



A CASE REPORT ON SCAR ENDOMETRIOSIS

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ABSTRACT Endometriosis is described as the presence of functioning endometrial tissue outside 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. Maximum incidence seen following caesarean section. A report of an unusual case of scar endometriosis following caesarean section is presented here.

KEYWORDS : Endometriosis; incisional endometriosis; painful scar; scar endometriosis.

1. INTRODUCTION

Endometriosis is defined as the presence or growth of ectopic endometrial tissue [1]. Affecting an estimated 89 million women of reproductive age worldwide, endometriosis occurs in 5% to 10% of all women, often resulting in debilitating pain and infertility. It generally occurs in pelvic sites such as the ovaries, posterior cul-de-sac, uterine ligaments, pelvic peritoneum, bowel and rectovaginal septum. Extrapelvic endometriosis can be found in unusual places like in the nervous system, thorax , urinary tract , gastrointestinal tract and in cutaneous tissue unless its most frequent location is the abdominal wall. Incisional or scar endometriosis has also been described, however, with a much rarer incidence (less than 1% of affected patients) [1,2].

Endometriosis, in patients with scars, is more common in the abdominal skin and subcutaneous tissue compared to muscle and fascia. The simultaneous occurrence of pelvic endometriosis with scar endometriosis has been found to be infrequent. Scar endometriosis is rare and difficult to diagnose, often confused with other surgical conditions. The present study describes an unusual case of scar endometriosis.

2. CASE PRESENTATION

A 42year old lady, with 2 previous caesarean section and who is tubectomised presented with a painful abdominal lump for last one years. She was otherwise healthy woman with no significant medical history. Her surgical history included an uncomplicated caesarean section ten years back. From the past one year she noticed a small swelling above the scar which was painful. However the swelling gradually increased in size. Though the swelling was painful throughout but sometimes the intensity of pain increased during menstruation.

On examination, the patient was of average built and nutrition. She had a pfannenstiell incision for caesarean section done previously but the interesting point was the tender nodule palpated not on the scar but above the scar about midway between symphysis pubis & umbilicus. It was about 3cm round shaped nodule, firm and tender. The overlying skin was pigmented & there was no sign of local inflammation.

Swelling was non mobile. The caesarean section scar was painless. Patient was sent for ultrasonography with the suspicion of scar endometriosis.

2.1 Ultrasonography Report

“A lobulated, hypoechoic & superficially placed mass lesion [32mm-31mm-24mm] that is hypovascular and tender seen along the midline in hypogastric region within the parietal tissues – possibly **scar endometriotic** nodule. No other intraabdominal pathology detected”.

All other blood investigations were within normal limits.

A decision was taken to excise the lesion. Operation was done under spinal anesthesia. The nodule was found to be densely adhered with skin and subcutaneous tissue . Wide excision of the mass was done with margin of 1 cm. No other similar nodules were found. The excised tissue was sent for histopathology examination.

Post-operative recovery was uneventful. Patient advised three cycles of low dose oral contraceptive post operatively. There was no recurrence after one year of follow-up.

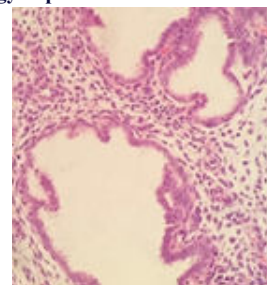


Specimen after removal



Cut Section of the specimen

2.2 Histopathology Report



Section shows histology of fibrocollagenous tissue with endometrial glands.

3. DISCUSSION

Endometriosis is the presence of functioning endometrial tissue outside the uterine cavity, whereas endometrioma is a well-circumscribed mass. 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 intensity of pain and size of nodule vary with menstrual cycle. Histologically, endometriosis is characterized by the ectopic presence of endometrial-like glands, spindled endometrial stroma and hemosiderin deposition either within the macrophages or in the stroma. 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. In clinical practice, its occurrence has been well documented in incisions of any type where there has been possible contact with endometrial tissue, including episiotomy, hysterotomy, ectopic pregnancy, laparoscopy, tubal ligation, and cesarean section [5].

The diagnosis of scar endometriosis may be challenging. It is often misdiagnosed as stitch granuloma, inguinal hernia, lipoma, abscess, cyst, incisional hernia, desmoid tumor, sarcoma, lymphoma, or primary and metastatic cancer. Cyclical changes in the intensity of pain and size of the endometrial implants during menstruation are usually characteristic of classical endometriosis. However, in the largest reported series [6] to date, only 20% of the patients exhibited these symptoms.

Ultrasonography is the best and most commonly used investigation for abdominal masses, given its practicality and lower cost. The mass may appear hypochoic and heterogeneous mass with messy internal echoes. On computed tomography, the endometrioma may appear as a circumscribed solid or mixed mass, enhanced by contrast, and show hemorrhages. MRI is also a useful modality for presurgical mapping of deep pelvic endometriosis. Infiltration of abdominal wall and subcutaneous tissues is much better assessed by MRI [7]. Tomographic scans and magnetic resonance imaging are more useful in demonstrating incisional hernias and differential diagnosis [8]. Fine-needle aspiration cytology (FNAC) was reported in some studies for confirming the diagnosis [9].

Management includes both surgical excision and hormonal suppression.

Local wide excision, with at least a 1 cm margin, is accurate treatment choice of scar endometriosis also for recurrent lesions. Recurrence of scar endometriosis seldom happens with only a few cases reported. As expected, the larger and deeper lesions to the muscle or the fascia are more difficult to excise completely. In large lesions, complete excision of the lesion may require a synthetic mesh placement or tissue transfer for closure after resection [10].

Oral contraceptives, progesterone and androgenic agents have been tried. It is believed that hormonal suppression is only partially effective and surgical excision of the scar is the definitive treatment [11,12]. Recently, there have been reports of the use of the gonadotropin agonist (Leuprolide acetate), but it has been found to provide only prompt improvement in symptoms with no change in the lesion size [13]. In this case a three months course of low dose oral contraceptive was given to the patient after wide surgical excision. No recurrence seen after one year of follow up. Malignant change of endometriosis in a caesarean scar is rare [14]. 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 caesarean section may help in preventing scar endometriosis.

4. CONCLUSION

Scar Endometriosis is a rare entity. The classical history of cyclical pain is not present always therefore high index of suspicion is needed in patients with previous uterine scar. It is very easy to misdiagnose these cases as inflammatory swelling because the main symptom is pain. Surgery in the form of wide local excision is the mainstay of management, therefore early diagnosis can spare these patients of considerable morbidity.

ETHICAL APPROVAL

Ethical approval was provided through the Institutional Ethics Committee.

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