Case Report

Abdominal wall endometriosis in the cesarean section surgical scar, a rare entity of extrapelvic endometriosis

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Abstract

The abdominal wall is the most common position locating endometriosis. The presentation of the event concerning the occurrence of endometriosis in scar of laparotomy after cesarean section. A patient, four years after cesarean section performed with Pfannestiel, came to our outpatient clinic with abdominal pain primarily located in the left end of the surgical scar. Based on history and clinical findings was the suspected endometriosis of the abdominal wall and decided surgical exploration of the disease. Intraoperatively was found hard clumps, a surface of which was solid adherent to the fascia of the abdominal muscles without good infiltration of the muscular wall. Histological examination of surgical preparation confirmed diagnosis of endometriosis in the abdominal wall with fresh bleeding and old data. In this work, after the description of the incident by the systematic arrangement and processing of modern references attempted a brief review of this rare localization of the disease, regarding the pathogenesis, diagnosis, treatment and prognosis.

Key words: Endometriosis, Laparotomy Scar, Pathogenesis, Diagnosis, Treatment, Prognosis

INTRODUCTION

Endometriosis was first described by Rokitansky in 1860. It is a non – invasive neoplastic disease of the reproductive age of women, characterized by the presence and development of functional endometrial tissue outside of the normal anatomical limits of the uterus. The incidence of the disease is not easy to determine with precision. Overall, it is estimated that it affects about 1% - 2% of women of reproductive age, approximately 40% – 60% of women with dysmenorrhea and 15% – 25% of infertile women (Bulletti et al., 2010). Endometriosis is usually located in the bowels of pelvic and peritoneum. More rarely, it is possible to find and except pelvis spot disease in every tissue and organ in the female body, including laparotomy scar, episiotomy scar, navel, vagina, urinary, gastrointestinal, respiratory, central nervous system, and others (Machairiotis et al., 2013).

CASE REPORT

Patient 28 years old came to our clinic outpatient clinic with abdominal pain primary located in the left iliac fossa. The patient described the symptom from four years, about four months after performing caesarean section. Over time reported deterioration of its situation especially during the days of menstruation, when describing pain intensity greater while felt painful swelling of the skin in the area of the fault. The information received from the obstetrical history attesting to perform caesarean section Pfannestiel without postoperative complications. The medical history was free and the clinical examination was found palpably painful in duration at the left end of the surgical scar. After ultrasound of upper and lower abdomen, there were no findings suggestive of intra-abdominal disease. The Computed Tomography (CT)
Based on history and clinical findings was suspected endometriosis of the abdominal wall and decided surgical exploration of the disease. Intraoperatively was found solid round mass, diameter about 4 cm, hard, small area which was solid adherent to the fascia of good abdominal muscles (Figure 1). There wasn’t found infiltration of the abdominal muscle wall. Histological examination of the preparation confirmed diagnosis of endometriosis in the abdominal wall with fresh and old bleeding elements (Figure 2). Postoperatively the patient reported relief of symptoms. No further therapeutic intervention was established since it was considered that there was complete resection of endometriosis outbreak of the abdominal wall.

**DISCUSSION**

The abdominal wall is the most common place of development of ectopic endometriosis tissue. The lesion usually relates to the subcutaneous tissue, while rarely possible to expand the fascia abdominal muscles and muscle wall (Bektaş et al., 2010). Although the literature cases automatic event reported the disease without prior
Table 1. Factors that favor the development of endometriosis in the abdominal wall.

- Automatic endometriosis
- Uterus section
- Caesarean section
- Gynecological operations
  - abdominal access
  - laparoscopic access
- Amniocentesis

Table 2. Pathological situations requiring differential diagnosis of endometriosis of the abdominal wall.

- Abscess
- Lipoma
- Hematoma
- Granuloma
- Neuroma
- Sebaceous cyst
- Inguinal
- Incisional
- Lymphadenopathy
- Lymphoma
- Sarcoma

Table 3. Diagnostic approach of endometriosis of the abdominal wall.

- History
- Clinical examination
- Serological markers
- Transabdominal ultrasound
- Transvaginal ultrasound
- CT
- MRI
- Aspiration biopsy

In most cases, endometriosis of the abdominal wall is iatrogenic and related to previous surgery scar that requires the opening of the uterine cavity. The most important predisposing factor for the development of ectopic endometriosis tissue in the abdominal wall by the foregoing hysterectomy in pregnant women. Especially the destructible early pregnancy seems predisposed to implant the surgical scar. Generally, the frequency of development of the disease is estimated to be higher after uterine incision for terminating a pregnancy than after cesarean section. More specifically, after uterine incision to address second trimester abortion calculated terms in 1.08% of cases, and after cesarean 0.03% – 0.04% (Patterson and Winburn, 1999). Recently, Chang and his colleagues showed that after cesarean section scar endometriosis in the laparotomy scar is related to 0.03% - 0.47% of cases, while the average period until onset of symptoms is estimated to be 39.3 months (Chang et al., 2009). Moreover, various gynecological surgeries open or laparoscopic access, and rarely amniocentesis (Table 1) included in predisposing factors have been implicated in endometriosis of abdominal wall (Hughes et al., 1997; Emre et al., 2012).

The diagnosis of endometriosis in surgical scars is not easy and often arises late. The symptoms are not specific and frequently appear after months or years after surgery. Usually displayed a slowly growing painful palpable mass in the scar area which may increase in size and become more painful during menstruation. The pain is the predominant symptom and occurs in almost all cases. The pains, though classically described as a
Ultrasound examination seems to be a useful but non-specific diagnostic method. With transabdominal ultrasound can be detected in the abdominal wall, the ultrasonographic characteristics which include a infrasound heterogeneous structure with internal vascularization of ectopic endometrial tissue have been reported in the international literature incipient tumor masses endometriotic origin in surgical scars after gynecological surgeries or cesarean (Stevens et al., 2013; Dobrosz et al., 2014). The treatment of endometriosis of the abdominal wall depends on the severity of symptoms and the age of the patient. Wide surgical resection of ectopic endometriotic masses in the abdominal wall. The method can distinguish ectopic endometrium from other pathologies included in the differential diagnosis of endometriosis of the abdominal wall and contribute to timely and accurate preoperative diagnosis, in order to achieve the most appropriate therapeutic approach design disease (Dash et al., 2015).

The prognosis of endometriosis of the abdominal wall is usually good. Immediately after surgery most patients report relief of their symptoms. Postoperative monitoring to determine Ca125 is necessary. The Ca125 a recurrence rate of the disease, and malignancy, as reported in the international literature iatrogenic. It is a rare form extra pelvic endometriosis in the differential diagnosis which should include all the painful masses in the abdominal wall. The cyclical
changes, the progressive increase in the size of the lesion and a range of modern serological and imaging now permit early detection and the proper selection of the most appropriate therapeutic manipulations in order to minimize the risk of recurrence and to prevent malignant transformation of the disease.

REFERENCES


