



Scar Endometriosis

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Abstract

Endometriosis is presence of endometrial tissue (glands and stroma) outside the uterus. Endometriosis can occur in previous surgical scar. It can pose a diagnostic dilemma. Scar endometriosis may develop after pelvic operation such as cesarean section, tubal ligation, hysterotomy, hysterectomy & laparotomy. Diagnosis is usually made following histological examination. It mostly follow obstetrical & gynecological surgeries. We are reporting case of abdominal wall endometriosis following emergency laparotomy done for uterine perforation repair.

Introduction

Endometriosis was first identified by Von Rokitansky in 1860. Endometriosis is most commonly found on the pelvic peritoneum, but may also be found on ovaries, rectovaginal septum, ureter rarely in bladder, pericardium, pleura & previous surgical scar site. It occurs in 8-15% of women of reproductive age group^[3,4,5]. Plevis is most common site^[3,6]. It is seen in lungs, bowel, ureter, brain & abdominal wall^[6]. Endometriosis in an operative scar is rare^[7,4]. Endometriosis in patients with scars is more common in abdominal skin & subcutaneous tissue compared to muscle & fascia^[2]. The actual incidence of abdominal wall Endometriosis is unknown but one series reported that only 6% of cases were unrelated to scar. In another series, the prevalence of surgically proven Endometriosis in scars was 1.6%^[1].

Case Report

A 30 year old female patient presented with a painful lump at suture site since 3 years. Pain

increased during menstruation, there was no history of discharge. She gives history of undergoing Emergency Laparotomy for uterine perforation repair, which occurred during MTP 4 years back, Bilateral tubal ligation was also done simultaneously. Abdominal examination revealed a lump 6x4 cm, which was tender, hard in consistency.

USG of abdomen was performed & revealed a illdefined mixed echogenic mass measuring 3x2.5 cm noted in subcutaneous & muscular plane at suture site.

FNAC – Aspirate from the lesion showed sheets & clusters of glandular epithelial cells & fragments of spindle cells, mild epithelial atypia seen in haemorrhagic background.

It was initially managed using conservative management techniques, however the abdominal wall lump persisted & gradually enlarged in size.

The patient was posted for a wide local excision of the abdominal wall lump. Endometrotic mass measuring 6x4 cm was adherent to subcutaneous fat, rectus sheath, rectus muscle, peritoneum and

to anterior wall of uterus. Adhesion were released & Endometriotic mass was removed. There was raw surface with track on anterior wall of uterus which was bleeding ,so Total abdominal hysterectomy & B/L salphingoopharectomy was done.

Histopathology

Gross: Fibrofatty tissue seen with cystic spaces.

Microscopic: endometrial glands seen in proliferative phase with fibrous tissue in the background.

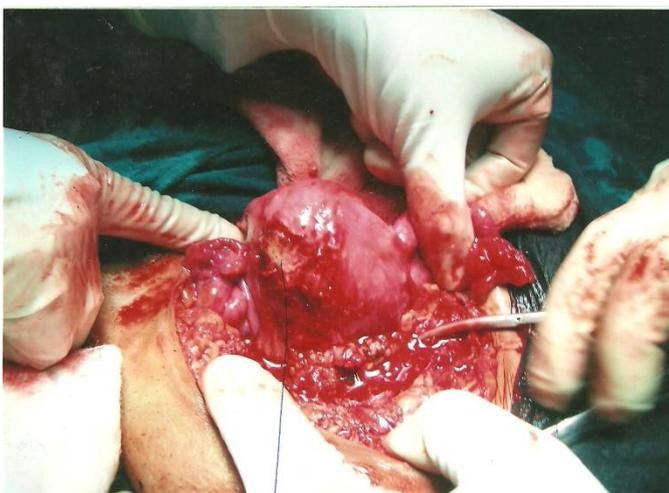
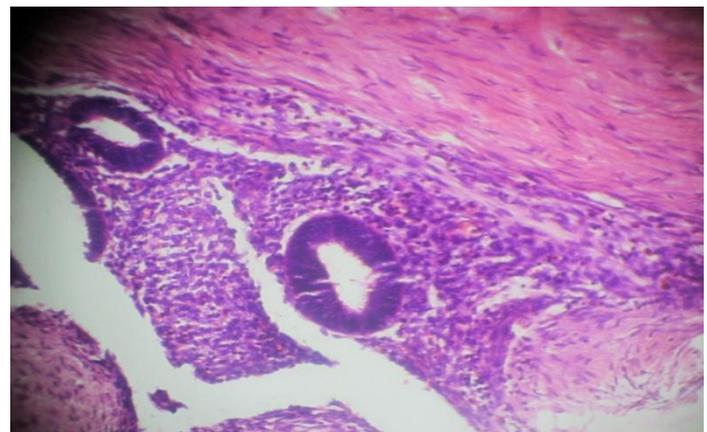
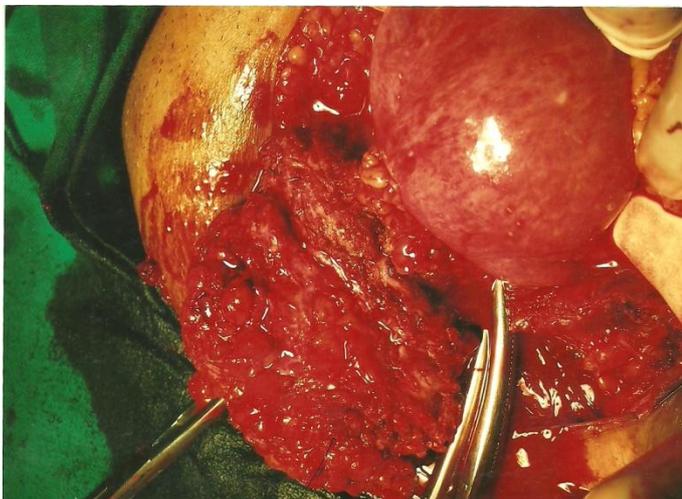
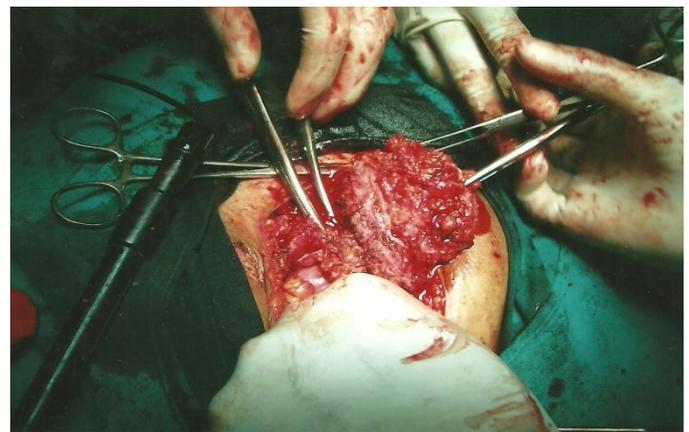
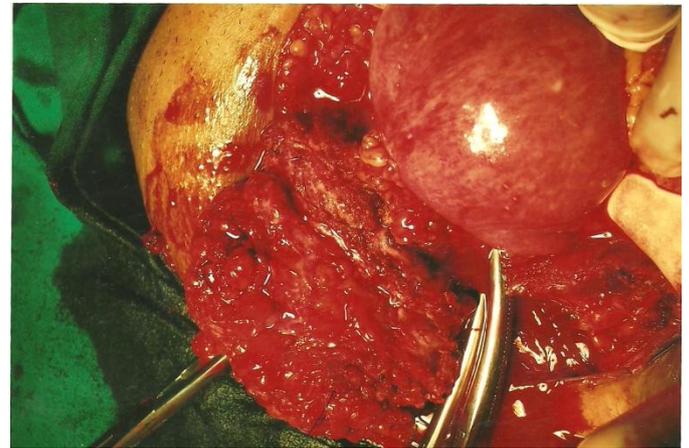
Endometrium: Hyperplastic Proliferative endometrium.

Myometrium: Normal study.

Cervix: Polypoidal endocervicitis.

Bilateral Tubes & Ovaries are normal

Sections from the excised tissue below scar reveals evidence of endometriosis.



Discussion

Endometriosis is the term used to describe the presence of endometrial glands or stroma in the abnormal location outside the uterus. It occurs in descending order of frequency 1) Ovaries 2) Uterine Ligaments 3) Rectovaginal septum 4) Pelvic peritoneum 5) Laprotomy scars & rarely in the umbilicus, vagina, vulva or appendix^[8].

Endometrioma is a well circumscribed mass of Endometrium, Abdominal wall Endometriomas present as a painful swelling resembling surgical lesions such as hernias, hematomas, granulomas, abscess & tumors.

Endometriosis involving the abdominal wall is an unusual phenomenon which should be considered in differential diagnosis of abdominal wall masses in women. The usual clinical presentation is a painful nodule in parous women with a history of gynecological or obstetrical surgery. The size of nodules & intensity of pain vary with menstrual cycle.

Pathophysiology

- 1) Retrograde spread of endometrial cells during menstruation.
- 2) Blood, Lymphatic or Iatrogenic spread.
- 3) Coelomic metaplasia
- 4) Induction theory
- 5) Role of the Immune system.

Scar Endometriosis are believed to be result of direct inoculation of the abdominal fascia or subcutaneous tissue with endometrial cells during surgical intervention & subsequently stimulated by estrogen to produce endometriosis.

This theory has been demonstrated by experiments in which normal menstrual effluent transplanted to the abdominal wall resulted in subcutaneous endometriosis. In clinical practice, its occurrence has been well documented in incision of any type where there has been possible contact with endometrial tissue including Episiotomy, Hysterotomy, Ectopic pregnancy, Laparoscopy, Tubal ligation & Cesarean section^[9].

Time interval between operation and presentation has varied for 3 months to 10 years in different series^[10].

Diagnosis

Scar endometriosis is rare & difficult to diagnose. A high index of suspicion is recommended when a woman presents with a post operative abdominal lump. Good history, through examination & proper imaging techniques (USG, CT or MRI) usually lead to correct diagnosis. MRI is better than CT when the lesion is small because of its high spatial resolution & in detecting the planes between muscle & abdominal subcutaneous tissue.

Management

It depends on patient's age, parity and severity of symptoms. The treatment of choice is total wide excision of lesion which is diagnostic & therapeutic at the same time. Partial relief is seen with medical treatment with progestogens, OCP & Danazol. Moreover side effects such as weight gain, amenorrhea, hirsutism & acne are seen & compliance is low.

Malignant Risk

Malignant change of endometriosis in a Cesarean scar is rare. Longstanding recurrent scar endometriosis could undergo malignant changes & clinician should be aware. In case of recurrence, malignancy should be ruled out.

Conclusion

The lack of awareness makes the preoperative diagnosis unnoticed. Diagnosis can be made on clinical grounds. Imaging techniques, laparoscopy & FNAC are indicated for better diagnostic approach. Follow up of case is necessary as presence of frequent recurrences may be associated with malignancy which carries poor prognosis.

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