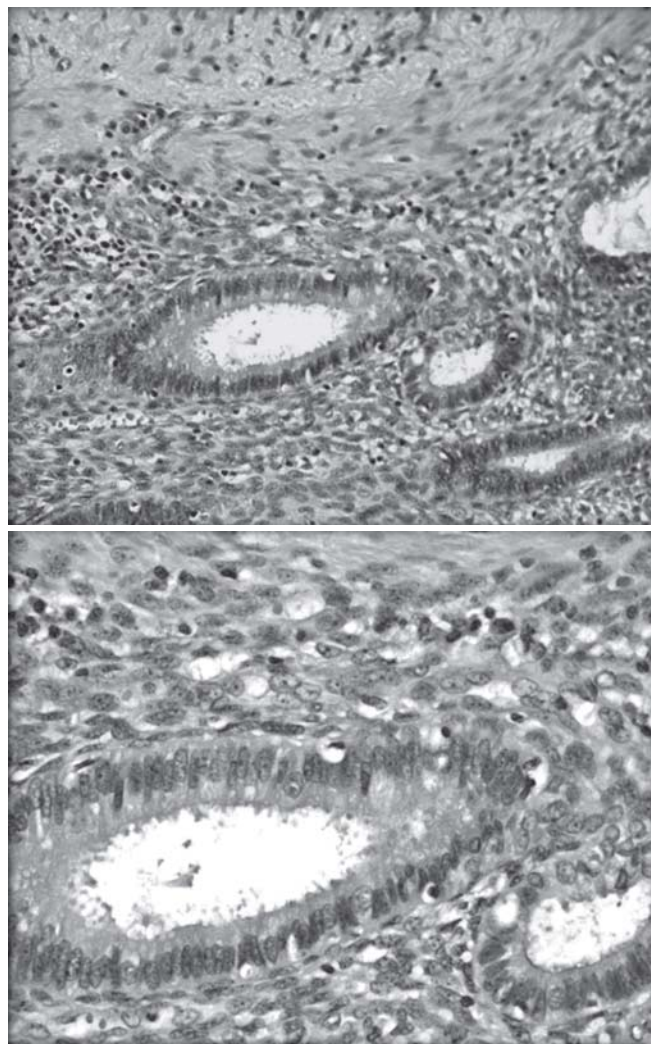


Fig. 1: Endometriosis by pathology

multipotential cells can develop into endometrial tissue, often stimulated by inflammation.

In 1994, Yu and associates described their experience with a 30-year-old woman who had an 18-month history of cyclic umbilical pain and bleeding. A $1.5 \times 1.5 \times 1.0$ cm lesion was found in the umbilical area, adjacent to a small umbilical hernia. Histological analysis of the lesion revealed endometriosis with chronic inflammation, hemosiderin and fibrosis.³

In 2000, Ramsanahie and associates reported a case of endometriosis in the scarless abdominal wall of a 33-year-old woman. She had a 2-year history of intermittent pain associated with an umbilical mass and underlying umbilical hernia. The mass increased in size and tenderness prior to menstruation. Physical examination revealed a 2×1 cm, firm, round, cherry red nodule at the umbilicus with an underlying umbilical hernia. Postoperative histological analysis showed endometriosis.⁴

In 2001, Yuen et al reported the case of 43-year-old woman who for several months had experienced umbilical pain that came on during her menses. She had a lower midline incision scar from a cesarean section that had been performed 9 years earlier. Physical examination revealed a tender, irreducible umbilical hernia with skin discoloration. Histological analysis showed a focus of endometrial tissue within the lower dermis.⁵

In 2007, Waxman et al reported a case of 29-year-old woman, presented with a 7-month history of tender umbilical mass; the initial impression was that she had an incarcerated hernia with possible bowel strangulation. Microscopic sections revealed an admixture of benign endometrial glands and stroma consistent with endometriosis.⁶

Between 0.5 and 1% of all endometriosis cases involve the umbilicus, endometriosis and umbilical hernia is not only rare, it can present as a diagnostic pitfall to the general surgeon.

Thus, it should be considered in the differential diagnosis of all premenopausal women presenting with umbilical swellings.

The diagnosis is often made incidentally by histological examination after surgical exploration and excision of the lesion.

The fact that up to 50% of these affected women may have concomitant pelvic endometriosis, further pre-operative diagnostic investigations, is advisable. MRI is recommended as the best investigation. This modality of imaging has been shown to be useful for delineating the size and location of extrapelvic endometriosis and in excluding intra-abdominal extension of the disease.

CONCLUSION

Extrapelvic endometriosis in the umbilical hernia sac is rare. This case highlights the importance of considering endometriosis in the differential diagnosis of any premenopausal woman who presents with umbilical swelling and pain, regardless of whether the pain correlates with her menses.

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