

Case Report

CESAREAN SCAR ENDOMETRIOSIS--A CASE REPORT

*Alpana Singh, M. Jayasheela Reddy

Malla Reddy Medical college, Andhra Pradesh

*Author for Correspondence

ABSTRACT

Endometriosis is described as the presence of functioning endometrial tissue outside the confines of the uterine cavity. Scar endometriosis is a rare disease, and is difficult to diagnose. The symptoms are nonspecific, typically involving abdominal wall pain at the incision site at the time of menstruation. It commonly follows obstetrical and gynaecological surgeries. The diagnosis is frequently made only after excision of the diseased tissue. We present here a case of abdominal wall scar endometriosis in a woman who had undergone a caesarean section three years ago. Surgical excision led to the diagnosis of scar endometriosis. The pathogenesis, diagnosis and treatment of this rare condition are discussed.

Keywords: Abdominal Wall, Painful Scar, Menstruation, Scars Endometriosis

INTRODUCTION

Endometriosis, first described by Rokitansky in 1860, was defined as the presence and proliferation of endometrial tissue outside the uterine cavity, commonest site being the pelvis (Francica *et al.*, 2003). However, extra pelvic endometriosis is a fairly uncommon disorder and difficult to diagnose. The various sites for extra pelvic endometriosis are bladder, kidney, bowel, omentum, lymph nodes, lungs, pleura, extremities, umbilicus, hernial sacs, and abdominal wall (Markham *et al.*, 1989). Majority of the scar endometriosis have been reported after obstetrical or gynecological procedures such as cesarean section, hysterotomy, hysterectomy, episiotomy, and tubal ligations (Padmanabhan *et al.*, 2003; Bhowmick *et al.*, 1986; Chatterjee, 1980). The incidence of scar endometriosis has been estimated to be only 0.03% to 0.15% of all cases of endometriosis (Francica *et al.*, 2003; Kaloo *et al.*, 2002).

Endometriosis, in patients with scars, is more common in the abdominal skin and subcutaneous tissue compared to muscle and fascia. The present study describes a case of scar endometriosis, and reviews the literature to elucidate signs and symptoms that may lead to an earlier diagnosis and prompt treatment.

CASES

A 32-year-old woman presented to the gynae OPD with complaints of pain and swelling on the right side of the transverse cesarean scar for the last 2.5 years. She had two cesarean deliveries - 6 and 3 years ago. She regained her menstruation after 6 months of her second cesarean, when she had this complain of pain abdomen, and this phenomenon has been continuing since then. She described pain above the cesarean scar that increased during the menstruation period and then noticed a swelling above cesarean scar. She was an otherwise healthy woman with no significant medical history. Physical examination revealed a well-healed caesarean scar, with a solitary, nonmobile, nodular, tender mass of 3 x 3 cm at the right part of the scar (Figure 1).

Transvaginal and transabdominal ultrasound showed a 4 cm × 3 cm oval-shaped heterogeneous mass in the subcutaneous and muscular planes, with no abnormalities of the uterus and ovaries

Based on characteristic history and examination findings, diagnosis of scar endometriosis was made. However other possibilities like hematoma, granuloma and desmoid tumour were considered

The patient was posted for a wide local excision of the abdominal wall lump. Intraoperatively, extensive fibrosis of the scar to the fascia was noted. The lump was about 3 x 3cm, firm, in the subcuticular plane extending to the abdominal wall muscles. Wide excision with clear margins was performed (Figure 2, 3). Postoperative period was uneventful and her pain subsided.

Histopathology of excised mass showed fibroadipose tissues with interspersed endometrial glands and stroma in deep areas of dermis, confirming the diagnosis of scar endometriosis (figure 4).

Case Report



Figure 1: swelling at end of caesarean scar



Figure 2: Endometrial mass being removed from over the abdominal muscles



Figure 3: Firm, compact appearing endometrial mass

Case Report

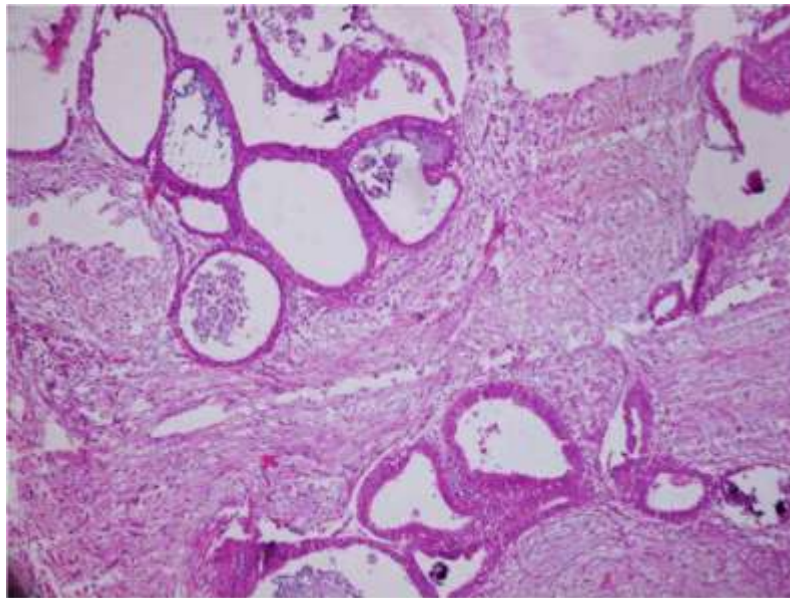


Figure 4: Hematoxylin and eosin photomicrograph showing benign endometrial glands and stroma in the subcutaneous tissue consistent with endometriosis

DISCUSSION

Endometriosis involving the abdominal wall is an unusual phenomenon which should be considered in the differential diagnosis of abdominal wall masses in women. The usual clinical presentation is a painful nodule in a parous woman with a history of gynecological or obstetrical surgery. The incidence has been estimated to be only 0.03% to 0.15% of all cases of endometriosis (Francica *et al.*, 2003; Kaloo *et al.*, 2002). However a study done by Chatterjee SK in 1980 showed 1.08-2% of scar endometriosis following hysterotomy where as after cesarean section the incidence was 0.03-0.4% (Chatterjee, 1980). The reason for higher incidence after hysterotomy has been given as the early decidua has more pluripotential capabilities and can result in cellular replication producing endometriomas. Many theories as to the cause of scar endometriosis have been postulated; however, the most generally accepted theory is the iatrogenic transplantation of endometrial implants to the wound edge during an abdominal or pelvic surgery (Francica *et al.*, 2003; Kaloo *et al.*, 2002; Tanos and Anteby, 1994; Douglas and Rotimi 2004). Time interval between operation and presentation has varied from 3 months to 10 years in different series (Sax *et al.*, 1996).

The diagnosis of scar endometriosis may be challenging. Cyclical changes in the intensity of pain and size of the endometrial implants during menstruation are usually characteristic of classical endometriosis. Patients usually complain of tenderness to palpation and a raised, unsightly hypertrophic scar. A high index of suspicion is recommended when a woman is presented with a post operative abdominal lump. Good history taking and thorough examination with appropriate imaging techniques (ultrasound, CT or MRI) usually lead to the correct diagnosis. MRI can be more helpful when the lesion is small because of its high spatial resolution, furthermore it performs better than CT scan in detecting the planes between muscles and abdominal subcutaneous tissue (Balleyguier *et al.*, 2003).

Management includes both surgical excision and hormonal suppression (Wolf and Singh, 1989; Schoelefield *et al.*, 2002). Medical treatment with the use of progestogens, oral contraceptive pills, and danazol is not effective and gives only partial relief in symptoms and does not ablate the lesion. The treatment of choice is always total wide excision of the lesion, which is diagnostic and therapeutic at the same time. Follow up of endometriosis patients is important because of the chances of recurrence, which may require re-excision. In cases of continual recurrence, possibility of malignancy should be ruled out. Hence, good technique and proper care during cesarean section may help in preventing endometriosis.

Case Report

REFENECES

- Balleyguier C et al., (2003).** Abdominal wall and surgical scar endometriosis results of magnetic resonance imaging *Gynecologic and Obstetric Investigation* **55** 220-4.
- Bhowmick RN, Paul P, Dutta S and Roy B (1986).** Endometriosis of laparotomy scar. *The Journal of Obstetrics and Gynecology of India* **36** 130-2.
- Chatterjee SK (1980).** Scar endometriosis: A Clinicopathological study of 17 cases. *Obstetrics & Gynecology* **56** 81-4.
- Douglas C and Rotimi O (2004).** Extragenital endometriosis: A clinicopathological review of Glasgow hospital with case illustrations. *Journal of Obstetrics and Gynaecology* **24** 804-8.
- Francica G et al., (2003).** Abdominal wall endometriosis near cesarean delivery scars. *Journal of Ultrasound in Medicine* **22** 1041-7.
- Kaloo P, Reid G and Wong F (2002).** Caesarean section scar endometriosis: Two cases of recurrent disease and a literature review. *Australian & New Zealand Journal of Obstetrics & Gynaecology* **42** 218-20.
- Markham SM, Carpenter SE and Rock JA (1989).** Extra pelvic endometriosis. *Obstetrics & Gynecology Clinics of North America* **16** 193-219.
- Padmanabhan LD, Mhaskar R and Mhaskar A (2003).** Scar endometriosis. *The Journal of Obstetrics and Gynecology of India* **53** 59-61.
- Sax HC et al., (1996).** Extrapelvic endometriosis: Diagnosis and treatment. *The American Journal of Surgery* **171** 239-241.
- Schoelefield HJ, Sajjad Y and Morgan PR (2002).** Cutaneous endometriosis and its association with caesarean section and gynaecological procedures. *Journal of Obstetrics & Gynaecology* **22** 553-4.
- Tanos B and Anteby SO (2004).** Caesarean scar endometriosis. *International Journal of Gynecology & Obstetrics* **47** 163-6.
- Wolf G and Singh K (1989).** Cesarean scar endometriosis: A review. *Obstetrical & Gynecological Survey* **44** 89-95.