Abdominal wall endometriosis: report of two cases

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Abstract

Endometriosis is the abnormal existence of functional uterine mucosal tissue outside the uterus. It is a usual disorder of women in reproductive age, which is mainly located in the female genital tract. We report the cases of two women with endometriosis of the abdominal wall: the first one in the rectus abdominis muscle and the second one in the surgical scar of previous caesarian incision. The diagnosis was made by the histopathological analysis of the surgical specimens.

Keywords: endometriosis, abdominal wall, rectus abdominis muscle, surgical scar.

Introduction

Endometriosis is the abnormal existence of functional uterine mucosal tissue outside of the uterine cavity and musculature. While extrapelvic endometriosis refers to endometriosis found at body sites other than the pelvis [1].

Endometriosis of the abdominal wall is a subtype of extrapelvic endometriosis. Common presentation includes palpable mass, cyclic pain during the menstruation, bleeding and discharge. Differential diagnosis includes abscess, lipoma, hematoma, sebaceous cyst, suture granuloma, inguinal hernia, incisional hernia, desmoid tumor, sarcoma, lymphoma and primary or metastatic cancer.

We present the clinical findings, the diagnostic procedures, and the management of two women with endometriosis of rectus abdominis muscle and surgical scar respectively.

Patients, Methods and Results

Case no. 1

A 32-year-old woman was presented with a 15-day history of persistent and continuous pain on the right anterior abdominal wall. The patient was at the 5th day of the menstrual cycle and had a 2-year history of caesarian incision. On physical examination, a palpated solid and painful mass was found in the right rectus abdominis muscle. Routine hematologic and blood biochemistry results were normal. Ultrasound (US) of the mass revealed a 3.5×1.5 cm solid heterogeneous mass of the anterior abdominal wall (Figure 1).

During surgery, a hyposcleral tissue mass with blood clot, desmoid elements, and adhesions with the posterior rectus sheath was completely excised from the rectus abdominis muscle. Histopathologic examination showed endometriosis (Figure 2).

The patient had an uneventful postoperative course, without any signs of recurrence three years after the operation.

Case no. 2

A 35-year-old woman was presented with a 5-month history of pain during her menstruation at her abdominal scar from a caesarian section five years earlier. On examination, she had a tender nodule measured 4 cm to the top of her Pfannenstiel scar. Hematologic and blood biochemistry results were normal while US of the mass demonstrated a 4.5×3 cm solid heterogeneous area.

At operation, a mass that contained dark serous fluid was removed superficial to the fascia (Figure 3). Histopathologic evaluation confirmed surgical scar endometriosis, possibly secondary to the caesarian section (Figures 4 and 5). The patient had an uneventful postoperative course, without any reported symptoms six months postoperatively.

Discussion

Endometriosis is approximately estimated to affect 10% to 15% of women in reproductive age with a mean age of presentation of 31.7 to 34 years, and up to 50% of infertile women [2]. Endometriosis usually involves the ovaries, the uterine tube, the uterus, the vagina, the cervix, the vulva, the sacro uterine ligament, the teres ligament and the rectovaginal septum.

Extrapelvic endometriosis has an incidence, which represents 8.9% of reported cases of endometriosis [2]. It may involve peritoneum, the urinary bladder and the ureter, the lungs, the gallbladder, the breasts, the extremities, the colon and the rectum.

Endometriosis of the abdominal wall has an incidence, which is approximately 4% and is mainly localized at surgical scars, at the umbilicus and rarely at the inguinal canal or the rectus abdominis muscle [3].
The true incidence of scar endometriosis is difficult to determine, but is estimated at 0.03% to 0.15% with the mean period between the procedure and symptoms starting around five years [4]. The clinical diagnosis of abdominal wall endometriosis should be suspected in any woman with a nodule near the surgical scar or in the
rectus abdominis muscle who presents with pain, odour, itch or bleeding associated with the menstrual cycle. In our cases, the first patient had endometriosis of rectus abdominis muscle presented with persistent and continuous pain on the right anterior abdominal wall and the second one had endometriosis of surgical scar presented with pain during her menstruation.

Endometriosis is though to arise from transport and implantation of endometrial cells from the uterine tubes to the ovaries, the pouch of Douglas, the scars at the time of surgery and the other sites of peritoneal cavity or via vascular and lymphatic channels or arise through metaplasia of urachus remnants [4].

Multiple diagnostic procedures have been used for the diagnosis of abdominal wall endometriosis such as US, computed tomography (CT), or magnetic resonance imaging (MRI). However, none of them is specific and the excisional biopsy remains the preferred [5].

The treatment of choice for the endometriosis of the abdominal wall is the extensive surgical excision including the adjacent fascia [3]. Local recurrence is likely to be after an inadequate surgical excision [2]. The hormonal management with progestogens and gonadotropin releasing hormone analogues has short-term success in alleviation of symptoms recurrence is common after cessation of treatment [1].

**Conclusions**

Endometriosis of the abdominal wall must be considered in the differential diagnosis in women with painful abdominal wall mass. The symptoms does not have always-cyclic attribute and the imaging procedures are not specific for the diagnosis. The extensive surgical excision remains the treatment of choice.

**References**


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*Received: May 20th, 2008*

*Accepted: September 10th, 2008*