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CASE REPORT

Benign Tumor Mimicking Malignancy

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ABSTRACT

In routine gynecological practice, benign tumor mimicking malignancies are rarely thought of as differential diagnosis. It is always mandatory to consider malignancy as the first diagnosis so that the clinician`s approach will be with a bird`s eye view. The diagnosis of malignancy will have a pronounced bearing mentally for the affected women. We confronted one such interesting case in our institution. The patient had undergone prior surgeries and recovered from serious postoperative complications. In addition, she poses a higher risk for anesthesia. Above all, to counsel the patient and the family about the impact of the current problem is a Herculean task. The scenario takes a different upturn with the histopathology report. The effort by the multidisciplinary team proves fruitful.

Keywords: Complex cyst, Malignancy, Neoplasm, Struma ovarii, Tracheostomy.

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INTRODUCTION

In routine gynecological practice, benign tumor mimicking malignancies are rarely thought of as differential diagnosis. It is always mandatory to consider malignancy as the first diagnosis so that the clinician's approach will be with a bird's eye view. The diagnosis of malignancy will have a pronounced bearing mentally for the affected women. We confronted one such interesting case in our institution.

CASE DESCRIPTION

A 52-year-old perimenopausal multiparous lady consulted our outpatient department (OPD) with lower abdominal pain, bloating sensation of the abdomen, and loss of appetite for 3 months. Had a history of loss of weight for 6 months. Bladder and bowel habits were normal.

Her menstrual cycles were regular, last childbirth 28 years back had undergone laparotomy for ruptured right cornual pregnancy and tubectomy 12 years back. Had subtotal thyroidectomy for toxic nodular goiter in 2001 following which she developed stridor and hoarseness of voice postoperatively. She was diagnosed to have bilateral abductor paralysis for which repeated surgeries were done. Initially cauterization of vocal cords done in 2002. In view of persistent stridor, tracheostomy with right posterior cordectomy performed in the following year. Finally, LASER assisted posterior cricoarytenoidectomy done in 2009 as there was no complete recovery from the previous surgeries. Subsequently, she regained her phonation and was relieved of stridor.

General and systemic examinations were normal. Abdominal examination showed a right paramedian scar and a firm lobulated nontender mass of 10 × 8 × 8 cm arising from pelvis with restricted mobility. There was no evidence of free fluid in the abdomen. Bimanual examination revealed the lobulated firm mass of mixed consistency in the right fornix with no evidence of free fluid or nodularity in the pouch of Douglas. Left fornix was free. Rectal examinations confirmed the above findings.

USG abdomen and pelvis revealed bulky uterus with diffuse adenomyosis, Complex adherent cystic mass in right adnexa 13 × 8 × 6.4 cm with internal hemorrhage and normal doppler findings suggestive of right ovarian tumor. To throw more light and precise diagnosis CT scan done, showed bulky uterus with few tiny cystic lesion seen in the myometrium. Multiloculated cystic lesion of 12 × 10 × 7 cm with multiple enhancing nodules noted in right ovary. Features suggestive of adenomyosis uterus with a multiloculated cystic lesion involving right adnexa. Baseline hematological investigations were within normal limits. Biochemical analysis revealed mild elevation of serum CA 125 level 69.87 U/mL and normal chest roentgenogram.

With the provisional diagnosis of ovarian neoplasm, staging laparotomy was planned. Extensive counseling required to discuss regarding the nature of the disease, the anesthetic risk involved, the type of anesthesia, and the subsequent follow-up. With the past history of repeated surgeries and the complications, the patients, as well as attenders, were made to understand the situ-

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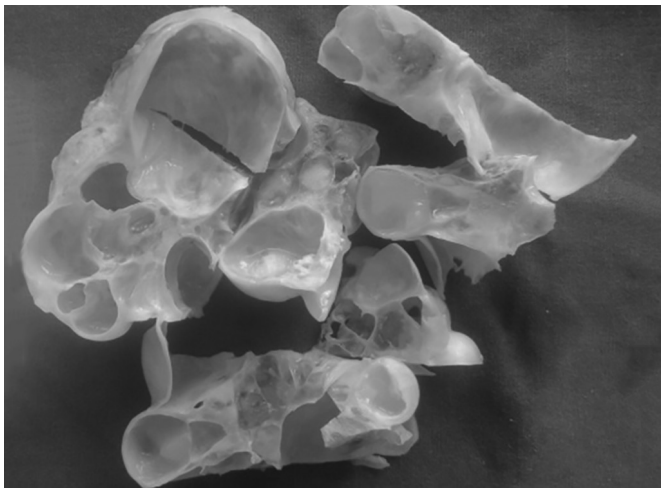

Fig. 1: Gross specimen of the complex cyst with multiloculation after removal

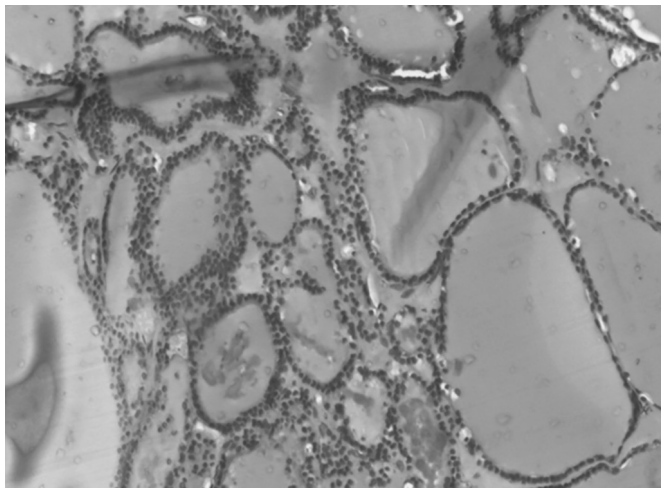

Fig. 2: Histopathology of the specimen: Microscopic picture of struma ovarii

ation in a realistic way. After the informed consent, proceeded for laparotomy. Under combined Epidural and general anesthesia, abdomen opened through midline incision peritoneal wash taken prior to survey of the viscera. There were adhesions of bowel with peritoneum and uterus, right ovarian complex cyst 13 × 7 cm with solid and cystic areas, lobulated appearance but no breach of surface and no undue vascularity. Uterus bulky, tubes were normal with no demonstrable ascites. Left ovary was normal. Type I extrafascial hysterectomy with B/L salpingo-oophorectomy, infracolic omentectomy, and pelvic adenectomy done. No intraoperative problems and postoperative period was uneventful. Gross examination of the specimen showed right ovarian tumor measuring 12 × 7 × 6 cm. Cut section showed multiloculated cyst with solid areas (Fig. 1). The microscopic picture revealed areas of colloid with cholesterol clefts (Fig. 2).

Histopathology report 1346/2014 showed benign struma ovarii in right ovary. Left ovary was normal. Uterus showed adenomyosis. It gave a sigh of relief to the patient as well as the clinician and the outlook of her future took a different dimension.

The patient kept under follow-up and recovered well.

DISCUSSION

Struma ovarii which is characterized by the presence of more than 50% of thyroid tissue are usually benign and unilateral, is considered to be the most common type of monodermal mature teratoma. It is a relatively rare tumor accounting for 1% of all ovarian tumors and approximately 3% of all mature ovarian teratoma.[1] Only 5–10% are malignant in nature.[2] Kalden in 1895 was the first to describe struma ovarii,[3] whereas Boettlin observed thyroid follicular tissue in ovaries which was first published by Gottschalk in 1899.[4] In the latest WHO classification, struma ovarii and malignant thyroid tumors arising within struma ovarii are included under monodermal teratomas and somatic type tumors associated with dermoid cysts.[5]

Even though the peak age of incidence is between 30 years and 50 years, rarely reported in postmenopausal and prepubertal girls.[6] Patients may be symptomatic or present with nonspecific symptoms. In the case of hormonally active struma ovarii, symptoms of thyroid hyperactivity or thyrotoxicosis. Even in the presence of a large amount of thyroid tissue, only 8% of patients present with symptoms of hyperthyroidism.[6] Struma ovarii when associated with ascites and pleural effusion is termed as pseudo-Meigs syndrome[7] and studies have reported postoperative complications in hormonal active tumors.[8] Struma ovarii appears as a heterogenous predominantly solid mass which is difficult to distinguish from dermoid cysts. Doppler flow aids in the diagnosis where low resistance flow signals are detected from the center of the echoic lesion.

Total abdominal hysterectomy with bilateral salpingo-oophorectomy is the definitive first line of management to prevent malignant transformation in the mondermic and highly specific teratoma[9] which leads to complete remission in the majority of cases. In the case of postmenopausal women, in addition to hysterectomy, omentectomy and lymph nodes sampling are suggested.[5] Radioiodine I-131, in addition to surgery, can be given for metastatic and recurrent tumors and thyroglobulin, a tumor marker is used to monitor recurrence postoperatively.[10] In the majority of cases, it is a postoperative histopathological diagnosis with good prognosis.

In the present case scenario, the patient was asymptomatic with clinical and radiological suspicion of malignancy, which was diagnosed as struma ovarii by histopathology after surgical removal.

CONCLUSION

Struma ovarii is a rare type of monophyletic teratoma comprising of a variable amount of functioning thyroid tissue in the tumor. Most struma ovarii are benign with only 5–10% being malignant.[11] The preoperative diagnosis, in the absence of clinical evidence of hyperthyroidism is difficult. Surgery is the treatment of choice for benign tumors. The diagnosis is usually made after surgical resection of the pelvic tumor. Histopathology is the confirmatory tool for diagnosis. This report is to emphasize that there are benign gynecological conditions mimicking clinical, ultrasonographic and biochemical signs suggestive of malignancy. Struma ovarii should be included in differential diagnoses of pelvic masses in postmenopausal women.

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