ORIGINAL RESEARCH PAPER

Volume-7 | Issue-12 | December-2018 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

STRUMA OVARII: A RARE CASE REPORT

Gynecology

Dr. Satadip Deb Roy Junior Resident, Department of Obstetrics & Gynaecology, RIMS, Imphal

Dr. Laishram Somen Kumar Singh* Senior Resident, Department of Obstetrics & Gynaecology, RIMS, Imphal *Corresponding Author

Dr. L. Ranjit Singh Professor & Head, Department of Obstetrics & Gynaecology, RIMS, Imphal

Dr. Koushik Mahajan Junior Resident, Department of Obstetrics & Gynaecology, RIMS, Imphal

Dr. Pinakjyoti Das Junior Resident, Department of Pathology, RIMS, Imphal

ABSTRACT

Struma ovarii is an ovarian teratoma predominantly composed of thyroid tissue. It is usally benign but 5%-10% shows malignant changes. We report here a case of palpable ovarian mass in a young 25 years old woman who underwent left salpingo oophorectomy. And the specimen was diagnosed as Struma ovarii in histopathological examination. Most of the time it is asymptomatic but it may present with hyperthyroidism, or in rare cases it can be malignant papillary thyroid carcinoma. This case is reported here for its rare presentation.

KEYWORDS

Teratoma, Struma ovarii, thyroid, benign.

INTRODUCTION:

Struma ovarii is a rare ovarian tumor belongs to the class of monodermal and highly specialised teratoma. Histologically >50% of tumor mass composed of benign thyroid tissues, but rarely it may contain malignant thyroid tissue. Though the first case was described by Von Kalden in 1895 [1], Struma ovarii is still extremely rare in clinical practice as it constitutes only 0.5-1% of all ovarian tumors and 3% of all ovarian teratomas [2]. Most of the cases are benign, unilateral, more commonly seen in right ovary and usually less than 10 cm. It can vary in size between 4-25 cm [1]. The most common presentation is lower abdominal mass and abdominal pain, rarely (5-15%) with symptoms of thyroid hyperactivity [3]. The age incidence is usually 30-50 years, but cases have been reported in wide range of age distribution between 6-74 years old [1]. Preoperative diagnosis is very difficult because of the rarity of the disease as well because the available diagnostic imaging techniques (Ultrasound, Computerized Tomography and Magnetic Resonance imaging) are all nonspecific. The only preoperative method to diagnose is the use of scintigraphy iodine 131 which can show active thyroid tissue in pelvis [2]. Treatment is usually surgical.

Case Report:

A 25 years old woman (para 2, living issue 2) who had previous one vaginal delivery and one caesarean delivery with a history of previous laparotomy for right ruptured tubal pregnancy, presented with a palpable pelvic mass with the history of infrequent menstrual bleeding for the last 7 months. Clinical examination showed that there was a firm, non tender, non mobile palpable mass extended up to the level of 20 weeks of uterine size in the mid portion of lower abdomen. The pelvic ultrasound showed a left ovarian complex cyst (8.3×5.4 cm) with soft tissue component, septations and echogenic foci. The patient was sent for all tumor markers, other biochemical tests; all were unremarkable. The patient underwent exploratory laparotomy under combined epidural spinal anaesthesia. During intraoperative exploration of the abdominal cavity, there was a multicystic complex mass of 7×6 cm size on the left adnexa. The tumor was mainly solid and partly cystic filled with a yellow grayish gelatinous marerials. There was no omental adhesion, no ascities. Right side of uterus was adherent to anterior abdominal wall and right ovary and fallopian tube was not visualised. Left saipingo oophorectomy was done and specimen was sent for histopathological examination. There were no intraoperative and immediate post operative complications. The histopathological result showed struma ovarii, but she denied any symptoms of thyroid hyperactivity pre/post-operatively and thyroid function test was within normal limits.

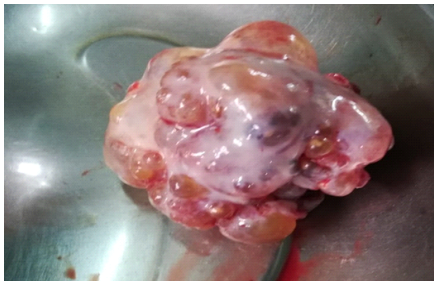

Figure 1: Gross appearance of Struma ovarii tumor

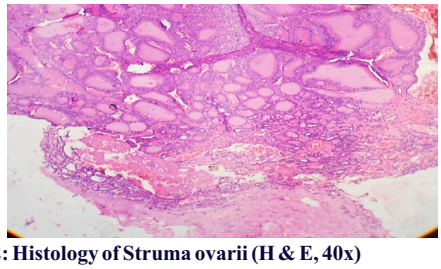

Figure 2: Histology of Struma ovarii (H & E, 40x)

DISCUSSION:

Struma ovarii is a rare tumor of the ovary which is composed of mature thyroid tissue growing within the ovarian teratoma. Approximately 15% of ovarian teratomas contain a small, non-significant focus of thyroid tissue, only 3%-5% contain >50% of thyroid tissue occupying the mass classified as struma ovarii [2]. Its incidence varies in different studies. A Japanese study of Higuchi et al, published in 1960, reports 3 cases among 1000 solid ovarian tumors (0.3%). In a recent review of 282 ovarian tumors, 2 cases of Struma ovarii have been reported (0.7%) [4]. In our institute she was the only case after reviewing the data of ovarian masses removed over the last 3 years. This tumor usually presents as a pelvic mass, which may be palpable on physical examination, depending on size and location. Most cases are incidentally found during clinical and imaging examination or laparotomy, as in our case that was diagnosed only after the histopathology result as preoperative diagnosis of Struma ovarii is

rarely reported because of non-specificity of the imaging technique used in clinical practice. Because of its rarity, there is no consensus or guideline on Struma ovaries' best management and each case must be managed individually. Based on the literature review, the optimal management should consider factors including the patient's age, preservation of fertility, histologic malignancy, tumor size and peritoneal metastasis. Usually unilateral adnexectomy is recommended for unilateral disease in women of reproductive age while total abdominal hysterectomy and bilateral salpingo oophorectomy is recommended for patients with bilateral disease and in postmenopausal women.

REFERENCES

1. Mustafa, A., Azzam, L., Azzam, H. M. (2016). Case report of a struma ovarii. American Journal of Medical Case Reports, 4(8), 272-274.
2. Yoo, S. C., Chang, K. H., Lyu, M. O., Chang, S. J., Ryu, H. S., Kim, H. S. (2008) Clinical characteristics of struma ovarii. Journal of Gynecological Oncology, 19(2), 135-138.
3. Soad Imhmed R Alkhumsi1, Salah E Gerryo2, Saleh Hdia1, Salem Edra3, Yonis Zaidi3, Abdulati Khalil. (2017). Recurrent thyrotoxicosis of extrathyroidal origin due to struma ovarii: A case report and review. Antibody Internalization Assay, 9(5), 140-143.
4. Shaco, L. R, Bean, S. M., Bentley, R. C., Robboy, S. J. (2010). Natural history of biologically malignant Struma ovarii: analysis of 27 cases with extra ovarian spread. International Journal of Gynecological Pathology, 29(3), 212-227.
5. Marti, J. L., Clark, V.E., Harper, H., Chhieng, D. C., Sosa, J.A., Roman, S. A. (2017). Optimal surgical management of well differentiated thyroid cancer arising in Struma ovarii: a series of 4 patients and a review of 53 reported cases. Thyroid, 22(4), 400-406.