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Juvenile granulosa cell tumour of ovary: a casr report

[1]Dr. Sayani Das, [2]Dr. Palash Mazumder, [3]Dr Shyamali Dutta, [4]Dr Kajal Kumar Patra
[1]Senior Resident, Uttarpara State General Hospital, Hooghly
[2]Associate Professor, Dept of Obstetrics & Gynaecology, Deben Mahato Medical College, Purulia
[3]Associate professor Dept of obstetrics and gynaecology, Medical college. Kolkata
[4]Ex professor and HOD, Dept of obstetrics and gynaecology, Gouri Devi Institute of medical science Durgapur west Bengal India

Corresponding Author

Dr Kajal Kumar Patra
Ex professor and HOD, Dept of obstetrics and gynaecology, Gouri Devi Institute of medical science Durgapur west Bengal India

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Abstract

Juvenile Granulosa Cell Tumor (JGCT) is a rare ovarian neoplasm occurring predominantly in children and adolescents. We report a case of a 5-year-old girl presenting with abdominal pain, early satiety, and vaginal bleeding. Imaging revealed a large solid-cystic ovarian mass, with elevated serum Inhibin B and CA-125 levels. The patient underwent left salpingo-oophorectomy and infra-colic omentectomy. Histopathological examination confirmed JGCT. Early diagnosis and surgical management are key to a good prognosis. Regular follow-up is essential due to the tumor's potential for delayed recurrence.

Keywords: Juvenile Granulosa Cell Tumor, Ovarian Neoplasm, Pediatric Gynecology, Inhibin B, Pseudo-precocious Puberty, Oophorectomy**.**

INTRODUCTION

Granulosa Cell Tumor(GCT), rare entiy of low-grade malignant tumor with indolent course. Here we present a case of Juvenile GCT.

CASE PARTICULARS

A 5 year old girl of Nadia referred to MCK with primary diagnosis of abdominal mass. C/O pain in abdominal for 2 months. Child s mother observed early satiety, abdominal hardness and vaginal bleeding for few months.

O/E a solid-cystic mobile abdominal mass of 15X10cm is found. Breast corresponds Tanner stage 2. Axillary and pubic hairs absent.

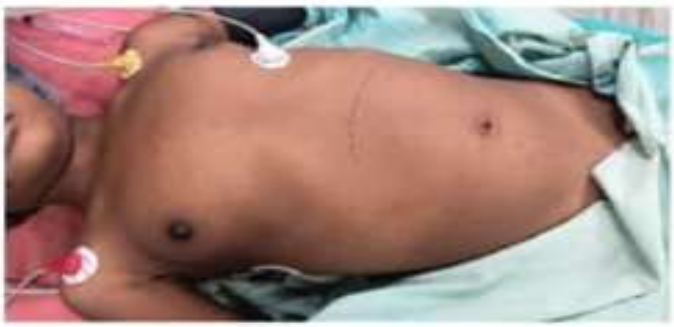


Figure 1: PATIENT WITH ABDOMINAL DISTENSION, TANNER 2 OF BREAST DEVELOPMENT

USG stated solid-cystic mass (15X15cm); ovarian origin. MRI-abdomen revealed complex ovarian SOL, 9.4X14.3X13.9cm. Serum Inhibin B 1280mcg /dl, CA125 109.5 U/ml (both elevated) and CAE, AFP, HCG levels are normal. Multi-disciplinary team involved.

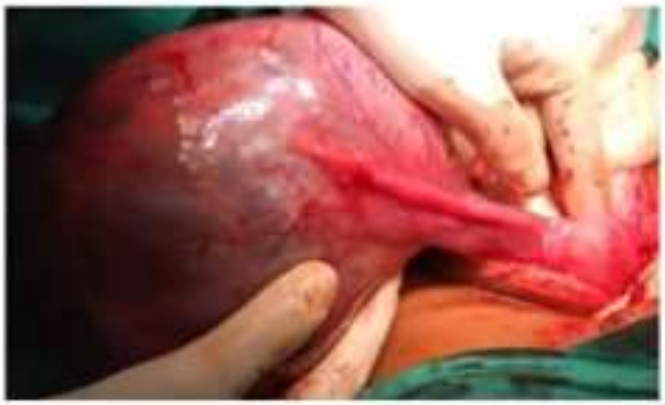


Figure 2: LEFT SIDED TUBE AND OVARIAN TUMOR

She underwent Laparotomy GA. No ascites. Left Salpingo-Oophorectomy with Infra-colic Omentectomy (thickened +areas of clumping) done. Right-sided FT and ovary normal, kept for future fertility and ovarian function. Uneventful postoperative period.

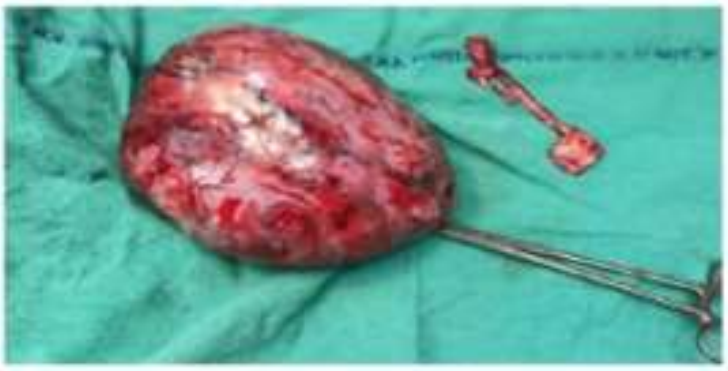
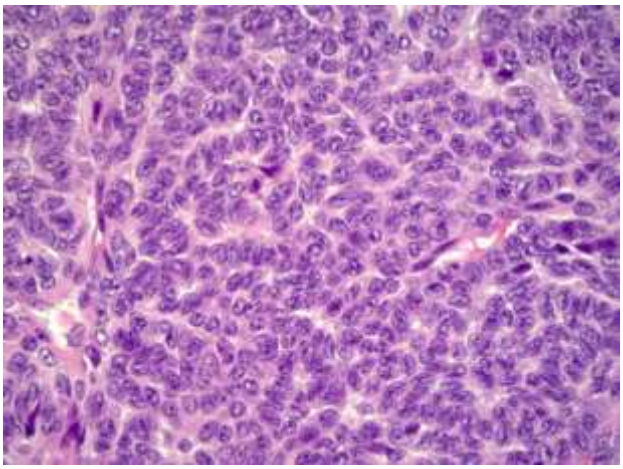
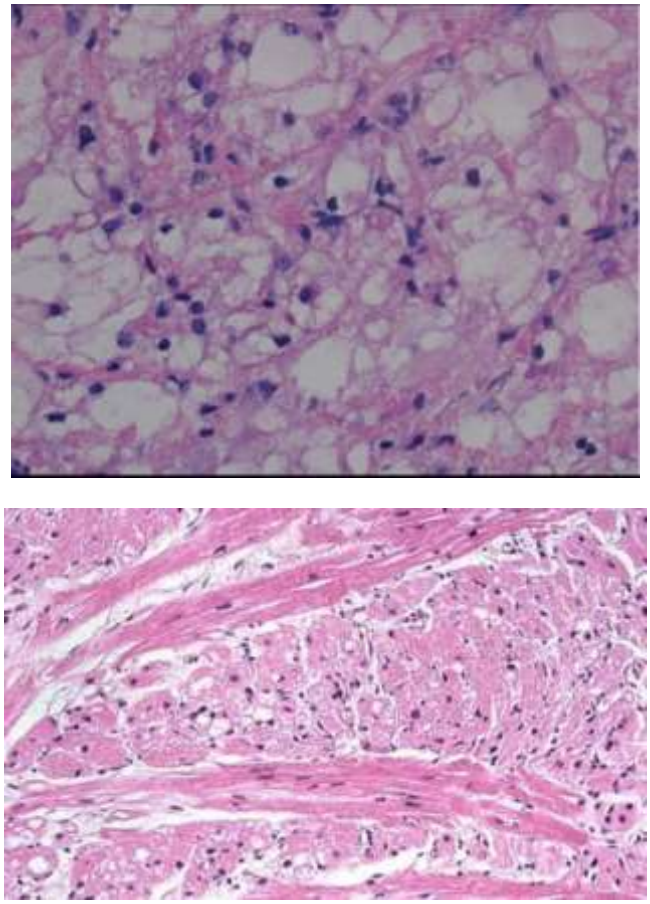


Figure 3: RESECTED OVARIAN TUMOR
HPE confirmed the diagnosis of Juvenile GCT.





Hematoxylin & Eosin stain (H&E) , 40 X

DISCUSSION

Juvenile GCT, a sec Cord- Stromal Tumor occurs in young. B/L in 2% cases. Pseudo-precocity becasuse of estrogen secretion, vaginal bleeding id common. Serum Inhibin B & AMH produced by Granulosa cells, potential markers of GCT. Early diagnosis predicts favorable prognosis. Primary therapy is surgery; radiation and chemotherapy reserved for recurrences and metastatic cases.

CONCLUSION

Regular follow up is necessary; indolent nature of recurrence.

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