Abdominal Wall Endometriosis

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ABSTRACT

Endometriosis of abdominal wall scar following operation on uterus and tubes is extremely rare. The late onset of symptoms after surgery is the usual cause of misdiagnosis. Scar endometriosis is a rare disease which is difficult to diagnose and should always be considered as a differential diagnosis of painful abdominal masses in women. The diagnosis is made only after excision and histopathology of the lesion. Preoperative differentials include hernia, lipoma, suture granuloma or abscess. Hence an awareness of the entity avoids delay in diagnosis, helps clinicians to a more tailored treatment and also avoids unnecessary referrals. We report a case of abdominal endometriosis. The definitive diagnosis of which was established by histopathological studies.

Key Words: *abdominal wall endometriosis, cesarean scar, cyclical symptoms*

INTRODUCTION

The estimated incidence of cesarean scar endometriosis is between 0.03% and 1.7%, most recently quoted as 0.8%.[1-5] However, the true incidence could be higher. Cyclical symptoms such as pain and swelling in relation to surgical scars, which worsen at the time of menstruation, are nearly pathognomic of scar endometriosis. Majority of the case series, however, report no-cyclical pain, thus commonly missing the diagnosis.[6] Sonography is routinely used in the assessment of patients with recurrent lower abdominal and pelvic pain and even when the lesions are between three to four centimeters in size, they can easily be missed if the examiner is not aware.[7]

CASE REPORT

A 26 year old female presented to the surgical outpatient department with complaints of lump in the left lower abdomen for the last ten months. It began with a lump in the left lower abdomen, at the site of previous cesarean scar. The lump was associated with mild persistent pain and was gradually increasing in size. She, however, did not give history of cyclical pain. Neither did she suffer from dysmenorrhoea or menorrhagia. However, she had a cesarean section done five years back for non progress of labour.

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Local examination revealed a lump measuring 2x1 cm at and around the left end of cesarean scar. Fine needle aspiration cytology showed spindle shaped cells with minimal lymphocytic infiltrate. An impression of benign spindle cell lesion, possibly, fibroma, was made on cytology. Ultrasound scan of abdominal and pelvic organs were normal. There was evidence of oval hypoechoic lesion measuring 22x8 mm in the left anterior parietal wall. A clinical diagnosis of parietal wall mass (left side) was made and the patient underwent surgery.

Wide local excision was done and the mass was submitted for histopathologic examination. Grossly it was a nodular tissue measuring 4x3x1cm, on cut surface was grey white with minute cystic spaces and foci of blackish discoloration and histopathology revealed endometrial glands and stroma embedded in fibrous tissue and the case was diagnosed as scar endometriosis. At 12 months of follow up there was no recurrence or any other complaints noted.

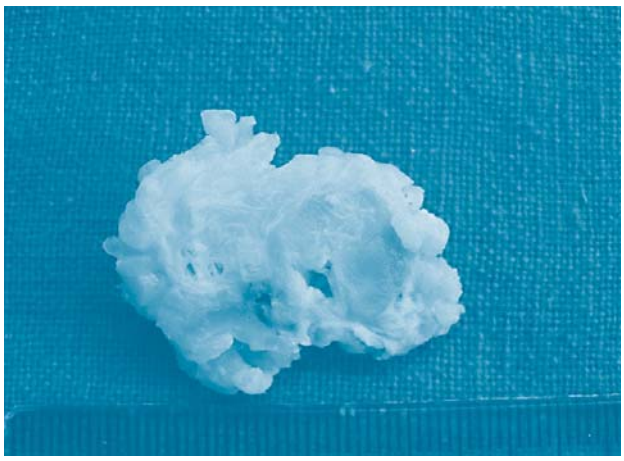

Figure 1. Gross picture of Scar endometriosis- cut section shows a grey white nodular tissue with cystic spaces and areas of blackish discoloration representing hemorrhage

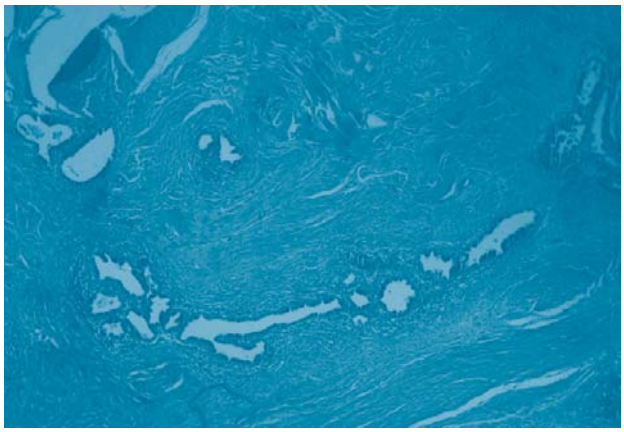

Figure 2. Photomicrograph showing endometrial glands and stroma embedded in fibrous tissue, 40x,H & E.

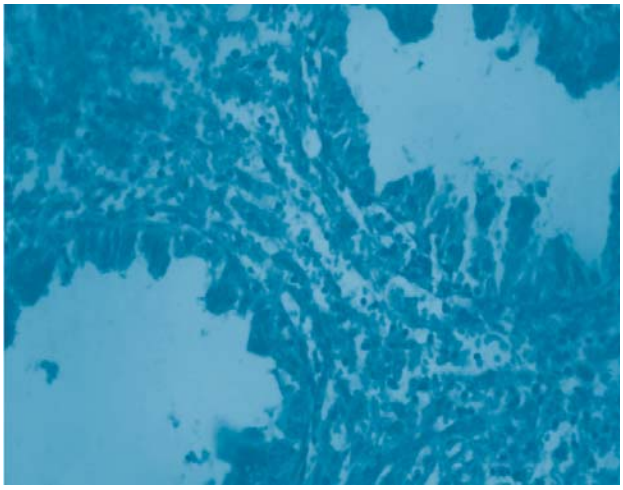

Figure 3. Photomicrograph showing endometrial glands lined by columnar epithelium and intervening stroma exhibiting signs of fresh hemorrhage. 400x,H & E.

DISCUSSION

The cause of endometriosis has remained controversial with many theories. However, scar endometriosis, especially those occurring after surgeries involving the uterus like hysterectomy, classical cesarean section, myomectomy etc have supported the mechanical transplantation theory. In such cases, it is believed that endometrium is iatrogenically transplanted to the surgical scar.[8] In our case report, the patient had a history of cesarean section but was not known to have pre-existing endometriosis, indicating the transplantation theory.

Endometrial implants in the abdominal wall could be considered a long-term, collateral but preventable effect of gynecologic procedures. The late onset of symptoms after surgery is the usual reason for misdiagnosis. Review of the gynecologic literature indicates that the presentation of patients with cesarean section scar endometriosis is made easily on clinical grounds.[4,9] Classically, the scenario is that of a parous woman complaining of a painful nodule, varying with menses, at the incision site.

Conversely, review of the surgical literature indicates that preoperative diagnosis is often incorrect.[10,11] In our case also the preoperative diagnosis was not made correctly. This could be attributed to the history of pain being of a constant nature rather than cyclic and the infrequent involvement of general surgeons in the management of caesarean section scar lesions as well as the late onset of symptoms after surgery.

The mean period between procedure and start of symptoms has been reported to be between 4.5 years to 5.72 years in various literatures.[6,12] However some series report it as early as three months and even after

ten years.[13] In the present case it was five years.

Incisional scar endometriosis is a described clinical entity in the gynecologic literature, but it is not well recognized among general surgeons. Most surgical reports indicate that preoperatively, the condition is often confused with other pathologic conditions such as incisional hernia, suture granuloma, abscess, or lipoma.[14]

In light of increasing rate of cesarean section, it is important to emphasize the early diagnosis as well as optimum management of scar endometriosis. Many recommendations have been given to modify practices at cesarean section to prevent transplantation of decidual endometrial tissue in the abdominal scar but without any published randomized trials.

A high index of suspicion is recommended when a woman presents with postoperative abdominal lump. Surgical excision provides both diagnostic and therapeutic intervention. Once the diagnosis is made on clinical grounds, wide surgical excision and confirmation of the diagnosis by histopathologic examination of the excised tissue should be done. However, whenever the diagnosis is uncertain, efforts should be made to make a preoperative diagnosis with the help of imaging techniques and FNAC.

Malignant change of endometriosis in a cesarean scar is rare, however has been reported.[15] Long standing recurrent scar could undergo malignant change and clinicians should be aware.

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