

Recurrent Scar Endometriosis - A Rare Case Presentation

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Abstract: Scar endometriosis is a rare form of endometriosis due to previous surgical scars from obstetrical and gynaecological procedures. The incidence is around 0.08%. It can pose a diagnostic dilemma and should be in the differential diagnosis of lumps in the abdomen in females. Histology is the hallmark of diagnosis. This is a case report of recurrent scar endometriosis following caesarean section.

Keywords: caesarean section scar, cyclical bleeding, wide local excision, recurrence, histology

1. Introduction

Endometriosis was first described by Rokitansky in 1860 and was defined as the presence and proliferation of endometrium outside the uterine cavity, commonest site being the pelvis. The actual incidence of abdominal wall endometriosis is unknown but the prevalence of surgically proven endometriosis in scars is 1.6%. The most common site is at the caesarean section scar. There are also case reports of involvement of rectus abdominis muscle in a virgin abdomen.

In patients' with scars, endometriosis 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 difficult to diagnose, often confused with other surgical conditions.

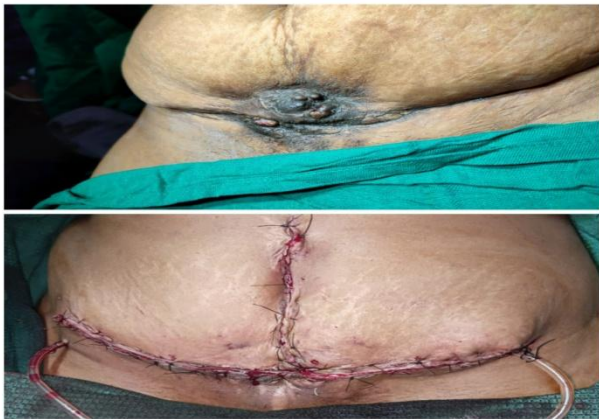
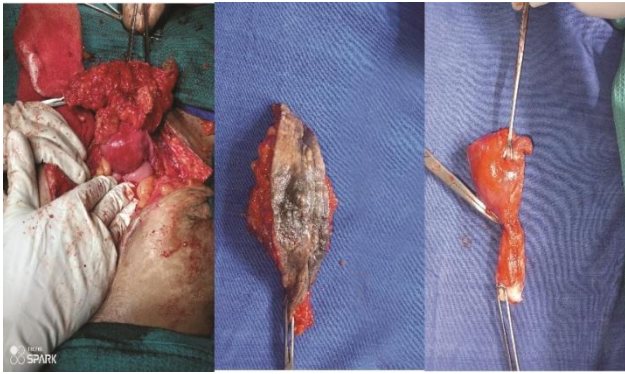
2. Case Report

32 year old P2L2 with previous two caesarean sections done in the years 2010 and 2012 respectively presented initially in the year 2016 with complaints of a swelling in the site of previous caesarean section scar. The swelling was painful and the woman noticed cyclical bleeding from the swelling during her menstrual cycle. Examination revealed a 10 cm wide, tender and immobile subcutaneous mass beneath the caesarean section scar. Ultrasound abdomen revealed a heterogenous mass of 6*5*4 cm in the previous scar site. MRI Abdomen and Pelvis confirmed a lesion in relation to the previous scar site with signal characteristics similar to endometriosis. A 6*5*4 cm irregular area of altered signal intensity was seen involving the scar of prior surgery in the anterior abdominal wall adherent to the uterine endometrium and myometrium of the fundus of the uterus. All features pointed towards scar endometriosis. Due to failure of medical management, Wide excision was done for scar endometriosis.

Following the excision, patient remained symptom free for 1 year. There was recurrence of symptoms in the following

year and patient was on medical management for 3 years. In the year 2022, due to exaggeration of symptoms, an MRI of the abdomen and pelvis repeated. Evidence of endometriosis was found to penetrate deeper into the uterine endometrial cavity. Multispeciality approach was upheld. Wide excision of the scar endometriosis was proceeded to total abdominal hysterectomy with bilateral salphingo oophorectomy as the sinus tract was extending into the endometrial cavity. Bilateral ovaries showed evidence of endometriosis and there was endometrial hyperplasia. Both fallopian tubes and cervix were found to be normal. Histopathology of the excised mass confirmed recurrent scar endometriosis. Post operative period was uneventful with good functional and cosmetic results.





3. Discussion

Endometriosis is the presence of functioning endometrial tissue outside the uterine cavity while an endometrioma is a well circumscribed mass. The various sites of extrapelvic endometriosis include bladder, kidney, omentum, lymph node, bowel, lungs, extremities, umbilicus and the abdominal wall. Endometriosis involving the abdominal wall is an infrequent phenomenon which should be considered in the differential diagnosis of abdominal mass in women. The usual clinical presentation is a painful nodule with a history of obstetric or gynaecological surgery. The intensity of pain and size of the nodule vary with menstrual cycle.

There are various theories to the pathogenesis of endometriosis. The development of intrapelvic endometriosis may involve retrograde menstruation, maturation of extrauterine primordial remnants of embryogenesis, hematogenous or lymphatic spread of endometrial cells. Extrapelvic endometriosis in the lung and skin may be attributed to hematogenous or lymphatic spread.

Scar endometriomas are believed to be the result of direct inoculation of abdominal fascia or subcutaneous tissue with endometrial cells during surgical intervention and subsequently propelled by estrogen to form endometrioma. Its occurrence has been documented in incisions of any type where there has been possible contact with endometrial tissue. The time interval between the surgery and onset of symptoms has been averaged at 2 years.

It is a herculean task to diagnose scar endometriosis. Often misdiagnosed as granuloma or incisional hernia, diagnosis of scar endometriosis needs a high level of suspicion. Imaging

modality will confirm the diagnosis. Wide local excision with a 1 cm margin is the best treatment for scar endometriosis. Larger and deeper lesions to the muscle or fascia are more difficult to excise completely. In large lesions, complete excision of the lesion may entail a synthetic mesh placement or tissue transfer for closure after resection. Medical therapy with Danazol, progesterone and GnRH produces only partial recovery and mostly recurrence occurs after cessation of treatment.

Malignant change of endometriosis in a caesarean scar is rare. Long standing recurrent scar endometriosis can undergo malignant change in 4% of the cases. Therefore strict follow up is a must.

4. Conclusion

Abdominal wall endometriosis should be considered as an important differential diagnosis in females presenting with a painful nodule or mass at the site of surgery with a positive history of prior abdominal surgery.

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