A Rare Case: Brenner and Dermoid Tumor in Struma Ovarii

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Abstract: Teratoma is a type of benign ovarian tumor. Struma ovarii is a monodermal teratoma. Our case applied with a complaint of swelling in his stomach. Postoperatively, struma ovarii were diagnosed pathologically, including teratomas and brenner tumors.

Keywords: teratoma, struma ovarii, brenner tumor

1. INTRODUCTION

Teratomas are seen in two forms, mature and immature. The less common type of mature teratom is the monodermal type struma ovarii. This condition is related to the presence of thyroid tissue at various rates. Sometimes this tissue can cause thyrotoxicosis. Brenner tumor is a rare epithelial tumor of the ovary. Pathologically it can be rarely observed other tumor. Benign / malign brenner tumors and mature teratomas are among these. In our case, overcurrent mass consisting of puree thyroid tissue is accompanied by a focal 1 millimeter area, both mature teratoma and brenner tumor. While presenting this case, we aimed to observe the general features of the struma ovary and to present the situations that may be accompanied by the literature.

2. CASE

A 47-year-old female patient was admitted due to bloating in her abdomen. Ultrasonography was appeared a mass of approximately 10x9x9 cm. Surgically unilateral salpingooforectomy was performed. The pathologically proven mass was 10.5x90x60 mm in diameter with a partially irregular appearance and dark brown color. The cross-section was exist up of a large cystic cavity, and serosal mucus emptied through it. It was observed with solid area in this district. This solid area was approximately 20x10 mm in size and the cross-section was compatible with thyroid tissue containing colloidal nodules. On microscopic evaluation, the solid area was observed extensive thyroid follicles. Some of these follicles were filled with colloid. Interestingly, a pathologically inferior area had an area of 1 millimeter in total, a tiny benign tumor with brenner tumor and mature teratoma. A striking finding in the blood samples taken during the patient's preparation for surgery was that the free T3, T4 and TSH values were normal.

Figure 1: Benign brenner tumor was observed in a 1-millimeter focus in the struma ovary

Figure 2: Neoplasm with cystic and solid areas of thyroid follicular epithelial cells were observed in over stroma. The cystic dilated tubules filled with colloid are noteworthy in the tumor, which is usually organized as tubular structures. The mature teratom is accompanied by Sebase glands.
3. DISCUSSION

Struma ovari is a monodermal teratoma (1). Struma ovarii is a rare ovarian tumor and exists for about 2.7% of all ovarian tumors. The struma ovary usually contains normal thyroid tissue. However, it sometimes includes thyroid adenomas, thyroid carcinoma and hyperplastic changes. Struma ovari is usually a solid organizing neoplasm (2,6). It is interesting that in our case we have a large cystic space and that it forms a limited solid arrangement within this cystic area. Brenner tumor is a relatively rare ovarian tumor and accounts for about 5% of all ovarian tumors. Brenner tumor is classified as benign, malignant and borderline (6). In our case histomorphologic features were compatible with benign brenner tumor and no atypical cytologic features were observed. It is striking that it is observed in a smaller focus, even in solid and millimeters. Brenner tumor is thought to develop from ovarian surface epithelium (6). Struma ovari is a monodermal tumor and develops from the germ cell (2,6). The dermoid tumor, which is observed in a focal area, also originates from germ cells. Gathering of struma ovari and brenner tumors, germ cells have been shown to be the origin of the literature (2,6).

4. RESULT

As a result, the struma ovary is a rare neoplasm. This neoplasm is not often accompanied by mature teratomas and brenner tumors. Our case is interesting both in pathological diagnoses and in the fact that the struma ovary is not solid but it is interesting because of cystic. One finding that should be kept in mind is that struma ovarie do not always produce thyroid hormone release and there is a possibility that several types of ovarian lesions may coexist at the same time.

REFERENCES


