Umbilical endometriosis primary site without pelvic endometriosis and previous surgery: a case report

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Summary: Umbilical endometriosis primary site without pelvic endometriosis and previous surgery: a case report.

The prevalence rate of umbilical endometriosis (also called Villar nodule) ranges from 0.5 to 1.0% in all patients with extragenital endometriosis. This report describes a case of primary umbilical endometriosis that developed in the absence of previous abdominal or uterine surgery and in which abdominal laparoscopy did not detect pelvic endometriosis.

Introduction

Endometriosis is defined by the presence of functional endometrial tissue outside the uterine cavity. Extrapelvic manifestations of this condition have been described in almost every area of the female body including the lung, brain, umbilicus and surgical scars.

The prevalence rate of umbilical endometriosis (also called Villar nodule) ranges from 0.5 to 1.0% in all patients with extragenital endometriosis (1).

The present report describes a case of primary umbilical endometriosis that developed in the absence of previous abdominal or uterine surgery and in which abdominal laparoscopy did not detect pelvic endometriosis.

Case presentation

A 33-year-old, nulliparous woman presented herself at our clinic with a one-year history of spontaneous and cyclical umbilical bleeding, swelling and pain.

The symptoms in the umbilicus began on the first day of the menstrual cycle and ended with its termination. She had no dysmenorrhea, dyspareunia, dysuria and dyschezia. She did not report previous use of any hormonal contraception and had not undergone previous surgery.

An inspection of the abdomen evidenced a 15 x15 mm hard umbilical nodule. It was brown and had the appearance of a pigmented tumor (Figure 1).
Ca-125 serum levels were in the normal range and pelvic transvaginal ultrasound did not evidenced any endometriosis sign (2, 3). A magnetic resonance study showed a round mass of 1 cm under the umbilical scar. The patient received a continuous estroprogestin treatment with complete regression of the symptoms, which, however, represented themselves with suspension of the therapy.

To achieve a definitive treatment surgical removal of the nodule (omphalectomy) and reconstruction of the umbilicus with positioning of a mesh were proposed. After removal of the nodule a diagnostic laparoscopy was performed. No pelvic or abdominal signs of endometriosis were evidenced but many peritoneal biopsies were undertaken to eventually evidence microscopic lesions (Figure 2). Histological examination confirmed umbilical endometriosis, and pelvic biopsies were not able to evidence any microscopic endometriosis.

**Discussion**

The pathogenesis of endometriosis is still under debate (4). The umbilical endometriosis nodule can arise spontaneously or after surgical procedures associated with scars.
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The diagnosis is often clinical, based on symptoms reported by patients. Sometimes we can use also ultrasound imaging or magnetic resonance to study the depth and the extent of the mass and if the mass is cystic or solid.

The therapy of endometriosis is surgical, but sometimes the medical treatment with hormonal oral contraceptives is useful and effective in controlling symptoms but not to eradicate the disease. For this reason, surgical therapy of umbilical endometriosis is the gold standard, with a low rate of symptom recurrence. Furthermore, the rare possibility of malignant transformation of the umbilical lesion should not be forgotten, so a histological examination is always recommended.

Finally, it may prove useful to perform a diagnostic laparoscopy in case of umbilical endometriosis without previous history of surgery or pelvic endometriosis, to assess the presence of pelvic endometriosis and eventually to treat it in the same time (5).

Conclusion

Cutaneous endometriosis should be considered when examining any umbilical skin lesion in a female, at fertile age, with cyclic symptoms like pain, swelling and bleeding associated with the menstrual and cannot be associated to pelvic endometriosis.

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References