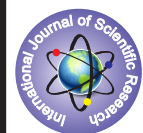


Abdominal wall endometrioma-A case report and review of literature.



Gynaecology

KEYWORDS: endometrioma, hysterotomy, abdominal mass, tubal ligation, ectopic endometrium

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ABSTRACT

Endometriosis is the presence of endometrial glands and stroma at extrauterine sites. These ectopic endometrial implants are known as endometrioma when they present in form of a discrete lump. Endometriosis involving the abdominal wall is an unusual phenomenon which should be considered in the differential diagnosis of abdominal wall masses in women.

This case report is about a twenty six years old lady, para three, abortion two, who presented to gynaecology outpatient department with complaints of continuous pain abdomen since eight months on the right side of the midline infraumbilical scar. Abdominal examination revealed a tender small lump around 4x3 cm in the infraumbilical region about 1.5-2 cm lateral to the midline. She gave a history of only tubal ligation and like us she too was unaware of her hysterotomy scar which accidentally came to our notice during laparotomy. The initial ultrasound gave a normal report. A repeat scan detected the mass with a differential diagnosis of desmoid tumor and nodular fascitis. FNAC strongly suspected endometriosis. Surgical resection with disease free margin was done. Histopathology confirmed ectopic endometrium.

To diagnose endometriosis one has to have a strong suspicion in mind especially when the picture is not classic like in our case, with no relation to menses. Tissue handling should be kept to minimum in any gynaecological and obstetric surgeries to prevent such non serious but annoying post operative complication.

INTRODUCTION

Endometriosis is defined as the presence of functioning endometrium outside the uterus. It was first described by Rokitansky in 1860. The actual incidence of abdominal wall endometriosis is unknown but one series reported that only 6% of cases were unrelated to scars. In another series, the prevalence of surgically proven endometriosis in scars was 1.6%.¹ The most common site is at a caesarean section scar. But there are case reports of involvement of the rectus abdominis muscle in a virgin abdomen.² Endometriosis involving the abdominal wall is an unusual phenomenon which should be considered in the differential diagnosis of abdominal wall masses in women. The usual clinical presentation is a painful nodule in a parous woman with a history of gynecological or obstetrical surgery. Diagnosis is usually made following histological examination, but prior to that ultrasound and fine needle aspiration cytology should be done.

CASE REPORT

A twenty six years old lady, para three abortion two, presented to gynaecology outpatient department with complaints of pain abdomen on the right side of the midline infraumbilical scar. It started eight months back and was continuous in nature with no relation to menses. The last pregnancy of three and a half months duration was terminated by hysterotomy followed by bilateral tubal ligation. Her physical examination was unremarkable. Abdominal examination revealed a tender small lump around 4x3 cm in the infraumbilical region about 1.5-2 cm lateral to the midline. Per vaginum examination was normal. She was given a course of cephalosporin along with a request for ultrasound of the abdomen and pelvis. She came back a week later with diminished pain and slightly smaller lump than before, but with a normal ultrasound report. She was sent again for a review scan and a contrast enhanced computed tomography, mentioning the clinical findings suspecting abdominal wall endometriosis. The lump of 2.5x2.0 cm was identified in the review scan with a differential diagnosis of desmoid tumor and nodular fascitis along with a suggestion for fine needle aspiration cytology. CECT was unaffordable for her. FNAC report mentioned numerous pigment laden macrophages with round to oval cells and cluster and sheets of epithelial cells. Excision biopsy was suggested now with a strong suspicion of endometriosis. The mass which was confined to the subcutaneous tissue and superior to the rectus muscle was completely excised along with the surrounding tissues and an abdominoplasty was performed. On inspection of the abdominal cavity, done prior to excision of scar, there was no evidence of associated pelvic endometriosis. Pathological examination confirmed that it was endometriosis and the margins

free of disease. The post operative period was uneventful.

DISCUSSION

Endometriosis is the presence of functioning endometrial tissue outside the uterine cavity, whereas endometriomas are well-circumscribed masses. The endometrial tissue innoculum is subsequently stimulated by oestrogens to proliferate until it becomes large enough to cause symptoms. This theory is convincingly demonstrated by experiments in which normal menstrual effluent transplanted to the abdominal wall resulted in subcutaneous endometriosis¹⁰. 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, laparoscopy, tubal ligation, and caesarean section^{3,4,5}.

The time interval between surgery and the onset of symptoms is variable and ranges from a few months to several years with an average interval of 4.5 years⁶. Incisional endometriosis usually occurs on the right side of the scar as in our case because it is the usual side of the operator and it is densely attached to the fascia. The typical presentation is a tender mass adjacent to surgical scar of gynaecological procedure. The tenderness is usually intermittent and is associated with the menstrual cycle. However this pattern was not present in our case.

The rare incidence and late onset with slow and intermittent progression of symptoms after surgery is usually misleading and is the main cause of misdiagnosis^{6,7}. It is also interesting to note that incisional endometriosis is rarely found in association with symptoms or findings of pelvic endometriosis⁶ as in our case also.

The various sites for extra pelvic endometriosis are bladder, kidney, bowel, omentum, lymph nodes, lungs, pleura, extremities, umbilicus, hernia sacs, and abdominal wall. Endometriosis involving the abdominal wall is an unusual phenomenon that should be considered in the differential diagnosis of abdominal wall masses in women⁷.

Medical treatment (such as oral contraceptive pills, danazol or GnRh) of this condition is similar to treatment of other forms of endometriosis but it only produces temporary alleviation of symptoms followed by recurrence after cessation of the treatment⁸. Therefore, surgical excision is the treatment of choice and should include the mass and a clean surgical margin which may include part of the rectus sheath in order to prevent recurrence. Synthetic mesh

may be necessary to close large defects of rectus sheath ⁸. A preoperative period of suppression of ovulation may be considered to reduce vascularity of the lesion, which may facilitate surgery and reduce postoperative complications. For prevention of the occurrence of scar endometriosis it has been suggested that the uterus should not be exteriorized for suturing and the divided visceral peritoneum should be approximated at the end of obstetric and gynaecological surgeries. Moreover, the abdominal wall should be cleaned thoroughly and irrigated vigorously with high jet solution before closure.¹¹

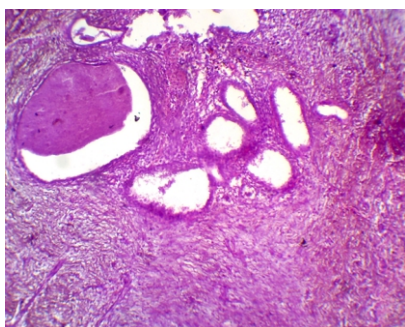
Follow up of patients with endometriosis is important because of the chances of recurrence, which may require re-excision. In cases of continual recurrence, possibility of malignancy should be ruled out.

CONCLUSION:

Endometriosis involving the abdominal wall is an unusual phenomenon which should be considered in the differential diagnosis of abdominal wall masses in women. Effort should be made to make a preoperative diagnosis with the help of imaging technique and FNAC. Medical treatment is not helpful. Wide surgical excision is the treatment of choice. Regular follow-up is necessary to detect recurrence.



Gross specimen of abdominal wall endometrioma



Cut section showing endometrial glands with secretion and stroma.

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