

Case Report

Surgical Scar Endometrioma: A Case Report

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Abstract: Abdominal wall scar is an uncommon condition that may be the underlying cause of acute or chronic recurrent abdominal or pelvic pain, especially after cesarean section due to the implantation of an endometriotic lesion within a pelvic or abdominal wall. Cesarean section scars are the most common site of extraovarian or extrauterine endometriosis. The condition also has been identified in other uterine surgery-related scars and in the skin, subcutaneous tissues, and abdominal and pelvic wall musculature adjacent to these scars. During uterine surgery, unintentional inoculation of endometrial stem cells at the surgical site is the most possible cause of scar endometriosis. This is a case of scar endometriosis following Lower Segment Caesarean Section and diagnosed by excision biopsy.

Keywords: Abdominal wall endometriosis, Scar endometriosis, Cesarean section, Extraovarian endometriosis, Extrauterine endometriosis

INTRODUCTION

Endometrioma or abdominal wall endometriosis is a rare condition, occurred after cesarean section or pelvic surgery in most of the cases. This condition is described as the presence or growth of ectopic endometrial tissue outside the uterus [1]. It is estimated to affect 89 million women of reproductive age worldwide. It occurs in 5% to 10% of all women that may often result in debilitating pain and infertility. Most frequently found in the pelvis, but are also reported to occur in extrapelvic endometrial locations range from the lungs to the extremities [2]. Incisional or scar endometriosis has also been reported with a much rarer incidence of about less than 1% of affected patients [1,3]. The predominant clinical picture of this condition is severe cyclic abdominal wall pain at the incision site at the time of menstruation.

Even today due to of its variable presentations, endometriosis remains as a diagnostic and therapeutic challenge[4]. Many of the times, clinical diagnosis of endometriosis is often confused with many other conditions like abscess, sarcoma, suture granuloma, desmoidtumor, hematoma and metastatic malignancy[5,6]. This case report summarizes the presentation, diagnosis and treatment of a woman with an abdominal wall Endometriosis within a cesarean incision scar.

CASE REPORT

A 33 year old female patient presented in surgical Out Patient Department with swelling and pain since 3 years at the site of cesarean scar on left side. The pain became worse during her menses and has increased progressively. Past history showed there was no menstrual disturbance and had a delivery 6 years back via cesarean section.

Abdominal examination revealed a solitary swelling and well defined mass of about 8x6 cm present at the left side of the cesarean scar which was tender firm and mobile on palpation. All other routine investigations were within normal. Ultrasonography revealed a well-defined hypoechoic lesion with few cystic components in the subcutaneous plane (Fig. 1). Fine needle aspiration cytology (FNAC) was done and results showed fragments of adipocytes with spindle cells in a hemorrhagic background. The mass was completely excised along with surrounding tissues and an abdominoplasty was performed. The excised mass was composed of 6x4 cm grey-whitish fibro fatty tissue (Fig. 2). Histopathology examination showed variably dilated endometrial glands surrounded by fibro collagenous tissue, confirming the diagnosis of endometriosis.



Fig 1: Ultrasonography image showing the hypoechoic lesion in longitudinal plan



Fig. 2: (A) Excised endometrial mass, (B) Photomicrograph showing endometrial glands with surrounding fibro collagenous tissue (Eosin stain in 5X magnification)

DISCUSSION

Extrapelvic endometriosis is an uncommon condition that occurred by following previous abdominal surgeries like hysterotomy and cesarean section. It rarely involves bladder, kidney, omentum, bowel, lymph node, pleura, umbilicus, hernial sac and abdominal wall [7]. Endometriosis of the skin and soft tissue constitutes 3.5% cases of extrapelvic endometriosis [8]. In majority of endometriosis reported cases, the growth of endometriosis tissue can be found in or adjacent to the surgical scars following caesarean sections, hysterectomy, hysterotomy and rarely following surgeries on fallopian tube, appendicectomy, amniocentesis and episiotomy. Two theories have been proposed regarding the pathogenesis: (a) the most favored metastatic theory states the transport of endometrial cells to adjacent locations via surgical manipulations, hematogenous or lymphatic dissemination and (b) primitive pluripotential mesenchymal cells undergo specialized differentiation and metaplasia into endometrial tissue [8].

Clinical diagnosis of scar endometriosis can be made carefully by studying previous medical history of the patient and followed by the physical examination. The patients presented with a mass near the previous surgical scars, accompanied by increasing severe pain during the menstruation. In such patients there will be a history of a gynecologic or rarely a non-gynecologic abdominal operation. In these patients, correct diagnosis relies on careful examination, right questioning and obviously taking endometriosis into consideration. There are worth of various methods of investigations, such as ultrasonographic examination, computed tomography, magnetic resonance imaging, Doppler sonography, or fine-needle biopsy in the diagnosis of scar endometriosis.

CONCLUSION

Careful clinical diagnosis of scar endometriosis should be done by previous medical history of the patient and the physical examination. Correct diagnosis relies on careful examination and various methods such as ultrasonographic examination,

computed tomography, magnetic resonance imaging, Doppler sonography, or fine-needle biopsy can be used for proper diagnosis of scar endometriosis.

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