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A CASE REPORT ON SEROMUCINOUS BODERLINE TUMOR OF OVARY

Obstetrics & Gynaecology

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ABSTRACT

Ovarian epithelial tumors are common diseases of female genital tract , they account for the majority of female ovarian neoplasms .The recent world health organization (WHO) 2014 classification of tumors of female reproductive organs introduced a new category of ovarian neoplasm designated as "Seromucinous tumors" as they exhibit both serous and mucinous features [2]. This case report describes a 24-year-old, unmarried post abortal unmarried woman who presented to us at the OPD with lower profuse bleeding per vagina ,lower abdominal pain in right iliac fossa for the past 20 days. Transabdominal USG showed Right ovarian cyst measuring 6.5*5.8cm which is fishnet in appearance with internal echoes with colour doppler showing Peripheral vascularity. CT confirmed a large midline pelvic multiloculated cystic lesion measuring 10.3*9.3*7.1 cm of varying attenuation seen attruting the right ovary .

KEYWORDS

Epithelial tumors , Seromucinous cystadenoma of ovary,,female genital tract, Ovarian neoplasm .

INTRODUCTION

Ovarian neoplasms are common disease of female genital tract . ovarian epithelial tumors account for approximately two-thirds of all ovarian neoplasms and their malignant forms represent about 90% of ovarian cancers . worldwide ovarian cancer is the sixth most common cancer and seventh leading cause of cancer deaths among women [1] . Ovarian epithelial neoplasms usually originate from single epithelium.

The recent World Health Organization (WHO) 2014 classification of tumors of female reproductive organs introduced a new category of ovarian neoplasm designated as "Seromucinous cystadenoma of ovary "as they exhibit both serous and mucinous features . These seromucinous tumors are composed of seous cells, endocervical cells, squamous cells and undifferentiated cells [2] .;

Case Report

This case report describes a 24-year-old, unmarried woman who presented to us at the OPD with lower abdominal pain in right iliac fossa for the past 20 days . Transabdominal USG showed Right ovarian cyst measuring 6.5*5.8cm which is fishnet in appearance with internal echoes with colour doppler showing Peripheral vascularity. CT confirmed a large midline pelvic multiloculated cystic lesion measuring 10.3*9.3*7.1 cm of varying attenuation seen attruting the right ovary .

Fig. 1: Gross Photograph Showing Multi-loculated Cyst with Smooth Cyst Wall on Cut Surface

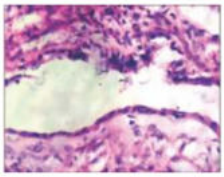

Fig. 2: Microphotograph showing Cuboidal Lining of Cyst Wall (H and E 400X)

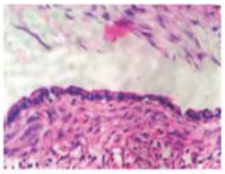

Fig. 3: Microphotograph showing Ciliated Columnar Epithelium of Cyst Wall (H and E 400X)

Container 1 showed an already cut open right ovarian cyst 7*6*3 cm with attached fallopian tube measuring 2 cm in length . The cyst was capsulated , glistening with areas of haemorrhage . on cut section the ovarian cyst was multiloculated and the cyst wall was smooth with areas of hemorrhage .The larger cyst measured 5*5 cm and the smaller cyst 0.8*0.1 cm . Container 2showed a single pink tubular structure measuring 1.2 cm in length .

On microscopy sections studied from the right ovarian cyst showed cyst wall , which was lined partly cuboidal epithelium and partly by ciliated coloumnar epithelium .In addition to it the cyst wall was also lined by tall coloumnar mucin secreting epithelium suggestive of an endocervical type of mucin secreting epithelium . The subepithelium suggestive of an endocervical type of mucin secreting epithelium .The subepithelium showed ovarian stroma, fibroconnective tissue and chronic inflammatory cell infiltrate . Left and right fallopian tubes are normal with focaldecidual tissue within the lumen .

DISCUSSION

Epithelial tumors are the common ovarian neoplasm . They arise from the surface epithelium and adjacent stroma .Serous cystadenoma continues between 20 to 50 percent of ovarian neoplasm and mucinous cystadenoma account for 15-25% . Other epithelial tumor occur less frequently [3].

In 1976, Fox and Langley first introduced the word seomucinous tumor which was composed of endocervical type mucinous epithelium and serous type of cells . Later in 1988, Rutgers and Scully described similar appearing borderline tumor into two sub classes . The first was classified as " ovarian Mullerian mucinous cystadenoma of borderline malignancy" which was composed of pure endocervical type of epithelium and the second one was clasffied as " ovarian mixed epithelial papillary cystadenoma of borderline malignancy" consisting of mixture of serous , endocervical type mucinous , endometroid and undifferentiated cells with abundant eosinophilic cytoplasm .In 2002 Shappell et al . reeused the term "Seromucinous tumor" as they found these neoplasm were composed of mixture of different cell types with clinically significant differences with these two classes , hence combined into single group

The recent 2014 WHO classification of tumors of the female reproductive organs introduced a new class of ovarian neoplasm called "seromucinous tumors" . Morphologically these tumors are composed of serous and endocervical type mucinous epithelium along with endometroid , indifferent and squamous types of epithelium include adenomas, atypical proliferative (borderline) tumors and invasive carcinoma .

Tumors are composed of endocervical type mucinous , serous , endometroid cells and undifferentiated cells with abundant eosinophilic cytoplasm without abundant eosinophilic cytoplasm without cellular atypia are classified as benign tumors .In the present case also there was admixture of serous and endocervical type of cells

without any cellular atypia and stromal invasion , and hence was diagnosed as seromucinous cystadenoma.

Tumors with complex papillary architecture and epithelium showing variable cellular stratification, mild to moderate cytological atypia without stromal invasion are classified as atypical proliferative or borderline tumors .Tumors with similar architecture and epithelial lining having either and epithelial lining having either marked cytologic atypia or cribriform growth pattern with stromal invasion > 5mm in diameter in any focus are classified as malignant tumors .

CONCLUSION

2014 WHO classification of tumors female genital organ has introduced a new category of ovarian tumors "Seromucinous tumors ".

The tumors are also subclassified as benign , borderline and malignant tumors , hence proper histopathological diagnosis is important for better treatment and to reduce the use of aggressive therapies.

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