Case Report

Scar Endometriosis Developing in Abdominal Wall

Mustafa Kara[1], Nilsen Yildirim Erdogan[2]

ABSTRACT

Endometriosis is a relatively common clinical disorder characterized with functioning endometrial tissue outside the uterine cavity. Although it is usually located in genital tract, the atypical sites may be involved including the bladder, ureter, intestine, appendix, surgical scars, and extremities. Scar endometriosis is rare, difficult to diagnose and can be easily confused entity with a suture granuloma, lipoma or cyst. The diagnosis is made by utilizing history, physical examination, ultrasonography (USG), and histopathological analysis of the surgical specimen. The definitive diagnosis of our case was made according to the histopathologic findings. In this case report, we aimed to review the diagnosis and treatment of scar endometriosis which is rarely seen via the light of the current knowledge.

KEY WORDS: Endometriosis, Scar, Abdominal wall.

Pak J Med Sci July - September 2012 Vol. 28 No. 4 745-747

How to cite this article:

Kara M, Erdogan NY. Scar Endometriosis Developing in Abdominal Wall. Pak J Med Sci 2012;28(4):745-747

INTRODUCTION

Scar endometriosis is a rare gynecological entity, and in its etiology, the previous pelvic and abdominal operations take important places.[1] Its incidence frequency is between 0.03% - 0.15% in all the endometriosis cases.[2] Numerous factors have been charged with etiopathogenesis of scar endometriosis. Nevertheless, the broadly accepted one is the theory of iatrogenic endometrial implantation induced after abdominal operations. The diagnosis is generally established by the help of histopathological examination. In the treatment of scar endometriosis, ectopic tissue is removed and hormonal suppression is performed. There is a short term recovery in symptoms and recurrence is often seen after the treatment is given up.[2,3]

CASE HISTORY

A female patient, at the age of 24, came to our clinic with the complaint of an abdominal distention growing with non cyclic pain in the left lower quadrant of her abdomen. In her anamnesis, there was a history of ovarian cyst operation she had four years ago. In the physical examination of the patient who was treated with oral contraceptive and hormonal suppression for 15 months after the previous operation, there was a painful swelling about 2 cm in size in the medial of incision line in her lower left quadrant. A hypo echoic space occupying lesion in 14.7 x 10.7 x16.1 mm sizes with lobule contour was observed under the skin in USG. There were cystic-necrotic zones in patches inside the lesion.

Minimal vascularization was determined in Doppler USG (Fig.1). By the help of these findings, it was thought that this case would be endometriosis or desmoids tumor. A nodular solid mass in 15 x 11.5

1. Dr. Mustafa Kara,
Assistant Professor,
Department of Obstetrics and Gynecology,
2. Dr. Nilsen Yildirim Erdogan,
Assistant Professor,
Department of Pathology,
1, 2: Bozok University Medical Faculty,
Yozgat, Turkey.

Correspondence.

Dr. Mustafa Kara,
Adnan Menderes Boulevard
No. 190 66200 Yozgat, Turkey.
E-mail: mustafa.kara@bozok.edu.tr
opdrmustafakara@hotmail.com

* Received for Publication: March 3, 2012
* Accepted: May 18, 2012

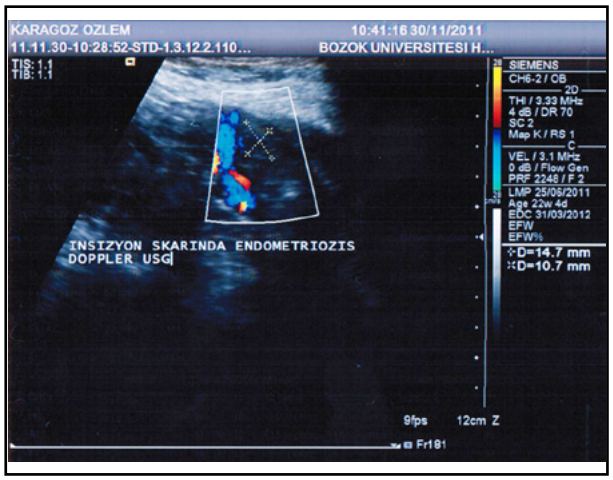

Fig.1: Demonstration of endometriosis located on incisional scar tissue by Doppler ultrasound.

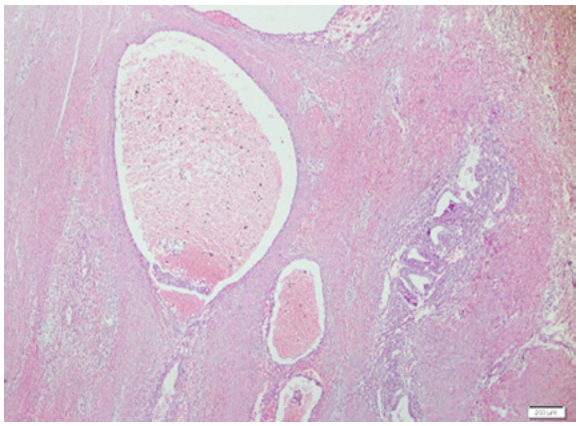

Fig.2: Endometrial stroma and gland structures observed in the subcutaneous soft tissue (H&Ex4).

x 17.5 mm sizes was determined in front abdominal wall as a result of computerized tomography (CT). Total excision of the mass was applied to the patient under local anesthesia. In the microscopy of the excised mass which seemed grey-white colored, irregular and rich in fat, some glands covered with endometrioid type epithelium inside the connective tissue, stroma and erythrocyte infiltration were observed (Fig.2). The result of pathology was found as endometriosis.

DISCUSSION

Endometriosis which is defined as the settlement of endometrial glands and stroma outside the uterine cavity are seen in 10% of women of reproductive age.[1] The most commonly affected organ is ovary, however, extra genital involvements including lungs, pleura, extremities and abdominal wall may be observed. Endometriotic implants which are seen on the abdominal wall may develop on their own or secondary to some operations such as caesarean section. In the pathogenesis of cutaneous endometriosis developing secondarily to the surgeries, endometrial cells spilling to the scar tissue during the surgery play role.[2-4] Our case has also developed on the basis of an abdominal operation performed in a similar way with the publications in the literature.

Danielpour et al initially thought that the distinctive diagnosis of the case developing with a painful abdominal scar after caesarean section was neuroma, but as a result of histopathological diagnosis and the fact that the lesion was removed surgically, they established endometriosis and dermal fibrosis diagnosis.[5] A number of diagnostic procedures were defined in the literature. USG has a limited value in diagnosis and exhibits nonspecific findings in the shape of hypoechoic fields giving patchy echoes. Hensen et al described a case series consisting of 12 patients all of whom had previously caesarean section and had abdominal endometriosis.[6] In 11 of these 12 patients, endometriosis was determined with Doppler USG, and a palpable mass was observed in 9 of them. It was reported that endometriosis symptoms were non-cyclic. The same authors reported that the growth rate of abdominal wall endometriosis incidence in the patients having caesarean section was 0, 8%. In our case, the pain was in non-cyclic character and the presence of painful palpable mass on abdominal wall was verified by Doppler USG. It was reported that computed tomography and magnetic resonance imaging (MRI) could be used in diagnosis. Balleyguier et al has reported that CT gave an image of well-defined and solid mass, and MRI was more valuable than CT because of the fact that its resolution was particularly better in diagnosis of little lesions.[7] It was found in our case that Doppler USG and CT results were supportive of each other. But anyway, the final diagnosis was established by the help of the pathologically examination of the excised tissue.

Scar endometriosis generally grows in the basis of pelvic or abdominal endometriosis. However, isolated cases are also reported. Goel et al have informed that the final diagnosis was scar endometriosis in a serial with two cases which were mistakenly established suture granuloma diagnosis and non-responsive to the treatment.[8] Accompanying pelvic endometriosis table was observed in both patients. There was similarly

isolated scar endometriosis in our case as well. The lesion is removed with a large surgical excision. It was reported that the progestin, oral contraceptives or the treatment of danazol provided only partial recovery and developed recurrence after treatment. Therefore, these cases should be followed closely considering the possibility of recurrence after the treatment.[4]

Consequently, it should be kept in mind that it may be scar endometriosis when a painful swelling grows in the place of incision of the patients who previously had abdominal or gynaecologic operation. This may be confused with the reasons of other medical or surgical mass. To establish preoperative diagnosis of the cases, the imaging methods such as USG, CT, MRI should be adopted. There is no role for medical treatment. Wide surgical excision is the treatment that should be applied. The cases should be followed up for recurrence growth.

REFERENCES

1. Khoo JJ. Scar endometriosis presenting as an acute abdomen: A case report. Aust NZ Obstet Gynaecol 2003;43:164-165.
2. Francica G, Giardiello C, Angelone G, Cristiano S, Finelli R, Tramontano G. Abdominal wall endometriosis near cesarean delivery scars. J Ultrasound Med 2003;22:1041-1047.
3. Douglas C, Rotimi O. Extragenital endometriosis: a clinicopathological review of a Glasgow hospital experience with case illustrations. J Obstet Gynaecol 2004;24:804-808.
4. Kaloo P, Reid G, Wong F. Caesarean section scar endometriosis: Two cases of recurrent disease and a literature review. Aust NZ J Obstet Gynaecol 2002;42:218-220.
5. Danielpour PJ, Layke JC, Durie N, Glickman LT. Scar endometriosis – a rare cause for a painful scar: A case report and review of the literature. Can J Plast Surg 2010;18(1):19-20.
6. Hensen JH, Van Breda Vriesman AC, Puylaert JB. Abdominal wall endometriosis: clinical presentation and imaging features with emphasis on sonography. AJR Am J Roentgenol 2006;186:616-620.
7. Balleyguier C, Chapron C, Chopin N, Helenon O, Menu Y. Abdominal wall and surgical scar endometriosis. results of magnetic resonance imaging. Gynecol Obstet Invest 2003;55:220-224.
8. Goel P, Sood SS, Dalal A, Romilla. Cesarean scar endometriosis - Report of two cases. Indian J Med Sci 2005;59(11):495-498.