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RESEARCH ARTICLE

Serous Cystadenofibroma of the Ovary: A Benign Tumor with Malignant Mimicry – A Case Report

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Abstract: Ovarian cystadenofibroma is a relatively rare benign tumor, generally affecting women in the fifth decade, it contains both epithelial and fibrous stromal components. The rate of occurrence is about 1.7 %., A 38-year-old woman was admitted to the hospital with lower abdominal pain for a few days. Her cycles were regular with a cycle length of 30 days, with menstrual pain for several months. Per abdomen, no palpable mass was felt. A firm mass of size approx. palpated in the right adnexal region, the uterus was not felt separately on pelvic examination. Her routine full blood counts and serum biochemistry were normal, except deranged glycemic index. Pelvic ultrasound revealed Right hydrosalpinx and left simple cyst. Mantoux was found to be negative. She underwent a Total laparoscopic hysterectomy with bilateral salpingo-oophorectomy. Intraoperatively she was found to have adenomyosis of the uterus. The right ovary appeared as multiloculated and cystic and the Left ovary with simple cystic appearance. The specimen was sent for histopathological examination, and it revealed the Right side serous cystadenofibroma, the left showing a simple cyst, and adenomyosis of the uterus. The appearance of cystadenofibroma on imaging is often complex: cystic to solid mass may be visualized and it often resembles a malignant tumor. Owing to a fibrous component of this tumor, MRI scanning shows low signal intensity on T2W imaging, and this may help a radiologist to make a preoperative diagnosis of this tumor and perhaps avoid aggressive surgical management.

Keywords: **Ovarian cystadenofibroma, firm mass, benign ovarian tumor**

INTRODUCTION

Ovarian Cystadenofibroma is a relatively rare benign tumor, arising from the ovarian lineages and stroma. This tumor can be solid, cystic, or semisolid, depending on the fraction of epithelium and stroma it contains and the secretory activity of the epithelium that composes it. occurring in females aged 15–65 years.[1]

It is a slow-growing epithelial tumor and can present as a single or multiple masses in the ovary often making the diagnosis of benign or malignant even more difficult. These tumors can be asymptomatic or may present with vague pain and heaviness, sometimes as a lump in the lower abdomen.

Ultrasonography generally shows a multicystic appearance with solid and cystic components; MRI may be more helpful. Tumor markers may not be very helpful in differentiating benign or malignant ovarian tumors. The intraoperative frozen section may help differentiate benign and malignant tumor. These patients often require surgical treatment. These tumors have a good prognosis with adequate surgical treatment.[2]

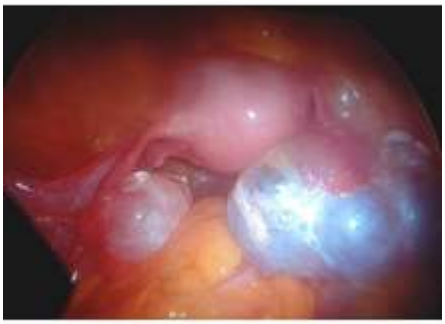
Case Description

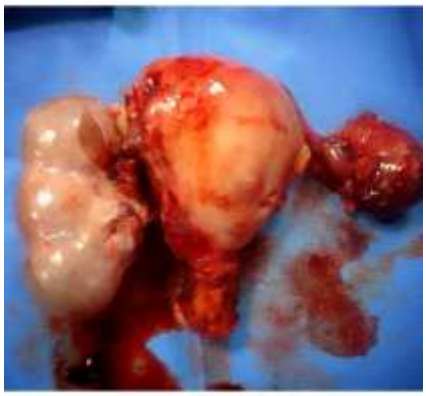
38-year-old woman was admitted to the hospital with lower abdominal pain for few days. Her cycles were regular with a cycle length of 30 days with menstrual pain for several months. A firm mass was palpated in the right adnexal region of the uterus on pelvic examination. Her routine full blood counts and serum biochemistry were normal, except for glycemic levels. Pelvic ultrasound showed Uterus- 8.5×5.5×5.7cm. ET-5mm.Right dilated tubular cystic focus if 7.4× 3cm noted in right adnexa (complete internal septation). The right ovary is not visualized apparently. Left well-defined cystic focus of size 4×2.5cm noted in left adnexa with internal echogenic content, and few internal septations. A provisional diagnosis of Right hydrosalpinx. Made.

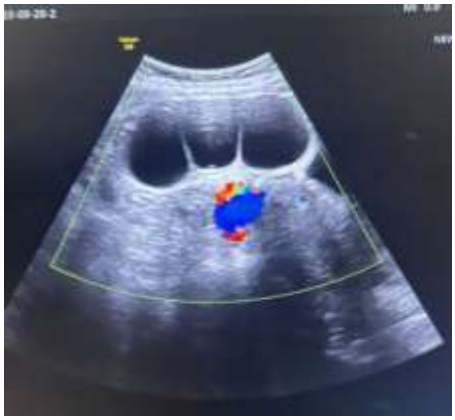
Patient counselled for medical management for dysmenorrhoea. But patient requested for hysterectomy. She underwent a Total laparoscopic hysterectomy with bilateral salpingo-oophorectomy. Intraoperatively Uterus of size 8 weeks with adenomyomatic changes noted. Right ovary- multiloculated cystic appearance, size 8×6cm. Left ovary- simple cystic appearance, size 3×4cm. Both fallopian tubes are normal.

The postoperative period was uneventful and was discharged from the hospital on post-operative day 6. Histopathological examination revealed sections showed ovarian parenchyma with cyst lined by a single layer of ciliated cells and cuboidal cells and the stroma contains dense spindle fibroblasts. One of the cysts shows

papillary projections with no stratification or atypia. Also seen are multiple inclusion cysts.







Discussion

Adenofibromas are relatively rare benign tumors with extremely rare malignant potential, arising from the germinal lining and ovarian stroma. Benign ovarian tumors are of a wide variety; cystadenoma is common but cystadenofibroma is rare. These tumors are classified according to the epithelial cell type present as serous, mucinous, endometroid, clear cell, and mixed categories.

Serous cystadenofibroma are the commonest of the adenofibromas; other varieties being endometroid, mucinous, and clear cell type. The degree of epithelial proliferation and its relation to the stromal component of the tumor are the criteria used for the classification as benign, borderline, or malignant.

The epithelial and the stromal components are the major constituents, and their relative proportions determine the solid, semisolid, or fluid state of the tumor.

The clinical presentation of these tumors is generally vague, and usually occurs in the fourth and fifth decade of life; they present with pain abdomen, distention of the abdomen, lump in the abdomen, or urinary and/or rectal symptoms may also occur. Earlier it was reported commonly in women who had DES exposure in utero. Rarely this tumor may present with vaginal bleeding and feminization if the tumor also had hormonal (estrogen) secretion. They have extremely rare malignant potential.

Preoperative diagnosis is difficult as these tumors mimic malignancy due to their multicystic nature, thick septa, and solid component; even tumor markers may not be of much help. Rarely do these tumors grow beyond 20 cm; they are multiloculated with papillary projections from the ovary. MRI can be helpful as the fibrous component frequently gives a characteristic appearance of low-signal intensity on T2W images that may help differentiate it from malignant ovarian tumors.[2] The frozen section may be of some help intraoperatively, though definitive diagnosis of benign may not always be possible.[4]

Kazuhisa Fujita et al reported a 22 year, nulligravida presented with abdominal mass, patient was operated laparoscopically only tumour was excised , postoperative hpe was found to be serous cystadenofibroma.

E C Ditkoff et al report a case of bilateral serous cystadenofibromas clinically simulating hyperreaction luteinalis during a normal pregnancy resulting from controlled ovarian stimulation and in vitro fertilization. Incomplete regression at 2-year follow-up, ca 125 elevated, prompted surgical intervention .

Conclusion

Cystadenofibroma has a very good prognosis after complete removal from the ovaries. Being benign, these

tumors have a very low recurrence risk of complete removal through surgery.

References

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