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Case Report

Endometriosis at Caesarian Section Scar

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Abstract

Endometriosis is the presence of endometrial glands and stroma in sites other than the uterus. It is an important cause of morbidity in women. It is common gynecological problem and is sometimes presented to the general surgeons as lump in the abdomen. It should be included in the differential diagnosis of lumps in the abdomen in females. We report a case of abdominal wall endometriosis following a succeeding three caesarian sections. The patient presented with complaints of swelling, severe pain in the abdomen for the last 3 months. The diagnosis was conformed by Biopsy.

Key Words: Endometriosis, Caesarian section, Pfannenstiel scar.

Introduction

Endometriosis is the presence of endometrial tissue outside the uterus. It was first described by Rokitansky in 1860. The common sites include pouch of Douglas, the pelvic peritoneum and the ovary.[1] The exact incidence of abdominal wall endometriosis is unknown but one series reported that only 6% cases were related to scars. In another series the prevalence of surgically proven endometriosis scars was 1.6%. The commonest site is at a caesarian section scar.[2]

Endometriosis in patients with scars is more common in the abdominal skin and subcutaneous tissues compared to muscle and fascia. Endometriosis involving only the rectus muscle and sheath is very rare.[3] The combined 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.

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Case Presentation

A 27 year old Pakistani female from supply area Abbottabad KPK, province came to OPD in gynecology department of Benazir Shaheed Teaching District Hospital Abbottabad. She had previously three caesarian sections; the last was done four years back. Six month following her caesarian section, she developed pain in her scar and noticed a swelling at the left corner of the Pfannenstiel scar site. About a year after her surgery she came to the OPD. On examination there was a healed Pfannenstiel scar with a 4.5 x 3.5cm, firm nodular subcutaneous mass. The mass was tender on deep palpation. There was no discharge from the mass or from the incision scar. The nodule was slightly fixed.

The patient gave history of dull dragging pain at the site of nodule an also noticed the increase in its intensity with menses. She however, never noticed any associated bleeding or discharge from it. The ultrasound report showed bright heteroechogenic mass about 4 x4 cm at the left corner of abdominal wall scar. She remained asymptomatic since surgery i.e. ½ years ago. The lump was removed by the surgeon and firm fibro-fatty

piece about 4 cm large was sent for histopathology.

The patient was investigated for routine tests. Urine R/E was normal. Her total leukocytes count was 3800 cells/µl, hemoglobin was 10.5g/dl, ESR was 35mm in 1st hour. Her blood glucose was 87mg/dl, kidney functions and liver function tests were normal. Histopathology showed fibro-fatty tissue with intermingled glands and stroma of endometriosis which conformed diagnosis of endometriosis abdominal wall scar. (Figure 1)

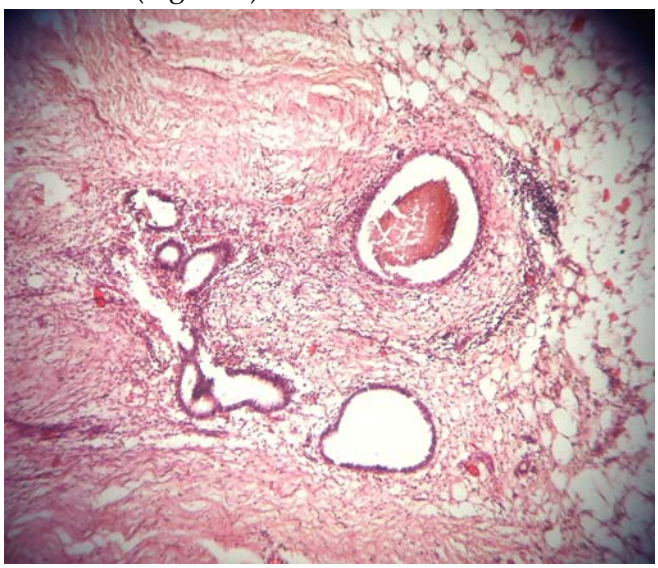

Figure 1: Endometrial glands and stroma in cesarean scar. (H&E X 100)

Discussion

The present case was a multiparous female (P3) with a history of obstructed labor (failure to progress) resulting in subsequent three caesarian sections, with interval of two years. The patient presented with a painful mass on the left corner of caesarian scar with duration of 4 years. The pain became severe for the last 3 months and increased in intensity particularly during menstrual flow. There was no blood or discharge from the mass. The etiology of endometriosis is unknown, however the proposed theories are retrograde spread of collections of endometrial cells during menstruation, blood, lymphatic or latrogenic spread, metaplasia of the pelvic peritoneal cells, immune system dysfunction and auto-antibody formation.[4,5]

Scar endometriosis as in present case is believed to be the result of direct inoculation or implantation of endometrial cells by the surgeon in abdominal fascia or subcutaneous tissue during caesarian section. Such inoculated or implanted tissue or cells are subsequently stimulated by estrogen to produce endometriosis. This theory has been practically demonstrated by experiments in which the normal menstrual effluent transplanted to the abdominal wall resulted in subcutaneous endometriosis.[6,7] 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, laproscopy, tubal ligation and caesarian sction.[8] Time interval between surgery and presentation has varied from 3 months to 10 years in different series.[5]

In the present patient time interval was 4 years. Similar case was reported by Khalifa AL-Jabri in 2009 from Buraimi Hospital Sultanate Oman[7]. However in that case patient developed endometriosis in ten months after a single caesarian section. The treatment of choice is always total wide excision which is at the same time diagnostic and therapeutic. Recently there have been reports of the use of gonadotrophin agonist (Leuprolide acetate) but it has been found to provide only quick improvement in symptoms with no change in lesion size. Danazole was not given in this patient. Malignant change of endometriosis in caesarian scar is rare. Long standing recurrent scar endometriosis could result in malignancy and clinicians need to be aware.[9,10]

Conclusion

Generally speaking, surgeons sometimes come across the management of caesarian scar lesions. The lack of knowledge makes the pre-operative diagnosis unnoticed. When such cases are diagnosed on clinical grounds, no further investigations are necessary before thorough surgical excision. However imaging studies, laparoscopy and FNAC are advised for better diagnosis.

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