

Incision scar's endometriosis case that was treated with false diagnosis

Yanlış teşhis ile tedavi edilmiş, bir insizyon skari endometriozisi olgusu

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ABSTRACT

Endometriosis is defined as the placement of a functional endometrium tissue outside the uterine cavity. Abdominal-wall endometriosis is usually observed after obstetric and gynecological operations. Endometriosis masses located in incision scars can be confused with foreign body reaction, granulomas, abscess, and incisional hernia. A 45-year-old female patient, who had undergone cesarean section 14 years ago, presented to our clinic for pain on the left side of the incision for 6 months and particularly because of the painful mass that grew during menstruation in that region. The patient was misdiagnosed as reactive lymphadenopathy due to fungal and bacterial infections in her toes before presenting to our clinic, and she was treated for a long time with this false diagnosis. On the left side of the Pfannen-Stiel incision, a non-mobile, painful mass of about 2x1 cm, with moderate stiffness, was detected on the physiological examination of the patient. Superficial ultrasonography applied to the region showed lobulated contour, mild heterogeneous hypoechoic, and mild vascularized solid lesion sized 10.4x3.4x10 mm on the left side of the incision line. The patient underwent surgery with an initial diagnosis of endometriosis in the incision scar. The received tissue was sent for pathological examination, and she was diagnosed as endometriosis. Thus, if a mass is detected in the anterior wall of the abdomen in women who had undergone cesarean delivery, the possibility of endometriosis should not be overlooked after the patient's history has been cautiously taken and physical examination and radiological examinations have been performed.

Keywords: Endometriosis, abdominal-wall's masses, incision scar's endometriosis

ÖZ

Endometriosis, fonksiyonel endometrium dokusunun uterus kavitesi dışında yerleşmesi şeklinde tanımlanır. Karın duvarındaki endometriosis, genellikle, önceki geçirilmiş obstetrik ve jinekolojik ameliyatlardan sonra görülmektedir. İnsizyon skarında yerleşik olan endometriosis kitleleri, yabancı cisim reaksiyonu, granülomlar, apseler ve insizyonel hernilerle karıştırılabilirler. On dört yıl önce Sezaryen ameliyatı olan 45 yaşındaki kadın hasta, 6 aydır insizyonun sol tarafında ağrı ve özellikle, o bölgede adet döneminde büyüyen ağrılı kitle sebebiyle kliniğimize başvurdu. Hastaya, bize başvurmadan önce, ayak parmaklarında mantar ve bakteriyel enfeksiyona bağlı reaktif lenfadenopati olarak yanlış tanı konmuş ve bu yanlış tanıyla hasta, uzun süre tedavi edilmişti. Hastanın fizik muayenesinde, Pfannen-Stiel insizyonun sol kısmında, yaklaşık 2x1 cm'lik, orta sertlikte, mobil olmayan ağrılı kitle saptandı. Bölgeye uygulanan yüzeysel ultrasonografide insizyon hattının sol tarafında 10,4x3,4x10 milimetre boyutlarında lobule konturlu, hafif heterojen hipoekoik, hafif vaskülarize solid lezyon izlendi. İnsizyon skarında endometriosis ön tanısıyla, hasta, ameliyat edildi. Alınan doku patolojik incelemeye gönderildi ve sonuç endometriozis geldi. Sonuç olarak; sezaryen geçirmiş kadınlarda, karın ön duvarında kitle saptandığında, hastanın anamnezi dikkatli bir şekilde alınıp, muayene ve tetkikleri yapıldıktan sonra endometriosis olasılığı göz ardı edilmemelidir.

Anahtar kelimeler: Endometriozis, batin duvarı kitleleri, insizyon skari endometriozisi

INTRODUCTION

Endometriosis is defined as the placement of functional endometrium tissue outside the uterine cavity. Endometriosis is a benign disease that is estrogen dependent (1).

The most common location of endometriosis is the pelvic area, which includes the ovaries, uterine ligaments, rectovaginal septum, and peritoneum. It is observed less commonly in the bladder, bowel, appendix, kidney, spleen, stomach, bile duct, lung, extremities, and surgical scars (2, 3). Endometriosis outside the pelvis is a rare disease and its diagnosis is difficult.

Abdominal-wall endometriosis is usually seen after obstetric and gynecological operations. During menstruation, pain and swelling are experienced in the area where the endometriosis mass is present.

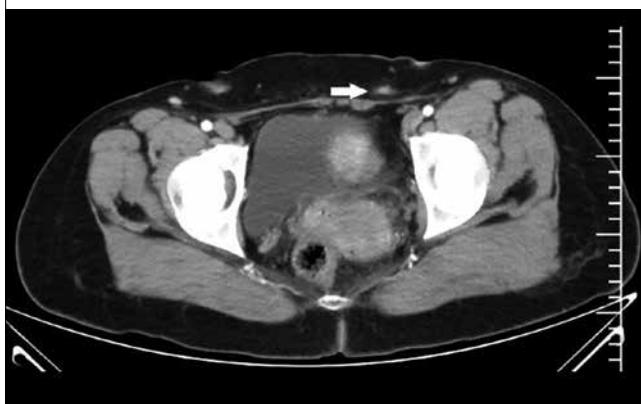
Endometriosis masses located in the incision scar can be confused with foreign body reaction, granulomas, abscess, and incisional hernia (3).

We present a case of a Pfannen-Stiel incision scar endometriosis that was wrongly diagnosed and treated long time as reactive

Figure 1. Superficial ultrasonography showed lobulated contour, mild heterogeneous hypoechoic, and mild vascularized solid lesion sized 10.4×3.4×10 mm



Figure 2. In the lower abdominal tomography scan, a hyperdense lesion was detected in the subcutaneous fat tissue, with a contrast enhancement sized 15×6 mm, which was not related to the abdominal cavity



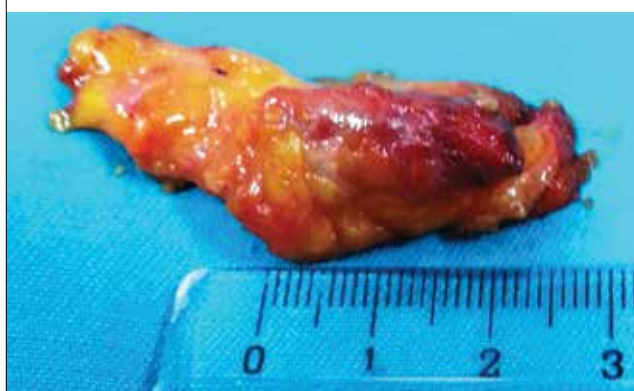
lymphadenopathy in the inguinal region due to fungal and bacterial infection for a on the toes.

CASE PRESENTATION

The patient provided consent for the case report. A 45-year-old female patient, who had undergone cesarean delivery 14 years ago, presented to our clinic for pain on the left side of the incision for 6 months and particularly because of the painful mass that grew during menstruation in that region.

The patient’s first birth was through vaginal delivery and the last birth was through cesarean delivery. The patient was misdiagnosed as reactive lymphadenopathy due to fungal and bacterial

Figure 3. Endometriosis mass of approximately 2×0.5 cm in diameter



infections in her toes before presenting to us, and the patient was treated for a long time with this false diagnosis.

On the left side of the Pfannen-Stiel incision, a non-mobile, painful mass of about 2×1 cm, with moderate stiffness, was detected upon physiological examination of the patient.

Radiographic examinations were performed. The abdomen and pelvic ultrasonography were normal. Superficial ultrasonography of the region showed lobulated contour, mild heterogeneous hypoechoic, and mild vascularized solid lesion sized 10.4×3.4×10 mm on the left side of the incision line (Figure 1). In the lower abdominal tomography scan, a hyperdense lesion was detected in the subcutaneous fat tissue, with a contrast enhancement of 15×6 mm in size, which was not related to the abdominal cavity (Figure 2).

Hemogram and biochemistry results were normal. Hormones, such as follicle-stimulated hormone; luteinizing hormone; estrogen; and progesterone and tumor markers, such as carcinoembryonic antigen (CEA) and CA-125 were normal.

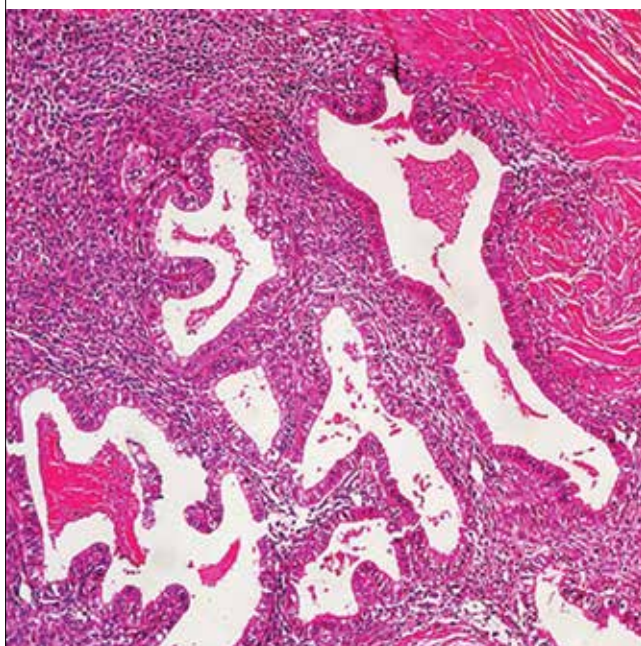
With the diagnosis of endometriosis in the incision scar, the patient was admitted to the clinic and prepared for surgery. Under local anesthesia, a mass of approximately 2×0.5 cm was removed along with a 1 cm area of surgical margin with clean tissue (Figure 3). Since the endometriosis mass is distant from the fascia and muscles, there is no defect in the fascia and muscles. After bleeding control, subcutaneous tissue and skin were closed.

The received tissue was sent for pathological examination, which confirmed endometriosis. Endometrial stroma, endometrial glands, and extravasated erythrocytes were observed in the fibrotic connective tissue in hematoxylin-eosin (H and E) -stained sections in the form of geographic areas (Figure 4).

DISCUSSION

Endometriosis is the placement of functional endometrium tissue outside the uterine cavity. This disease was first described in the ovarium by Russel in 1899 (2).

Figure 4. Endometrial stroma has endometrial glands, and fibrin is present in the lumens of the endometrial glands (10x hematoxylin-eosin stain)



This pathology is more common between the ages of 31 and 40 years (2). Our patient was 45 years old and had undergone a cesarean delivery 14 years ago.

The most common location of endometriosis is the pelvic area, which includes the ovaries, uterine ligaments, rectovaginal septum, and peritoneum. Endometriosis located outside the pelvis covers 8.9% of all cases (3).

The endometriosis tissue of our patient was placed under the skin on the left side of the Pfannen-Stiel incision scar. Scar endometriosis is a rare condition and usually occurs following uterus and fallopian tubes surgeries (4, 5).

The rate of development of endometriosis is between 0.03% and 0.4% after cesarean delivery, but it increases to 1.08% after hysterectomy (5, 6). Endometriosis in the abdominal wall often occurs with previous surgical scars, while there are also cases of spontaneously developed endometriosis in the literature (7).

There are several endometriosis case reports in the literature from a number of different regions. At the beginning, endometriosis can be confused with incisional hernia, inguinal hernia, and wall tumors (7). The reason our case is interesting is that the patient was misdiagnosed and treated for a long time for inguinal lymphadenopathy due to fungal and bacterial infection.

The endometriosis mass can be cystic, solid, or mixed and often manifests as scar mass, cyclic or non-cyclic pain. Generally, there is mass at the scar site and pain at that area during menstruation. The diagnosis can be difficult in patients without classic symptoms. This is observed in one-third of the cases (6). In our patient,

there was a mass in the left inguinal region and a persistent pain problem in that region, which increased even more during menstruation. On the left side of the incision, there was a very painful mass sized approximately 2×1 cm under the skin.

Ultrasonography, color doppler ultrasonography, tomography, magnetic resonance, and needle aspiration biopsy are the recommended diagnostic methods (6, 7). Ultrasonography scar endometriosis usually appears as a hypoechoic and heterogeneous solid mass and may show internal vascularity (6). Multicolored doppler ultrasonography combined with clinical information is proposed to be more useful in the diagnosis (7). In our patient, firstly, superficial ultrasonography and abdominal ultrasound were performed. A vascularized, hypoechoic, and heterogeneous mass located on the left side of the incision line was detected.

Tomography and magnetic resonance can also be used to visualize the endometriosis mass (7). To visualize the relationship of the mass of endometriosis with the abdominal fascia, the patient underwent contrast-enhanced tomography. There was hyperdense lesion showing contrast enhancement and no relation to the abdominal fascia and abdominal cavity.

In the study performed by Emre et al. (8), biochemical tests, beta-human chorionic gonadotropin (B-hCG) and CA-125 values were determined and found to be normal. Biochemical tests of our patient, including hormones, such as follicle-stimulated hormone; luteinizing hormone; estrogen; and progesterone and tumor markers, such as CEA and CA-125 were normal.

Progesterone, oral contraceptives, and danazol, which are used to treat endometriosis, may be partially ameliorated (7). The main treatment is surgery with total removal of endometriosis with intact surgical margins.

Endometriosis tissue can be removed under local, regional, or general anesthesia, depending on its size and location. Local anesthesia was used in our patient; the mass was removed with a clean tissue margin of approximately 1 cm and sent for pathologic examination.

CONCLUSION

In conclusion, if a mass is detected in the anterior wall of the abdomen in women who had undergone cesarean delivery, the possibility of endometriosis should not be overlooked after the patient's history has been cautiously taken and physical examination and radiological examinations have been performed.

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