

CLINICAL CASE

ATIPICAL PRESENTATION IN ENDOMETRIOSIS-CASE REPORT

Mara Ieșanu¹, S. Păsărică¹, Romina Sima^{1,2}, D.C. Badiu^{1,3}, Liana Pleș^{1,2}

1 The “Carol Davila” University of Medicine and Pharmacy, Bucharest, Romania

2 “St. John” Hospital, “Bucur” Maternity, Bucharest, Romania

3. Department of Surgery “Bagdasar-Arsenie” Hospital, Bucharest, Romania

Corresponding author: Romina Sima

Phone no.: 0040741071243

E-mail: romina.sima@yahoo.es

Abstract

Endometriosis is a condition that affects 5-10% women of reproductive age and is characterized by abnormal growth of endometrial cells outside the uterus. Most commonly it involves the ovaries, fallopian tubes and the tissue lining the pelvis and rarely, endometrial tissue may spread beyond pelvic organs. We report a case of a 43-year-old female patient admitted to hospital for a routine gynecological clinical examination. Regarding her personal and family medical history no important pathology was associated. Clinical examination revealed a normal uterus with a 10 cm tumoral mass on the right side. The transvaginal sonography showed a mass with a negative ecogenity, well delimited, with 92 mm in diameter. A diagnosis of right ovarian tumor was established. Using exploratory laparoscopy, the adnexal tumoral mass was confirmed and because the tumor didn't have definite signs of benignity, the intervention was converted into laparotomy. Due to massive hemorrhage the patient underwent abdominal hysterectomy with bilateral salpingo-oophorectomy. The postoperative evolution was favorable, and the histological examination confirmed the ovarian endometriosis and adenomyosis.

Keywords: endometriosis, adenomyosis, infertility, pelvic pain, transvaginal ultrasound

Introduction

Endometriosis is a benign debilitating gynecological disease affecting millions of women worldwide, widely accepted as an estrogen-dependent condition [1]. Endometriosis occurs approximately in 5-10% women of reproductive age [2], while the prevalence in infertile women can reach 40% [1].

The mechanisms regarding the origin of endometriosis are not fully known and understood and there are several theories (Figure 1) that are trying to explain the right pathogenesis [3].

Its symptoms usually consist in chronic pelvic pain, dysmenorrhea, dyspareunia and infertility [4], changing the quality of life in

women. There are also many women with endometriosis that have no symptoms or unspecific symptoms. This disease is detected in up to 43% of cases during laparoscopy in women with no symptoms [5].

Case presentation

A 43-year-old female patient was admitted to the hospital for a routine gynecological clinical examination. The patient presented with no abdominal pain, without any signs of infertility, having no endometriosis specific symptoms.

Her personal medical history revealed no important features, having regular menstrual

cycles, with two pregnancies and two deliveries, at the last one, two years ago, a cesarean delivery was performed. Regarding her family medical history there was no significant pathology.

The clinical examination revealed a cervix with preserved epithelium, without any blood loss, a normal uterus with a large tumoral mass on the right side of 10 cm, well delimited and painful at mobilization. She had no other associated pathology on clinical examination.

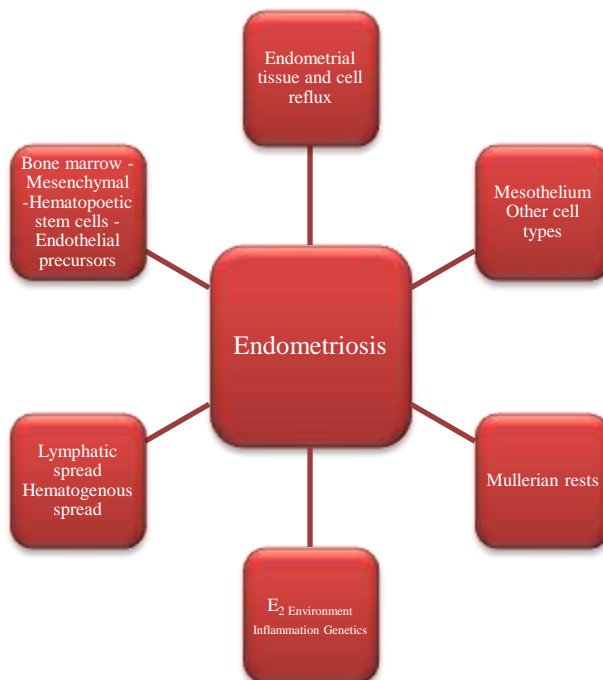


Figure 1 - Theories regarding endometriosis pathogenesis (E2 – Estradiol)

Of the available imagistic explorations, transvaginal sonography (TVS) was used, being easily accessible and efficient, proving the existence of the tumor. This investigation revealed an anteverted anteflexed uterus with a small enlargement on the right and in the anterior part was reported a mass with a negative ecogenity, well delimited, with 92 mm in diameter, presenting a few intracavitary septa and no cystic vegetations.

Considering the physical and paraclinical findings a diagnosis of right ovarian tumor was established.

Using laparoscopy, the gold standard for diagnosing endometriosis, we confirmed the adnexal tumoral mass (Figure 2) of around 10/10 cm, very adherent to the posterior wall of uterus and rectum. The mass didn't have definite signs of benignity. The laparoscopy transformed into laparotomy (Figure 3) because of these uncertain features of the tumor and of the intense adhesion to the uterus, the broad ligament of the uterus, the small intestine and the rectum.

Being highly vascularized with a hematic content, a large intraoperative hemorrhage occurred, which led to total abdominal hysterectomy with bilateral salpingo-oophorectomy.



Figure 2 - Laparoscopic aspect

The postoperative evolution was favorable. The laboratory blood test indicated an anemia with hemoglobin of 8.6 g/dL so the

patient was administered intravenous martial therapy.

After the surgery, the histological examination confirmed the ovarian endometriosis and adenomyosis. As the diagnosis was certain after the histopathological examination of the specimens, no immunohistochemistry examination was performed. The patient short and long-term outcome were favorable.

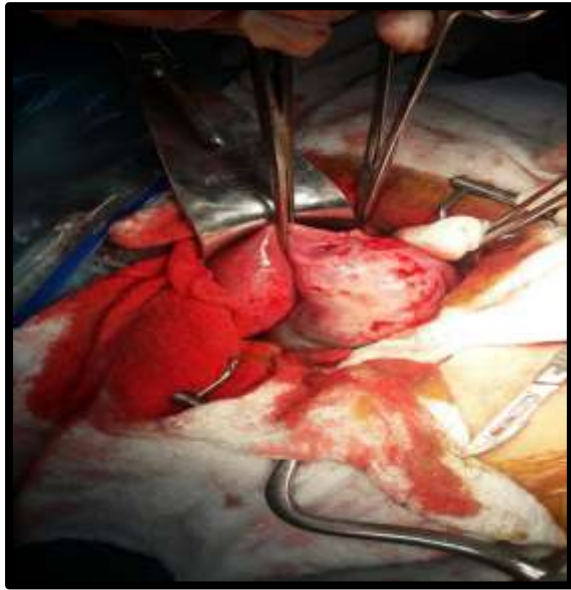


Figure 3 - Intraoperative view during exploratory laparotomy, prior to total abdominal hysterectomy

ultrasound characteristics other than the typical features mentioned above. Atypical lesions can manifest some of the following ultrasound characteristics: multiple locules, hyperechoic wall foci, cystic-solid lesions, or anechoic cysts. The optimal rule for the ultrasound diagnosis has been stated as an adnexal mass in a premenopausal patient with ground glass echogenicity of the cyst fluid, one to four locules and no papillations with detectable blood flow [7].

The best-known staging system of endometriosis is ASRM (American Society for Reproductive Medicine) Classification, in which endometriosis ranges from I- minimal, II-mild, III-moderate and IV-severe depending on their intraoperative location and extend of lesions [6].

Usually the treatment depends on the severity of the symptoms and includes pain killers, hormone therapy to conservative surgery and finally hysterectomy.

Endometriosis is a rare disease affecting especially women of reproductive age. It can be a clinical challenge, due to the sometimes-difficult diagnosis. In this case, the patient revealed no specific signs, with atypical sonographic and macroscopic appearance. Moreover, the patient's age is particular (43 years), endometriosis occurring especially in 18-29 years old group [8].

Discussions

Endometriosis is a condition characterized by endometrial tissue outside the uterine cavity, such as ectopic glands and stroma [3], the most common locations are the ovaries and the pelvic peritoneum [6]. The characteristic is the displaced endometrial tissue which continues to act as normal and it thickens, breaks down and bleeds with every menstrual cycle. This tissue has no way to exit the body becoming trapped and forming a cyst.

There are three major methods to diagnose endometriosis: pelvic exam, ultrasonography and laparoscopy.

At transvaginal sonography, the first-line imaging technique, endometrial lesions are diagnosed through the presence of single or multiple cystic formations, with a homogenous and hypoechoic content [6]. However, almost half of all endometrial lesions display

Conclusions

The peculiarity of this case is the atypical clinical presentation of the patient: no abdominal pain, no infertility in a 43 years of age patient. The ultrasound examination revealed an ovarian cyst without any appearance of endometriosis. The laparoscopic finding was more appropriate to ovarian cancer, but the pathological exam confirmed the endometriosis. In this case, the endometriosis has unusual presentation regarding clinic, imagistic and laparoscopic appearance.

References

- [1]Liang Y, Yao S. Potential role of estrogen in maintaining the imbalanced sympathetic and sensory innervation in endometriosis. *Molecular and Cellular*

- Endocrinology. 2016;424:42-49. doi:10.1016/j.mce.2016.01.012.
- [2]Khan KN, Kitajima M, Fujishita A, et al. Pelvic pain in women with ovarian endometrioma is mostly associated with coexisting peritoneal lesions. Human Reproduction. 2013;28(1):109-118. doi:10.1093/humrep/des364.
- [3]Badalà F, Nouri-mahdavi K, Raoof DA. NIH Public Access. Computer. 2008;144(5):724-732. doi:10.1038/jid.2014.371.
- [4]Appleyard TL, Mann CH, Khan KS. Guidelines for the management of pelvic pain associated with endometriosis: A systematic appraisal of their quality. BJOG: An International Journal of Obstetrics and Gynaecology. 2006;113(7):749-757. doi:10.1111/j.1471-0528.2006.00937.x.
- [5]Moen MH, Stokstad T. A long-term follow-up study of women with asymptomatic endometriosis diagnosed incidentally at sterilization. Fertility and Sterility. 2002;78(4):773-776. doi:10.1016/S0015-0282(02)03336-8.
- [6]Brătîla E, Comandasu D-E, Coroleucă C, et al. Diagnosis of endometriotic lesions by sonovaginography with ultrasound gel. Medical Ultrasonography. 2016;18(4):469-474. doi:10.11152/mu-875.
- [7]Van Holsbeke C, Van Calster B, Guerriero S, et al. Endometriomas: Their ultrasound characteristics. Ultrasound in Obstetrics and Gynecology. 2010;35(6):730-740. doi:10.1002/uog.7668.
- [8]Soliman AM, Fuldeore M, Snabes MC. Factors Associated with Time to Endometriosis Diagnosis in the United States. Journal of Women's Health. 2017;0(0):jwh.2016.6003. doi:10.1089/jwh.2016.6003.