A rare case of Rectus Sheath Endometriosis

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ABSTRACT

Introduction: Scar endometriosis is a rare disease, and is often difficult to diagnose due to nonspecific symptoms, typically involving abdominal wall pain at the incision site at the time of menstruation.

Case Report: A 30 year old woman, with previous one caesarean done two years back, presented with complaints of a painful lump over the left lateral aspect of her caesarean scar. On examination, there was a tender fluctuating mass over the left lateral aspect of the scar. Ultrasonography revealed a heteroechoic irregular mass beneath the anterior abdominal wall with vascularity present in the periphery. The patient was posted for Wide Local Excision (WLE). Intra-operatively, the lesion was seen over the rectus sheath. It was excised and sent for histopathological examination, which confirmed the diagnosis of rectus sheath endometriosis.

Discussion: Scar endometriomas are believed to be the result of direct inoculation of the abdominal fascia or subcutaneous tissue with endometrial cells during surgical intervention and subsequently stimulated by estrogen to produce endometriomas.

Conclusion: Scar endometriosis can be a challenging entity. A post-operative lump at the scar site should be thoroughly evaluated keeping a high index of suspicion.

Key words: Endometriosis, rectus sheath, scar endometriosis, caesarean, painful scar, excision.

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INTRODUCTION

Endometriosis was first described by Rokitansky in 1860 and was defined as the presence and proliferation of the endometrium outside the uterine cavity, the commonest site being the pelvis. The actual incidence of abdominal wall endometriosis is unknown but one series reported the prevalence of surgically proven endometriosis in scars was 1.6%[1]. The most common site of abdominal wall endometriosis is at a caesarean section scar.

Endometriosis, in patients with scars, is more common in the abdominal skin and subcutaneous tissue compared to muscle and fascia. Endometriosis involving only the rectus muscle and sheath is very rare[2]. 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.

CASE REPORT

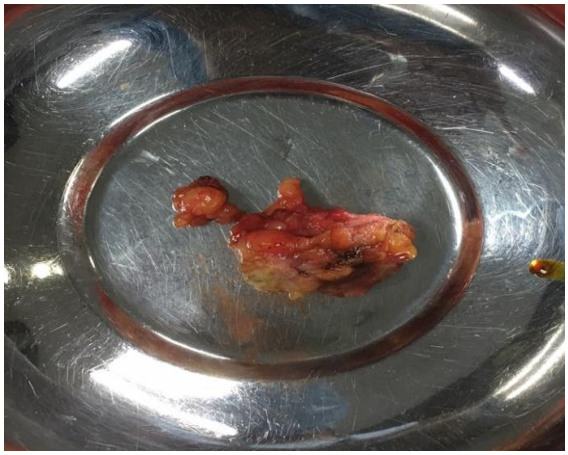
A 30 year old woman, married since four years, P1L1MTP1 with previous one caesarean done two years back, presented with complaints of a painful lump over the left lateral aspect of her caesarean scar. There was no history of any discharge from the lump site. The patient had regular menstrual cycles and the pain over the lump was often associated with menstruation. She underwent one medical termination of pregnancy four years back and had undergone one full term lower segment caesarean section two years back in view of non-progress of labour.

On examination, the patient was comfortable and vitally stable. On abdominal examination, there was a pfannenstiel scar present over the lower abdomen and a 2x2 cm tender fluctuating mass was felt over the left lateral aspect of the scar. A differential diagnosis of Stitch Granuloma or Scar Endometriosis was made. Ultrasonography revealed a heteroechoic irregular mass lesion measuring 1.8x1.3x0.6 cm, around 1 cm beneath the anterior abdominal wall with vascularity present in the periphery with probe tenderness present.

The patient was posted for Wide Local Excision (WLE) of the abdominal lump. Intra-operatively, 2 cm wide fibrotic appearing mass was seen with bluish black endometriotic spots on the rectus sheath at the lateral part of the scar and also in the subcutaneous fat. The lump was excised (Figure 1) and sent for histopathological examination.

Histopathological examination showed endometrial glands and stroma interspersed with fibrofatty and fibrocollagenous tissues. Hence, the diagnosis of endometriosis of rectus sheath was confirmed.

Figure 1: Excised specimen of Rectus sheath lump with blue-black areas of suspected endometriosis



DISCUSSION

Endometriosis is defined as the presence of functioning endometrial tissue outside the uterine cavity. The various sites of extra-pelvic endometriosis are bladder, kidney, bowel, omentum, lymph nodes, lungs, pleura, extremities, umbilicus, hernia sacs & abdominal wall3. Abdominal wall endometriosis is a very rare entity. The usual clinical presentation is a painful mass at the scar site following an obstetric or a gynecological surgery. The intensity of symptoms vary cyclically with the menstrual cycles.

Pathophysiology: Pelvic endometriosis is postulated to be the result of:

- Retrograde spread of endometrial cells during menstrual cycle.
- Haematogenous, lymphatic or iatrogenic spread.
- Metaplasia of pelvic peritoneal cells.
- Immune system dysfunction4.

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

Diagnosis: Scar endometriosis is rare and difficult to diagnose. Possible differential diagnoses include stitch granuloma, inguinal hernia, incisional hernia, lipoma, abscess, desmoid tumor, cyst, sarcoma, lymphoma, or primary and metastatic cancer.

Good surgical & gynecological history coupled with thorough examination & appropriate imaging techniques like USG, CT & MRI, usually lead to the correct diagnosis. CT usually shows a well circumscribed solid area whereas MRI is more useful because of its high spatial resolution[6].

Management: The treatment of choice is wide local excision, which is diagnostic as well as therapeutic. Medical treatment with the use of progestogens, oral contraceptive pills, and danazol is not effective and gives only partial relief in symptoms. Recently, there have been reports of the use of the gonadotrophin agonist (Leuprolide acetate), but it has been found to provide only prompt improvement in symptoms with no change in the lesion size[7].

Risk for malignancy: Malignant change in scar endometriosis is a very rare8. However, there is a small chance for long standing recurrent endometriotic scars to undergo malignant transformation.

Follow up & prevention: Follow up of patients with endometriosis is of prime importance considering the chances of recurrence, which may require re-excision. Possibility of malignancy must be ruled out in continuously recurring lesions. A good technique & proper care during caesarean section goes a long way in preventing scar endometriosis.

CONCLUSION

Scar endometriosis can be a challenging entity. A post-operative lump at the scar site should be thoroughly evaluated keeping a high index of suspicion. When the diagnosis is made on clinical grounds, wide local excision is the treatment of choice. However, imaging techniques, laparoscopy and FNAC are indicated towards better diagnostic approach. Frequent recurrences indicate malignant transformation and carry a poor prognosis.

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