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EDITÖRE MEKTUP/LETTER TO THE EDITOR

Uncomplicated struma ovarii in an old-aged woman with total uterine prolapse

Total uterus prolapsusu olan yaşlı kadın hastada komplikasyonsuz struma ovarii

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Dear Editor,

We wish to call attention to an uncomplicated rare ovarian tumor called struma ovarii with concomitant uterine prolapse and discuss its clinicopathological characteristics.

Struma ovarii is a rare ovarian tumor, that is the presence of thyroid tissue in the tumor and was first described in 1899[1]. Struma ovarii is commonly seen between the ages of 40 – 60 years and its incidence is approximately 0.3% of all the ovarian tumors and nearly 1% of all ovarian teratomas[2,3].

The symptoms of struma ovarii are generally similar to other ovarian tumors, especially abdominal distension and pain, pressure effects on rectum or bladder as constipation / urinary incontinence, weight loss, eating difficulties and feeling full[4,5]. The treatment of benign struma ovarii is surgical resection, and it is usually cured by this procedure4.

In our case, a female multipar patient aged 66, applied to our clinics because of a protrusion of tissue from the vagina. Her complaint has continued for four years. In the patient's anamnesis and family history, no chronic disease or surgical examination with an unremarkable family history except for hypertension and glaucoma was observed. The patient's gynecological examination showed, total uterine prolapse with stage III was assessed. In transvaginal ultrasonographic examination (General Electic Logiq S6® , 1.5-4.5 MHz probe, Waukesha, WI U.S.A.) the uterus 5x7x4 centimeters in diameter; the uterine myometrium was homogeneous, no focal lesion was seen within it; the endometrial three layer pattern measured at 4 millimeters and in the left adnexal area was revealed a 2.5-cm cystic lesion with no septations, well- demarcated, hypoechoic mass most likely ovarian in origin by location alone (Fig.1).

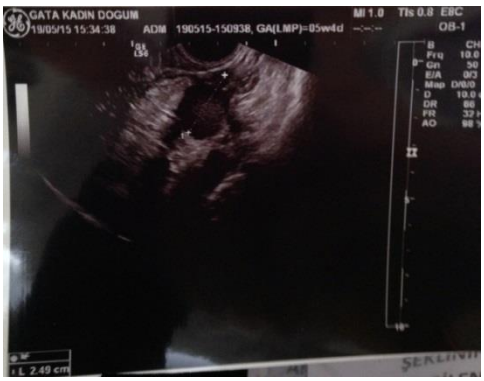

Figure 1. Ultrasonographic appearance of the cyst

Her routine biochemical results and tumor markers detected were within the normal reference intervals.

A vaginal hysterectomy with bilateral salpingo-oopherectomy procedure was performed on the patient with the diagnosis of total uterine prolapse. The cystic lesion on the left ovary was sent to

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pathology department for frozen section (Fig.2A). The frozen tissue observation showed histopathological findings that were consistent with struma ovarii. So, the operation was ended with no complications.

After definitive histopathological diagnosis of the lesion, it was reported that luminal surface of the cyst was lined by a multilayer of squamous and columnar cells. A focal solid lesion, resembling normal thyroid tissue, was observed in the cyst wall. This lesion was composed of follicular structures which were arranged in a back-to-back position. Their lumina were lined by a single layer of epitelium and filled with a colloid-like material (Fig.2B). Immunohistochemical study illustrated that the follicular epithelial cells were positive with "Throid Transcription Factor-1 (TTF-1)" antibody (Cell Marque, Mouse Monoclonal, 1:100, USA) (Fig.2C). This finding was corresponding to thyroid origin.

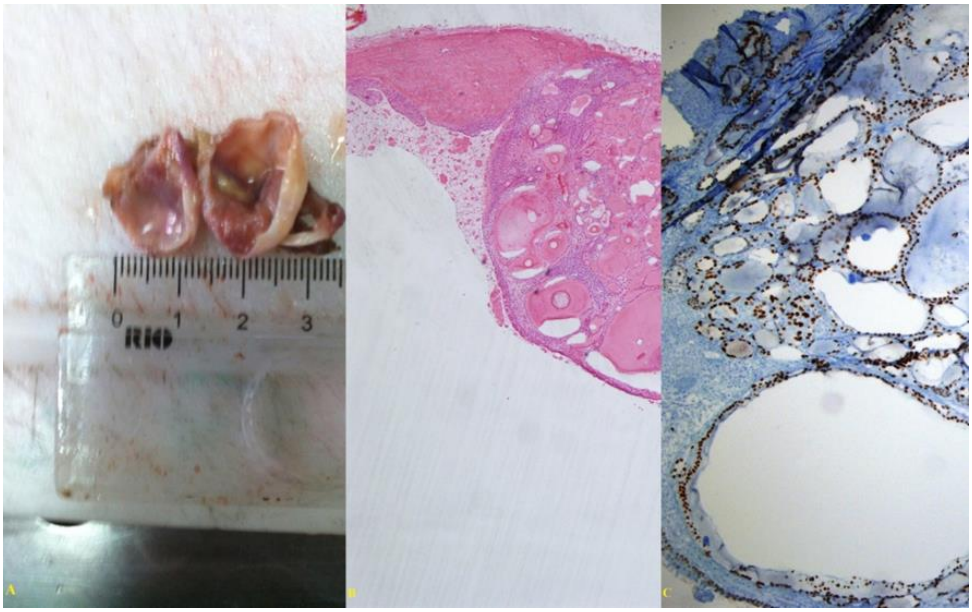

Figure 2 (A). The macroscopic appearance of the cyst (B) Histologic appearance of cystic lesion. Note the thyroid follicules filled with colloid-like material beneath the cyst epithelium (20xH&E) (C) Immunohistochemically, TTF-1 positivity in the follicular epithelial cells (100xTTF-1).

There was no recurrence in the 4- month follow up.Struma ovarii with its usual form of being benign is a rare ovarian tumor and can be transformed into malignant form approximately 0.3% to 5% rates[4]. Due to the rarity of struma ovarii, it's difficult to create a differential diagnosis between benign / malign forms of the tumour with the similar morphological findings[6]. However, the differential diagnosis is usually based on histopathological criteria like cellular atypia, nuclear pleomorphism, mitotic activity and lymphovascular and/or capsular invasion[7].

Gynecological ultrasound findings of struma ovarii usually include a heterogenous solid mass[8]. In our case, our gynecological ultrasound findings included a 2.5-cm cystic lesion with no septations, well-demarcated, hypoechoic mass, were not associated with struma ovarii. So, we decided that it was a simple serous ovarian cyst with the ultrasonographic findings and normal serum CA-125 levels. However, elevated serum CA-125 levels already have a little clinical value in struma ovarii in the literature[4]. In some cases, struma ovarii might present with ascites like malignant ovarian tumours with the range of 17.7 – 33.3 %[4]. In our case, we did not observed ascites in our ultrasound findings.

Struma ovarii's treatment is usually surgical resection for benign forms. In malignant forms, a surgical staging procedure is optimal treatment modality; in selected cases especially for families who have further childbearing desires, fertility preserving surgery could be done[4]. In less than 8% of the patients with struma ovarii, biochemical or clinical hyperthyroidism can be detected[9]. In our case,

thyroid function tests were in normal reference intervals and thyroid gland examination was in normal size.

In our case, the patient was operated by vaginal hyterectomy with bilateral salpingo- oopherectomy. The key point in the vaginal route surgery, is not to rupture the cyst intra- abdominally to aviod spreading malignancy. A laparoscopic or laparotomic approach to treat struma ovarii is recommended surgical procedure[6].

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