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CASE REPORT PROF-3260

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COLLISION TUMOUR IN OVARY;

CASE REPORT: RARE CASE OF COLLISION TUMOUR IN OVARY: COMBINATION OF SEROUS CYSTADENOMA, FIBROMA AND BRENNER TUMOUR.

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ABSTRACT: Most of the ovarian tumours are of surface epithelium and account for 65-75% of tumours.[1] Serous cystadenoma constitutes 20% of ovarian tumours. Sex- cord stromal tumour is less common. Fibroma is the most common sex-cord stromal tumor comprising 70%.[2] Tumors can present in a combination in ovary like teratoma and mucinous cystadenoma, granulosa cell tumour and mature teratoma and/or mucinous tumors.[3] We report a rare case of combined serous cystadenoma and fibroma in a 55 years old female. Review of literature reveal only two such cases. To best of our knowledge this is the third case which is being report.

Key words: Collision Tumour, Fibroma, Serous Cystadenoma.

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INTRODUCTION

Among ovarian epithelial tumors, serous cystadenomas are the most common and can be bilateral in up to 20% of the cases. Serous tumors with fibrous component are designated serous cystadenofibromas. Approximately 8% of all ovarian tumors are sex cord stromal tumours. They can occur in all age groups but predominantly affects perimenopausal women. Mostly they are benign.[4]

Brenner tumours constitute 2 to 3 % of surface epithelial tumours.[5] In most cases they are incidental findings. The significance of which is unknown. They can occur in association with other tumours like serous cystadenofibroma, mucinous cystadenoma and mature cystic teratoma.[6]

Case Presentation

Our patient was a 55 years old female presented with abdominal pain for 15 days. On ultrasonography bilateral cystic and solid adnexal masses were seen. The patient underwent hysterectomy and bilateral salpingo-oophorectomy on gross examination, cut surface of the right ovary showed two small cysts measuring 1.0x1.0cm and 0.7x0.6cm; containing gelatinous material. A white tan nodule measuring 3 mm was noted in the large cyst. Left ovarian mass measured 17x13x10.5cm. Cut surface showed white tan solid component in the lower half and cystic in the upper half. Cystic component measured 10.5x6.0x4.0cm and was multiloculated with predominantly smooth inner lining and few gray white nodules measuring less than 1mm. Left ovary measured 5.0x4.5x2.5cm. Cervix, endomyometrium and both fallopian tubes were unremarkable on gross and microscopic examination. Hematoxylin and eosin stained sections of the right ovary showed cystic follicles and cyst lined by ciliated cuboidal to columnar epithelium consistent with serous cystadenoma.

Sections of the cystic area of the left ovarian mass also showed features of serous cystadenoma. Sections of the solid area showed bland appearing spindle cells separated by marked edema and myxoid change. The histological features from

solid area were suggestive of fibroma. Sections of the residual left ovary revealed scattered clusters of transitional type epithelium consistent with brenner tumor. The final report was bilateral serous cystadenoma, left fibroma and Brenner tumour.

This is a case of rare collision tumour in ovary. Collision tumours are the tumours having two distinct histological types in the same organ. These types of collision tumour are quite rare in ovaries.[3]

Ovarian tumours show different pattern of histology reflecting their different cell of origin.[7]

The most frequently cited combination in ovary is that of Brenner tumour with Mature cystic teratoma and sertoli leydig cell tumour with mucinous cystadenoma.[8]

In some cases the serous cystadenoma may have fibrous component in it and it is designated as serous cystadenofibroma. As both the components are intermixed.[9]

But in our case both the cystic and solid components are grossly and histologically separate. Although, some of the fibromas may show cystic degeneration but in that case the cyst has no lining whereas in our case the cyst was lined by serous epithelium.[10] Also careful examination of multiple sections is required to rule out stromal overgrowth in Brenner tumour which presents as a single nodule with small foci of transitional epithelium scattered within the stroma.[11]

CONCLUSION

The final diagnosis was the collision tumour of the left ovary having serous cystadenoma, fibroma and brenner tumour. The right ovary had serous cystadenoma.

Conflicts of Interest

No potential conflict of interest relevant to this article was reported.

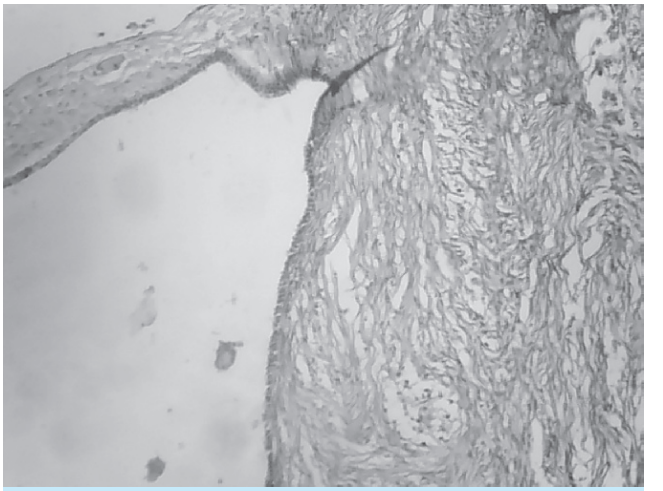

Figure-1. Serous cystadenoma of right ovary (magnification 100x).

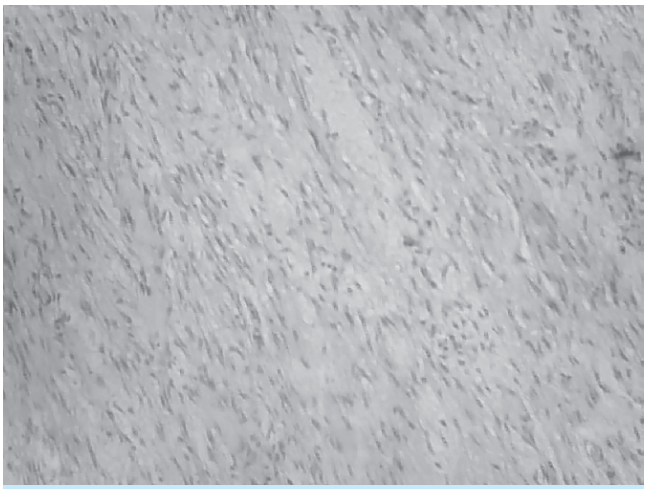

Figure-2. Spindle shaped cells separated by edema and myxoid change (Fibroma) of left ovary (magnification 100x).

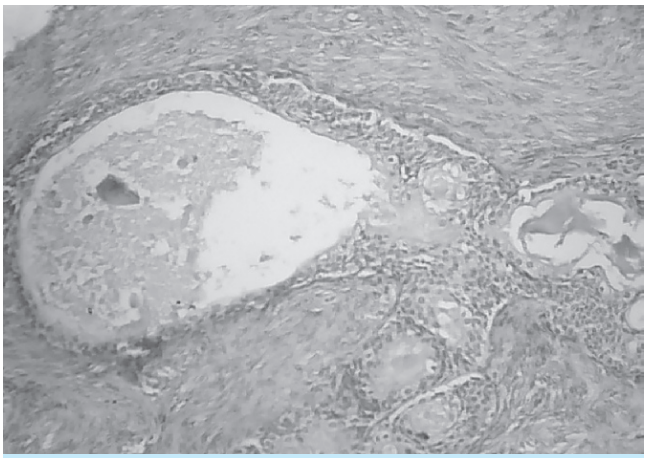

Figure-3. Focus of Brenner tumour of left ovary (magnification 100x).

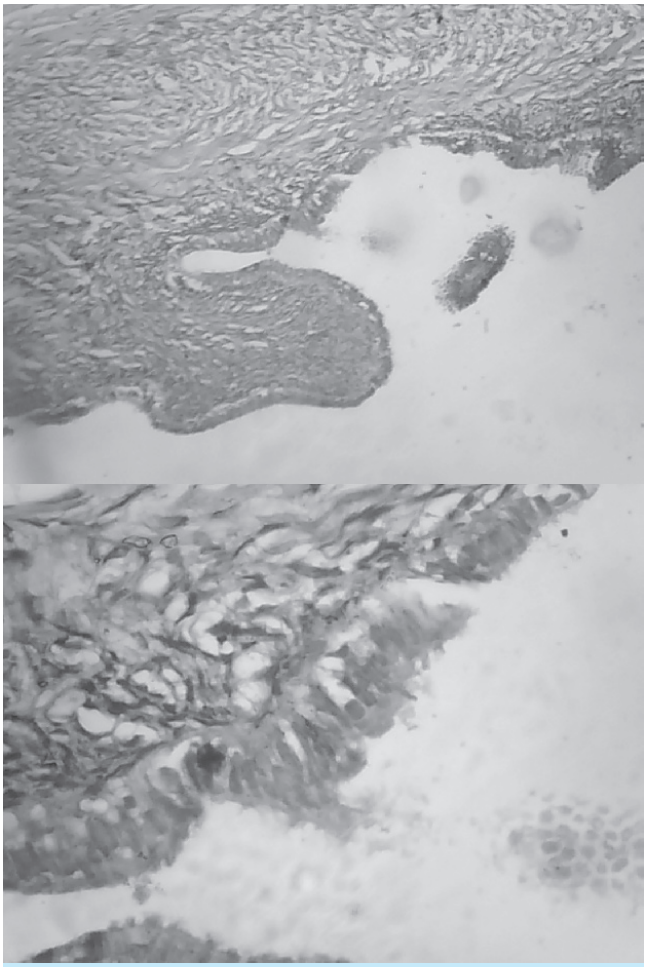

Figure-4 A&B. Serous cystadenoma of left ovary (magnification 100x & 400x)

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AUTHORSHIP AND CONTRIBUTION DECLARATION

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