



SCAR ENDOMETRIOSIS- AN ORIGINAL CASE REPORT WITH REVIEW LITERATURE

Gynecology

Hemanta Kumar Pradhan* Asst. Prof. Department of Obstetrics and Gynaecology, KIMS & RF, Amalapuram, India.
*Corresponding Author

Meenakshi Gothwal Asst. Prof. Department of Obstetrics and Gynaecology, AIIMS, Jodhpur, Rajasthan, India..

ABSTRACT

Scar endometriosis is a rare extra pelvic endometriosis commonly encounters in reproductive age group and closely associated with obstetrical and gynaecological surgeries. It is usually confused with other surgical or dermatological conditions and delay in diagnosis and treatment. We report a case of scar endometriosis along with its epidemiology, etio-pathogenesis, diagnosis and treatment of this condition.

KEYWORDS

Endometriosis, Abdominal wall, Scar, Extra pelvis

INTRODUCTION

Endometriosis is a common and distressing gynaecological disorder in women of reproductive age group. It is the presence of functioning endometrial like tissue outside the uterine cavity which induces chronic inflammatory reaction. It is the most common single gynaecologic diagnosis responsible for the hospitalization of women in reproductive age group accounting for over 6% of patients.

The exact prevalence of endometriosis is unknown but estimates range from 2 to 10% within the general female population but up to 50% in infertile women.¹ While some women with endometriosis experience painful symptoms with or without infertility, others have no symptoms at all.

It generally occurs in pelvic sites commonly in ovaries (almost 50%) followed by pouch of Douglas, uterosacral ligaments, posterior surfaces of uterus and broad ligament, and the remaining pelvic peritoneum, bowel, and rectovaginal septum. Extra-pelvic endometriosis can be found in unusual places such as the nervous system, respiratory tract, urinary tract, gastrointestinal tract, and in cutaneous tissues. Scar endometriosis is a rare condition and difficult to diagnose due to its different types of presentation and most often referred to the general surgeons because the clinical presentation suggestive of a surgical cause.

Case Report

A 32 year old woman Kausalya Jangid P4L4 presented in Gynaecology OPD on February 2017 with the complaint of pain and swelling on the right upper side of caesarean scar on lower abdomen for one year. She also noticed cyclic bloody discharge from this mass for last 6 months. The pain was dull aching in nature that increased during the menstruation period. The lesion used to increase in size and become more painful during her menstruation. She declared mild bleeding from this mass that associated with the first days of her menstruation. She had a no significant history of dysmenorrhea. She had two spontaneous vaginal birth 14 and 11 years ago and two caesarean deliveries 9 and 6 years back. There was no history of bladder and bowel complaints.

On per abdominal examination, a painful tender lesion of about 3 cm × 3 cm was found at the right upper end of the stitch line which was smooth surfaced and firm in consistency. The rest of systemic and general physical examination was essentially normal. The ultrasonography (USG) revealed ill-defined localised fluid collection with internal echoes is noted in superficial subcutaneous plane in right Para median plane of lower abdominal wall along the stitch line measuring approximately 2x2.6x2.6cm in size (volume 7 cc) no intraperitoneal extension seen. In view of the above findings, provisional diagnosis of sinus tract in previous LSCS scar was made and plan for surgical excision of tract. During the surgical procedure a mass of size about 3 cm × 3 cm size, found above the rectus sheath was widely excised and send for HPS.

Histopathological report

Gross

A single partially skin covered yellowish fibro fatty tissue piece of size measuring 8.5x5x3.5 cm with overlaying skin measuring 4x1.5 cm.

Microscopic features

Section shows skin with unremarkable epidermis. Dermis shows melanin pigments incontinence with adnexal glands. The underlying fibro adipose and fibro collagenous tissue shows many dispersed variably sized endometrial glands with endometrial stroma. Most of the glands are lined by cuboidal to columnar epithelium and few of them are cystically dilated and contain intraluminal secretions along with neutrophils. The endometrial stroma shows extensive decidualisation and edema. Areas of haemorrhage, several hemosiderophages, fibrosis, foreign body giant cell reaction and empty spaces with refractive materials, chronic inflammatory infiltrate comprising of lymphocytes, foamy histiocytes and plasma cells several ecstastic and congested blood vessels are noted. Impression of excised sinus tract near LSCS incision site shows features suggestive of endometriosis.

Discussion

Scar endometriosis usually follows previous abdominal surgeries especially mid trimester hysterotomy for surgical method of abortion which is rare now a days and caesarean section. Miraglia et al. found the incidence of scar endometriosis to be 0.08%.² Ectopic pregnancies; salpingectomy, puerperal sterilization, laparoscopic surgeries, amniocentesis, episiotomy, and vaginal hysterectomy are other surgical procedure also responsible for scar endometriosis. Incidence of scar endometriosis increases by induced number of caesarean section and laparoscopy performed in recent years. Direct mechanical implantation likely to be the most acceptable theory for explaining scar endometriosis.

De Oliveira et al. demonstrate that heavy menstrual blood flow and alcohol consumption were the risk factor related to scar endometriosis but increase number of parity may be a protecting factor.³

Clinical diagnosis of scar endometriosis can be made by a careful history taking and physical examination. The patients are usually present with a mass near the previous surgical scar site accompanied by increasing pain during the menstruation. Usually, there is a history of a gynaecologic or rarely a nongynecologic abdominal operation.

When a proper diagnosis cannot be achieved, scar endometriosis can be easily mixed with other surgical conditions like hematoma, neuroma, hernia, granuloma, abscess, scar tissue, neoplastic tissue, or even metastatic carcinoma which is a simple excuse to refer the patient to the general surgeon. Often, the diagnosis of endometriosis is not suggested until after histology has been performed.

The various methods of investigation, such as ultrasonography with or without Doppler study, computed tomography, magnetic resonance imaging or fine-needle biopsy in the diagnosis of scar endometriosis is not clearly documented. Imaging procedures help in diagnosis and in obtaining differential diagnosis rather than confirmation of diagnosis.

Ultrasonography is the best and most commonly used imaging procedure for abdominal masses, given its easy availability and lower cost. The mass may appear hypo echoic and heterogeneous mass with internal echoes. On computed tomography, the endometrioma may appear as a circumscribed solid or mixed mass, enhanced by contrast, and show haemorrhages. MRI is also helpful for presurgical mapping of deep pelvic endometriosis. Infiltration of abdominal wall and subcutaneous tissues is much better assessed by MRI. Fine-needle aspiration cytology (FNAC) was reported in some studies for confirming the diagnosis but implantation of potential malignancies during the process is possible. Usually diagnosis is made with microscopic examination of a standard haematoxylin and eosin-stained slide. Histopathological report showing endometrial glands, stroma and hemosiderin pigment confirm the diagnosis.

Local wide resection with at least 1 cm margin is preferred method of treatment for scar endometriosis. Recurrence of scar endometriosis seldom happens with only a few cases reported. This same principle is also applied for recurrent lesions. As expected, the larger and deeper lesions to the muscle or the fascia are more difficult to excise completely where recurrence is possible. In large lesions, complete excision of the lesion may require synthetic mesh placement or tissue transfer for closure of defect after resection.

Conclusion

Endometriosis has significant effect on various aspects of women's lives including their social and sexual relationships apart from the economic burden.⁴ Ideally all patients must be examined for concomitant pelvic endometriosis. Good surgical technique during caesarean section is recommended. Wide local excision of the lesion is recommended to prevent recurrence. Postoperative follow up is preferable.

Conflict of Interests

The authors have no conflict of interests.

Ethical approval: "All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards."

Figure -1. USG revealed ill-defined localised fluid collection with internal echoes is noted in superficial subcutaneous plane in right Para median plane of lower abdominal wall along the stich line measuring approximately 2x2.6x2.6cm in size(volume 7 cc) with no intraperitoneal extension.

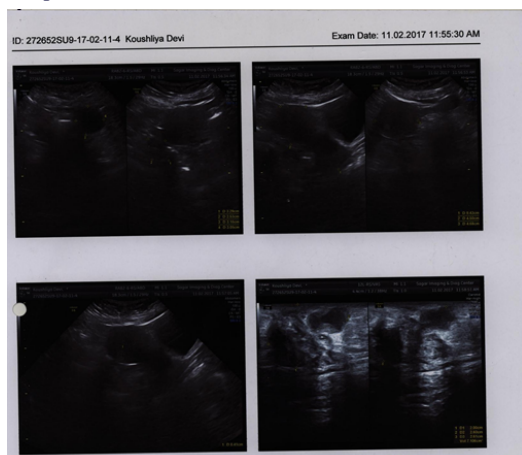
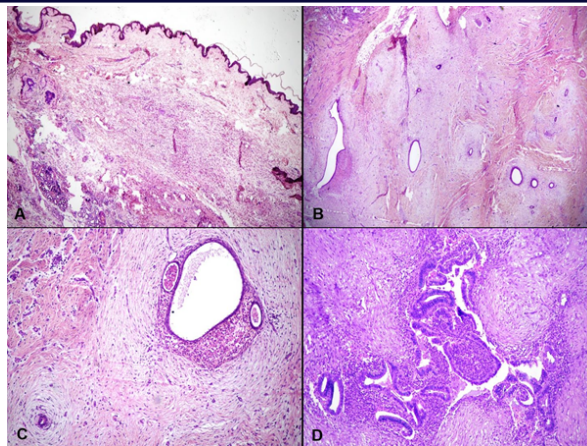


Figure-2. (A) Uremarkable epidermis with dermis showing few adnexal glands (H&E x4)

(B) Underlying fibrocollagenous tissue showing many endometrial glands (H&E x2).

(C) Some of the glands are cystically dilated (H&E, x10).

(D) Photomicrograph shows a tortuous endometrial gland lined by columnar epithelium along with stroma (H&E, x10)



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