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A Rare Tumor of Ovary – Struma Ovarii

KEYWORDS

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ABSTRACT **Objective :** For study of histopathological feature of Teratoma ovary (Struma ovarii)

Method : n the histopahtological unit of Pathology Department, J.L.N.M. College, Bhagalpur 11 cases of strumaovarii are evaluated.

Result : Of these 11 cases 10 were benign & rest one is malignant.

Conclusion : A teratoma having thyroid tissue may converted to hyperplasia either diffuse or nodular, thyroiditis, lymphoma or carcinoma. So histopathological examination is mandatory for these type of teratoma.

Introduction :

Struma is the most common form of monodermalteratoma. Struma ovarii represent only when thyroid tissue is recognizable on gross examination or occupied most of the tumor (>50%). Thyroid tissue is identified in 20% of dermoid cyst& only 5% become malignant.

Method :

These specimen is collected by Department of Obs. &Gynae of J.L.N.M.C. Hostpital, Bhagalpur from Feb, 2014 to Dec, 2016.

Slide is prepared in our Histopathology Department & stained with H & E (Haematoxyline& eosin) stain. Which then studied for histopathological features and correlated with clinical presentation.

Age of these patients varies from 20 – 56 years. Most of them complaining abdominal distention, abdominal pain, very few of them also complain of warm and flush skin, heat intolerance, diarrhoea, palpitation & tachycardia- symptoms of hyperthyroidism. On USG examination two patients have adnexal mass and suffering from infertility- one had adenocarcinoma of endometrium, Two had leiomyoma of uterus, three had total hysterectomy and two had salpingo-oophorectomy.

Gross - Size may vary from 4 cm to 10 cm in diameter. Surface are smooth and glistening, typically brown or green brown in colour but one was irregular. Some have unilocular and some have multilocular cyst containing brown to green gelatinous fluid. Four of these is associated with other feature of teratoma like hair, tooth and bone.

Microscopic : Ten out of eleven having benign feature of thyroid element having multiple follicle of varying in size and contain amorphous eosinophilic material called colloid. Each follicle is lined by flattened to cuboidal cell with a nucleus &scant cytoplasm. In five cases other element of teratoma i.e. bone, hair & tooth was found. Two cases has features of multinodular goiter within thyroid tissue having dilated follicle which is filled with colloid. Out of which one of the case having feature of minimal invasive follicular carcinoma characterized by sheet ofmicrofollicle lined by cell having mild nuclear atypia& scant cytoplasm, focal capsular infiltration. So, it is called malignant stromaovarii. (Minimally invasive follicular carcinoma)

Discussion :

In all ovarin neoplasm mature cystic teratoma having a percentage of about 18 – 20%. Struma ovarii is described by von Kalden in 1895, Gottschalk in 1899, and Meyer in 1903. As there is no specific clinical symptoms so its diagnosis is difficult preoperatively. It can be diagnosed only upon histological examination. Two of these patient is younger then its normal occurance age group i.e. 51 to 60 years.

The pathological changes in thyroid tissue of stromaovarii is same as in normal thyroid tissue. Such as thyroiditis, nodular hyperplasia of thyroid, carcinoma and malignant lymphoma.

Criteria of malignancy ispleomorphism, increased cellularity & mitotic activity. Malignant tumor must have fulfill the criteria of vascular or capsular invasion or metastasis or both.

One of my case is fulfill the criteria of focal invasion of capsule by tumor cells. So it was malignant one and diagnosed as minimal invasive follicular carcinoma.

So far as distant metastasis is concerned only 4-7% of cases have distant metastases mostly to abdominal cavity & rarely to liver, bone, lung and brain. But in my case no distant metastasis was found.

Conclusion :

Very few cases of struma ovarii become malignant but careful evaluation of malignancy is necessary by histopathological examination.

Preoperative diagnosis is difficult as it has no specific clinical feature. So in young patients awareness of this disease is necessary,because it affects on fertility of the patients.

References

1. Kempers RD, Dockerry MB. Hoffman DL, et. al. Struma ovarii: ascetic, hyperthyroid and asymptomatic syndromes. *Ann Intern Med* 1970; 72: 883-893.
2. Szyfelbein WM, Yong RH, Scully RE. Cystic strumaovarii: a frequently unrecognized tumor. A report of 20 cases. *Am J SurgPathol* 1994; 18: 1102-1116.
3. Szyfelbein WM, Yong RH, Scully RE. Cystic ovarii simulating ovarian tumor of other types : a report of 30 cases. *Am J SurgPathol* 1995; 19: 21-29.
4. Raina A, Stasi G, MonzioCompagnoni, B. et. al. Struma ovarii: A rare gynecological tumor. ActaOncol 1997: 36: 533-4.
5. Devaney K, Snyder R, Norris HJ et al. Proliferative and histologically malignant strumaovarii: a clinicopathologic study of 54 cases. Int J GynecolPathol 1993: 12: 333-43.
6. Gould SF, Lopez RL, Speers WC. Malignant strumaovarii: a case report and literature review. J Reprod Med 1983; 28: 415-9.
7. Amr SS, Hassan AA. Struma ovarii with pseudo-Meigns syndrome: report of a case and review of the literature. Eur J ObstetGynecolReprodBiol 1994; 55: 205-8.