

Umbilical endometriosis: a case report

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Dear Editor,

Endometriosis is an estrogens-dependent disease characterized by the presence of functioning endometrial glands and stroma outside the uterine cavity. Its prevalence is ranges from 2% to 20% in all women of child-bearing age and 3% of postmenopausal women with a mean age of 40(19-49) (1). On the other hand, umbilical endometriosis is rare, its incidence is estimated to be 0,5-1% of all endometrial ectopia (2).

Endometrial islands may be found in many possible locations, of which the following are the most common: Ovaries; round, broad, uterosacral ligaments; rectovaginal septum; pelvic peritoneum covering the uterus, tubes, rectum, sigmoid. In the rare cases still other locations such as the umbilicus; laparotomy scars; hernia scars (inguinal, femoral); appendix; gallbladder; liver; pancreas; spleen; stomach (3).

A 36 year-old woman, gravida 5, parite 5, no abortion. She presented with a 3-year history of pain localizing to the umbilicus, which has been increasing in menstrual period. The patient first revealed a polipoid brown-blue nodule within the umbilical depression, which enlarged, in the past 3 years. For the last one year, it is associated with cyclical bleeding. She had no any operations and any symptoms or signs of endometriosis.

On examination the general condition of the patient was found to be good. A brown-blue polipoid mass 2 cm in diameter was seen in the umbilical depression (Figure 1).

Ultrasound (USG) and computed tomography scan showed normal abdominal and pelvic features. The umbilical mass was only protruding through the fibbers of the rectus.

At operation umbilicus was removed with the mass. There was a small facial defect. Primary repair and mesh herniorraphy was performed. The postoperative period was normal. The histopathological picture of the specimen

showed skin fragment with an endometriotic focus within the lower dermis.



Figure 1. Umbilical endometriosis

The etiology of this disease remains elusive. There has been much discussion as to origin of the aberrant endometrium. There are various theories on this point: Transtubal regurgitation of menstrual blood, celomic metaplasia, lymphatic dissemination, and hematogeneous spread of endometrium (3, 4).

The etiopathogenesis of umbilical endometriosis can be explained with susceptibility of scar tissue to endometrial implantation. According to this theory, umbilicus act as a physiological scar with a predilection of endometriosis (5). Endometriosis can also present as an emergency with abdominal pain or biliary colic (6). When symptomatic endometriosis of the umbilicus occurs it is difficult to diagnose. It is often confused with other conditions, such as; neuroma, lymphadenopathy, abscess, irreducible hernia, primary or metastatic cancer, lymphoma, lipoma, hematoma, sarcoma and subcutaneous cyst (7). The fact that up to 50% of these affected women may have

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concomitant pelvic endometriosis, further pre-operative diagnostic investigations such as USG or magnetic resonance imaging (MRI) is advisable. These can also be in excluding intraabdominal extension of the lesions (5). Although endometriosis is a benign disorder, the frequency of malignant transformation of endometriosis is still unknown. It is estimated that up to 1% of women with ovarian endometriosis.

Endometriosis is a condition that often leads to variety of symptoms, also found in women who are asymptomatic. The usual presentations are infertility, pain, which is the common, (pelvic discomfort, lower abdominal pain, backache, dysmenorrhoea, dyspareunia) and menstrual symptoms. Cyclical symptoms associated with menstruation are present in 50% of patients. Umbilical pain with blue discoloration at the time of menstruation is typical for umbilical endometriosis and similar to the case (6). Researches into the genetic risk factors for endometriosis revealed that alterations to p53, PTEN, Cytochrome P450 1A1, and Peroxisome proliferator-activated receptor γ 2 and Pro-12-Ala have been implicated in endometriosis. Prolonged radiation exposure as well as increased estrogen exposure have also been implicated (8).

The diagnosis of endometriosis was established by the final histological appearance based on the identification of characteristic endometrial glands and associated stromal cells within fibrous connective tissue are skeletal muscles. As a result, endometriosis can be difficult to diagnose; definitive diagnosis is performed by visual inspection via laparotomy or laparoscopy (9).

Spontaneous umbilical endometriosis, also known as Villar's nodule, is an unusual location of the endometrial

tissue. While in the case of umbilical locations secondary to surgical procedures endometriosis occurs quite frequently, the frequency of the primary umbilical location is lower than 1% of all endometriosis locations (10). Endometriosis, although an uncommon condition in general surgery, should be included in the differential diagnosis of women presenting with swelling related to umbilicus, surgical scars, inguinal canal and pelvis, especially if symptoms are cyclical.

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