

SERTOLI -LEYDIG CELL TUMOUR OF OVARY : A CASE REPORT

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ABSTRACT

Sertoli–leydig cell tumor are very rare and make up approximately 0.5% of all ovarian tumors. they typically produce androgen and clinical virilization is present in 70-85% of cases. We report a of Sertoli–leydig cell tumor without virilization.

Key words: Ovarian tumor, Sertoli-Leydig cell tumor, virilization.

INTRODUCTION

Sertoli-Leydig cell tumor(SLCT) is a rare ovarian tumor that belongs to the group of sex – cord stromal tumors. 1 Most tumors are unilateral, confined to the ovaries and are seen during the second and third decades of life. Only 2% are bilateral These tumors are characterized by the presence of testicular structures that produce androgens.

CASE REPORT

A 23 yrs lady para 1+1 complained of amenorrhoea of 2 years. There was no history of abdominal lump and distension. She was on Depomedroxyprogesterone injection on and off for last 3 years. Her past medical and surgical history was not significant. On abdominal examination there was mass of 18 week size, mobility was restricted, firm in consistency , non tender. On per speculum examination cervix was healthy. On per vaginal examination exact size of uterus couldn't be estimated, mass was 18 week size.

USG revealed large multiseptated mass 13.3x12x5.6 cm seen filling pelvic cavity. CA 125 was 30.8IU/ml, CEA was 5.6ng/ml ,LDH was 397U/l. CT scan of the abdomen revealed a large complex ovarian mass (left ovarian origin) suggestive of malignant lesion. On laparotomy Jelly like cyst with slight solid component seen measuring 20x20 cm in diameter, uterus was normal in size. Right tube and ovary were normal in size and texture. On cut section Serous fluid of about 2 litres, multiple septation and projection like structure was seen. Post-operative period was uneventful. Histopathology shows Sertoli-Leydig cell tumour of intermediate differentiation with retiform and heterologous mucinous elements with low-grade dysplasia.

DISCUSSION

Sertoli- Leydig cell tumor are most frequently low grade malignancies, although occasionally a poorly differentiated variety may behave more aggressively. 2 The tumors

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typically produce androgen and clinical virilization is noted in 70% to 85% of patients. Size of SLCTs varies greatly, Mean diameter is approximately 10 cm. Typically, they form firm, lobulated, yellow or tan, solid masses with a smooth external surface. Cysts may be conspicuous, particularly if the tumor contains heterologous mucinous elements or has a retiform component. Heterologous tumors with a prominent mucinous component may simulate mucinous cystic tumors.

Tumors with a retiform component are often soft and spongy, or cystic with large, edematous intraluminal polypoid excrescences simulating serous papillary tumors. Areas of hemorrhage and necrosis are uncommon, except in poorly differentiated subtypes.

These tumors are categorized into four subtypes, based on microscopic features. The most important prognostic factors in these tumors are their stage and degree of differentiation. In a review of 207 cases by Young and Scully in 1985, all well differentiated tumors are benign, whereas 11% of tumors with intermediate differentiation, 59% of tumors with poor differentiation and 19% of those with heterologous elements were malignant.

In another study who had intermediate or poorly differentiated SLCT, a survival rate of 92% was noted at both five and 10 years.³ Fortunately, more than 97% of SLCTs are grade one (well differentiated).

Most of these tumors are unilateral and diagnosed in grade one, the usual treatment is unilateral salpingo-oophorectomy and evaluation of the contralateral ovary for

patients who are in their reproductive years.⁴ For older patients hysterectomy and bilateral salpingo-oophorectomy are appropriate.⁵

Adjuvant chemotherapy in grade 1 is given to those patients who have poorly differentiated SLCT or SLCT with heterologous elements or a metastatic tumor of any histologic type.⁶ The BEP regimen is a comparatively safe chemotherapeutic regimen because it does not affect the fertility status of the patient.⁷

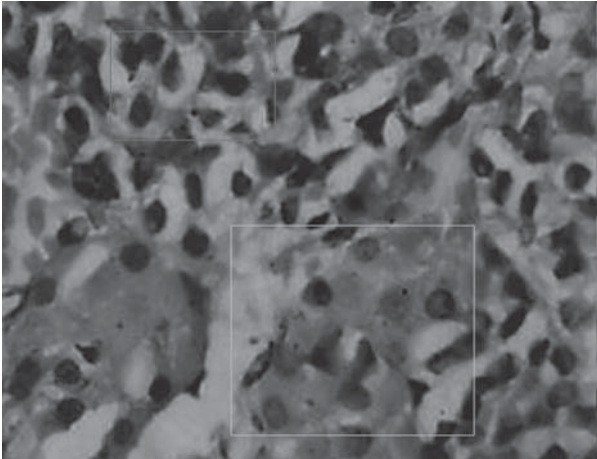
CONCLUSION

SLCT should always be considered in a young female patient who has symptoms of virilization and an ovarian mass on examination or investigation.

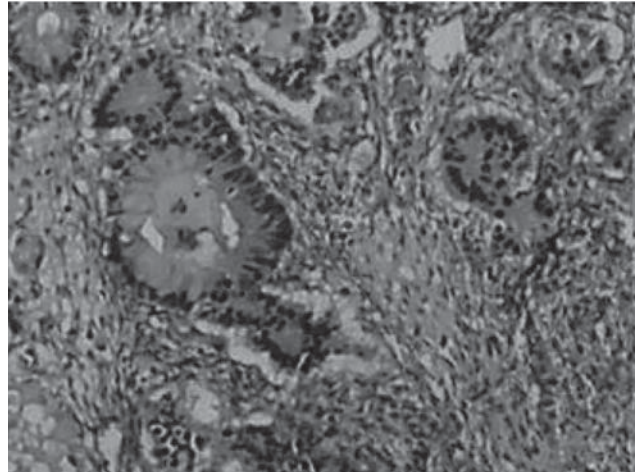
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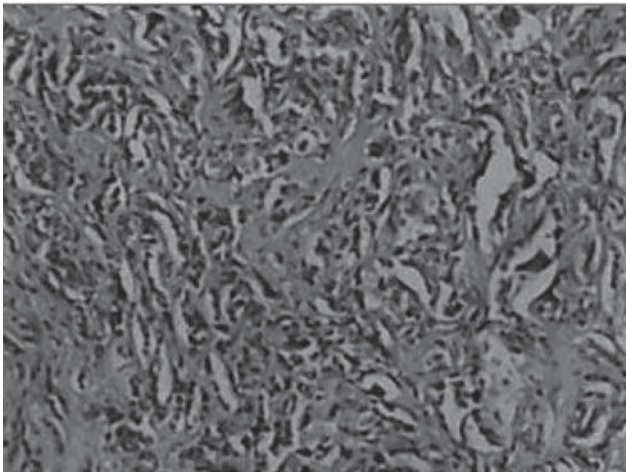
Heterologous mucinous elements



Retiform elongated tubules



**Darker Sertoli cells (Red box) and
Pink Leydig cells (Green box)**



Biphasic cellular components with darker Sertoli cells arranged in sheets, tubules and retiform formations and clusters of pink Leydig cell with abundant eosinophilic cytoplasm