CESAREAN SCAR ENDOMETRIOSIS: A RARE CASE REPORT

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ABSTRACT

Endometriosis is one of the puzzling subjects in gynaecology and its diagnosis requires high level of suspicion, especially if it occurs at extra pelvic site. Extra pelvic endometriosis is a relatively rare event. The most common extra pelvic form of endometriosis is cutaneous endometriosis. Our aim to publish this case report is to draw attention of clinicians to cyclic complaints of patients with abdominal wall endometriosis, and also to remind this rare gynecologic disease as a differential diagnosis. Endometriosis should be included in the differential diagnosis of lumps related to a surgical scar, inguinal canal and pelvis, especially if symptoms are cyclical. Usually surgical excision is adequate management as in our case but selected cases require gynecological referral and further medical therapy.

Key words: *Endometriosis, abdominal wall*

INTRODUCTION

Endometriosis is defined as a functioning endometrial tissue outside the uterine cavity [1]. First reported in 1860 [2], it is found in 10-15 % of all reproductive age women, and it is commonly seen in pelvic areas such as ovaries, posterior cul-de sac, and pelvic peritoneum[3].

Extra pelvic endometriosis is a relatively rare event although its average incidence represents 8.9 % of all reported cases of endometriosis with a mean age of 35 years. The most common extra pelvic form of endometriosis is cutaneous endometriosis, involving scar tissues occurring after obstetric or gynecologic procedures such as episiotomy, hysterectomy, cesarean section, and even laparoscopic surgery[4].

The incidence of scar endometriosis after cesarean delivery is 0.03-0.4 % [3]. The cause is unknown but it was attributed to retrograde menstruation theory, hematogenous or lymphatic distribution to other parts of the body, genetic theory, surgical transplantation and dioxin exposure[5]. Mostly, endometriosis is asymptomatic; some may have extensive disease and have no pain, whereas others with only minimal disease may experience severe pain. Symptomatic cases may complain of dysmenorrhoea, dyspareunia, infertility, fatigue, painful micturition and defecation during periods[5].

Endometriosis of the abdominal wall is difficult to diagnose for clinicians; it is often mistaken in clinically or in diagnostic imaging for other abnormal cases such as lipoma, abscess, granuloma, incisional hernia, or primary or metastatic cancer. Although a mass in the abdominal wall with symptoms of cyclic pain related to menses and swollen condition together with tenderness before menses is nearly pathognomonic [3, 10, 12].

CASE REPORT

Our aim to publish this case report is to draw attention of clinicians to cyclic complaints of patients with abdominal wall endometriosis, and also to remind of this rare gynecologic disease as a differential diagnosis.

A thirty two year old lady complained of swelling in the caesarean section (LSCS) scar of 3-4 months duration. The swelling was gradually increasing in size and was associated with cyclical pain. The patient had undergone caesarean section 6 months ago. On clinical examination there was a

hard, round mass, 2.5 x 1 cm with mild tenderness at the right lateral edge of the LSCS scar. The differential diagnosis was implantation dermoid cyst, foreign body (stitch) granuloma, lipoma (lipo-fibroma), or abscess. In ultrasound examination, 20x12 mm hypoechogenic mass with uniform margins, deeply located under the incision scar, had been reported. Ultrasound of the pelvis showed no abnormality. Provisional diagnosis of foreign body granuloma was kept on USG.

Excision of the mass was done under local anesthesia and the histopathological findings revealed features of endometriosis associated with nonspecific organizing inflammation.

DISCUSSION

The frequency of endometriosis in and around the surgical scar of caesarean section is 0.03%-0.04% to 0.8% in some reports[3]. Diagnosis of scar endometriosis should involve detailed history taking and pelvic examination. The role of needle aspiration cytology is still controversial. Pre–surgical diagnosis may be difficult as it needs to be differentiated from hernia, hematoma, granuloma and tumours. Sonography and fine needle aspiration cytology can be used but it is usually diagnosed by surgical excision[4] and histopathological examination.

Several prophylactic procedures have been proposed to prevent residual contamination of the wound. Complete surgical excision including the adjacent fascia or skin is the proper treatment[6]. The pathogenesis of abdominal wall endometriosis is best explained by a combination of theories, including metaplasia, venous or lymphatic metastasis and mechanical transplantation[7]. The most popular theory is that of mechanical transplantation; during the surgical procedure, viable endometrial cells into scars at the time of surgery[8].

Although therapy with oral contraceptives, progestins, medroxyprogesterone acetate and gonadotropin-releasing hormone agonists has been tried, complete regression is rare with medical treatment. Total surgical excision is considered to be the gold standard for both diagnosis and treatment for abdominal wall endometriosis.

Furthermore, fine-needle aspiration biopsy may be used for evaluation of subcutaneous abdominal masses. It is not commonly used for abdominal wall endometriosis as it is not suspected in diagnosis. Recurrence after adequate surgery is not common. If it occurs; it is likely to be a result of inadequate operation[7]. Malignant development from abdominal wall endometriosis has been assigned worldwide. For instance, a report of endometrioid carcinoma unfortunately developing in abdominal wall endometriosis seventeen years after hysterectomy had been reported in 1980[9].

Postoperative follow-up with a gynecologist is recommended since a concomitant pelvic endometriosis may be occur in these cases. Medical treatment after surgery may be added to therapy if it is necessary[10].

In our case, the definitive diagnosis was established by excisional biopsy. Our patient was premenopausal with no history of pelvic endometriosis. The cause in this case was surgical transplantation. The management was adequate excision to prevent recurrence. Although abdominal wall endometriosis is seen rarely nowadays; cause of increase in cesarean delivery and also other surgical procedures, it may be more common in the future. Familiarity with its symptoms and signs will increase awareness of this disease.

As it is accepted, inoculation of endometrium into the surgical area is the most common cause of abdominal wall endometriosis, it is strongly recommended that the used sponge should be discarded immediately after cleaning the uterine cavity, the suture material used for uterus should not be reused while closing abdominal wall, and finally the surgical area should be cleaned thoroughly and irrigated with saline solution before closure[11].

CONCLUSION

Endometriosis should be included in the differential diagnosis of lumps related to

a surgical scar, inguinal canal and pelvis, especially if symptoms are cyclical. Usually surgical excision is adequate management as in our case but selected cases require gynecological referral and further medical therapy.

REFERENCES:

1. Jan-Hein J. Hensen Adriaan C. Van Breda Vriesman, Julien BCM. Puylaert: Abdominal Wall Endometriosis: Clinical Presentation and Imaging Features with Emphasis on Sonography. AJR Am J Roentgenol 2006; 186:616-620. http://dx.doi.org/10.2214/AJR.04.1619, PMid:16498086
2. Von Rokitansky C: Ueber uterusdrusen-neubuildung in uterus and ovarilsarcomen. ZGes Aerzte Wein 37:577, 1860
3. Ilker Sengul, MD, Demet Sengul MD, Serkan Kahyaoglu, MD, Inci Kahyaoglu, MD. Incisional endometriosis: a report of 3 cases. Can J Surg 2009; 52:444-5. PMid:19865584 PMCid:2769132
4. Teng CC, Yang HM, Chen KF, Yang CJ, Chen LS, Kuo CL. Abdominal wall endometriosis: an overlooked but possibly preventable complication. Taiwan J Obstet Gynecol 2008; 47:42-8. http://dx.doi.org/10.1016/S1028-4559(08)60053-4
5. Liand CC, Liou B, Tsai CC, et al. Scar endometriosis. Int Surg 1998; 83:69-71.
6. Douglas C, Rotimi O. Extragenital endometriosis--a clinicopathological review of a Glasgow hospital experience with case illustrations. J Obstet Gynaecol 2004; 24: 804-808. http://dx.doi.org/10.1080/01443610400009568
7. Chiang DT, Teh WT. Cutaneous endometriosis--Surgical presentations of a gynaecological condition: Aust Fam Physician 2006; 35:887-8. PMid:17099809
8. Gunes M, Kayikcioglu F, Ozturkoglu E, Haberal A. Incisional endometriosis after cesarean section, episiotomy and other gynecologic procedures: J Obstet Gynaecol Res 2005;31:471-5. http://dx.doi.org/10.1111/j.1447-0756.2005.00322.x, PMid:16176520
9. Madsen H, Hansen P, Andersen OP. Endometrioid carcinoma in an operation, scar: Acta Obstet Gynecol Scand 1980; 59:475-6. http://dx.doi.org/10.3109/00016348009155433, PMid:7446017
10. Kocakusak A, Arpinar E, Arikan S, Demirbag N, Tarlaci A, Kabaca C. Abdominal Wall Endometriosis: A Diagnostic Dilemma For Surgeons: Med Princ Pract 2005; 14:434-437. http://dx.doi.org/10.1159/000088118, PMid:16220019
11. Chatterjee SK. Scar endometriosis: A clinicopathologic study of 17 cases. Obstet Gynecol 1980; 56:81-4. PMid:7383492
12. Ergün T, Lakadamyalı H. A Rare Cause of Low Abdominal Pain: Abdominal Wall Endometriosis Following Caesarian Section Performed 13 Years Ago: Case Report.Turkiye Klinikleri J Gynecol Obst 2009; 19:172-4.