Bilateral Ovarian Teratoma: A Case Report

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Abstract

Case report for a 31-year-old female with history of hypothyroidism comes to obstetrician for clinical evaluation of primary infertility after two months of thyroidectomy.

Transvaginal Ultrasound Scan (TVS) was requested for a symptomatic patient and illustrate that bilateral adnexal mass, heterogeneous appearance and contain echogenic foci with posterior acoustic shadow (teeth) and linear hyperechoic appearance (hair) differential diagnosis was ovarian teratoma, and ectopic pregnancy. Patient sends to MRI for more evaluation which represents bilateral ovarian dermoid cysts. Mass removed by laparoscopy and send to histopathology.

This case considers unique because it has a clear relation between disturbance of thyroid hormones and existence of ovarian masses, also it was rare occurrence of dermoid cysts in both side of ovaries, moreover the patient did not have any symptoms although the size of mass was the right cyst measures 6 cm × 3.8 cm and the left cyst measures 5.8 cm × 4.4 cm, with no ovarian torsion.

Keywords: Hypothyroidism; Bilateral ovarian teratoma; A symptomatic

Introduction

Identifying ovarian cyst is very crucial to women in reproductive age due to fear from sterility and developing malignancy [1]. Thus most of mature teratomas are benign and small number of cases may undergo malignant transformation about 0.1% to 0.2% [2]. The majority of ovarian cysts are asymptomatic, in some case representative with acute abdominal pain, discomfort able abdominal bloating and anorexia or any other sign of gastrointestinal disturbance, dermoid cysts are generally benign and unilateral, but may also be bilateral [3]. In this case report we report a case of uncommon bilateral ovarian dermoid treated by laparoscopic.

Case Presentation

A 31-year-old female came to out-patient gynecological clinic for routine follow-up after. Patient has history of hypothyroidism after thyroidotomy (taken 150 microgram of thyroxin) she came back again due to delay in childbirth for four years, with no sign of pain. Ultrasonography (Transvaginal) was carried out finding that the uterus appears anteverted and bulky with evidence of posterior wall sub-serosal myoma 5.4 cm × 4.3 cm in diameter. FIGO classification 6 endometrial thicknesses 0.5 cm in diameter and right ovarian dermoid cyst seen measures 3.0 cm × 2.8 cm in diameter with evidence of echogenic fatty content. The ovarian vasculature is maintained by Doppler and left ovarian complex multilocular cystic swelling seen measures 5.3 cm × 3.9 cm in diameter with an echogenic. Patient referred to MRI for further investigation using Coronal T2 and STIR weighted images. Axial T1, T2 and STIR weighted images. Sagittal T1 and T2 weighted images. Post contrast sagittal, axial and coronal T1 fat-saturated images. Axial DWI and ADC maps as a technique and MRI findings were confine with Ultrasonography (Figure 1). There are bilateral ovarian cystic lesions of mixed signal intensity; the right cyst measures 6 cm × 3.8 cm and the left cyst measures 5.8 cm × 4.4 cm (Figure 2). They showed fixed components more prominent on the right side presenting high T1/T2 and being suppressed in fat saturation sequences, it is also dark T2 signal suspicious material inside. In the post contrast series they showed smooth marginal enhancement with no solid components. Average sized AVF uterus showing large sub-serosal myoma is seen protruding from the uterine fundus measuring 5 cm × 4.5 cm. Another small intramural fibroid is seen within the right side of uterine body measuring 2 cm. No intracavitary focal lesions. Normal MR appearance of the cervix and endocervical canal. Normal MR appearance of the vagina. Normal appearance of the urinary bladder and rectum. No pathological pelvic lymphadenopathy. Preserved signal void character of the pelvic vascular channels denoting their patency. Unremarkable marrow signal intensity of the examined bones with no marrow edema or infiltration. After this result patient referred to oncologist for cyst removal.
Discussion

A benign ovarian tumor that accounts for about 95% of all ovarian teratomas and about 10% to 20% of all ovarian tumors is a mature cystic ovarian teratoma [1]. It can occur at any age.

Nevertheless, it is the most prevalent ovarian tumor diagnosed in women in their 20s and 30s [2]. It is assumed to originate from the ovary’s germ cell and is made of cystic materials and ordered structures. It is possible to find all three cell layers in it. It is also macroscopic, teeth, skin, hairs combined with sebaceous, sticky and foul-smelling materials contain many cystic areas. Commonly mature ovarian cystic teratomas are unilateral except in around 8% to 15% of cases where bilateral cystic teratomas are identified [3,4]. It does not have signs in most cases and is incidentally observed by abdominal examination or pelvic ultrasound for other purposes.

The occurrence of symptoms depends on the extent of the cyst and may be due to one of the complications, such as ovarian cyst torsion or rupture. One of the complications of ovarian enlargement is factors linked to torsion. Reports suggest that ovaries measure more than 5 cm in 80% of ovarian torsions [5]. Mature ovarian teratoma (dermoid cyst) is the most common benign tumor confirmed to have ovarian torsion. Our patient was a symptomatic just comes for check up with accident finding of bilateral ovarian cysts.

Ovarian teratoma diagnosis relies on a thorough history, examination and imaging. An enlarged ovarian mass can be seen by pelvic ultrasound, the initial image of preference, due to the absence of the classical tradition of sudden onset of lower abdominal pain and examination findings of tender lower abdomen with measurable mass, the diagnosis in this case was a challenge (Figure 3). The diagnosis was later confirmed with MRI results and ultrasound as bilateral adnexal mass. The management was appointed by laparotomy management because that the patient was a young nulliparous woman and required fertility and, happily, both ovary seemed viable with no signs of malignancy, the primary advantage of our management was the opportunity to grossly evaluate the viability of the ovary.

References