



JUVENILE GRANULOSA CELL TUMOUR OF OVARY - A RARE CASE REPORT AT GADAG INSTITUTE OF MEDICAL SCIENCES, TERTIARY CENTRE.

Obstetrics & Gynaecology

Dr Manjushree C Post graduate, Department of Obstetrics and gynaecology, GIMS, Gadag, Karnataka

Dr Jayashree Professor and Head of the department, Department of obstetrics and Gynecology.

Ashok Kumar* *Corresponding Author

ABSTRACT

Background : Granulosa cell tumors (Gcts) are rare sex cord-stromal Tumors, encompassing 1–5% of all ovarian tumors. These tumors are divided into adult GCT (AGCT) and Juvenile get (JCT). The AGCT is the more common type, accounting for nearly 95% of all GCTS. **Material and methods :** A rare case report on juvenile granulosa cell tumour at GIMS tertiary centre. **Discussion** In our case she presented with features of AUB and she was FIGO STAGE 1, fertility conserving surgery, unilateral salpingo oophorectomy was done. She was followed up. At the end of 1 year she was asymptomatic and normal. At presentation, 90% of juvenile granulosa cell tumors are FIGO stage I, confined to the ovary. This stage carries a very favorable prognosis and a 5 year survival rate of 90-100%. **Conclusion** Juvenile granulosa cell tumors are less likely than adult granulosa cell tumors to recur after resection of stage I tumors, however if they do, their clinical course is more likely rapid and aggressive, with early relapses and poor outcomes.

KEYWORDS

Juvenile granulosa cell tumour, Figo staging

INTRODUCTION

Case report

A 27 year old female p211 with previous 1 lscs presented with heavy menstrual bleeding and pain abdomen since 3 months. She gets her menstrual cycle every 20 days bleeding lasting for 8-10 days with history of passage of clots present changing 3-4 fully soaked pads, wakes up in the night to change the pad. She complains of pain abdomen since 3 days severe in nature continuous type not radiating, no relieving factor found. Previous menstrual cycles regular and normal flow.

- Her last caesarean section was 3 years back
- On examination she is found to have pallor
- Vitals stable
- Cardiovascular and respiratory system normal
- Per abdomen examination soft, pfannenstiel scar present healed by primary intention
- tenderness present in Right iliac fossa
- On perspeculum examination bleeding through os +
- On pervaginal examination uterus anteverted normal size, right and posterior forniceal fullness present
- Mass around 7×5 cm palpable in right adnexa cystic regular border tender and mobile
- Uterus felt separate from the mass
- On per rectal examination – rectal mucosa free
- No nodularity in pouch of douglas.
- USG was done s/o large hypoechoic lesion measuring 8.4 × 4.5 cm with traces of vascularity noted in the periphery of the lesion, right ovary not seen separately

Left ovary normal

-suggestive of right adnexal mass endometrioma or tuboovarian mass
MRI abdomen and pelvis suggestive of right ovarian torsion with bulky oedematous ovary with diffusion restriction

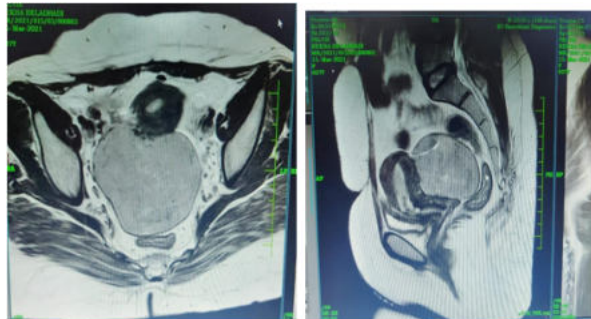


Figure no 1 and 2

- Hemoglobin 8.9g%
- Total count-11.7, platlet - 3.1×10^3 , Rbs -145 mg/dl, blood group –

b positive, Inr -1.3

- UPT negative, beta-hcg normal
- Ca 125-11.6u/ml
- Serum inhibin 2831/litre
- Serum TSH, t3, t4 normal
- Urine routine normal
- Patient was managed with 2 pint prbc transfusion
- And diagnostic laparoscopy followed by staging laparotomy was planned
- Diagnostic laparoscopy suggestive of solid to cystic right ovarian tumour present 7×5 cm present

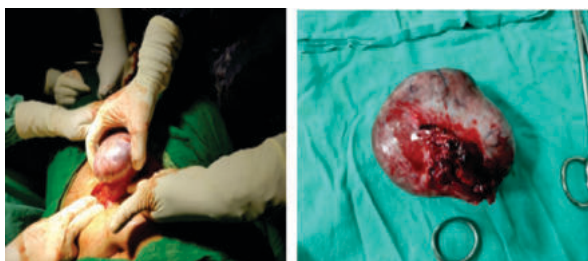


Figure no 3 and 4

- Staging laparotomy done right salpingo-oophorectomy was done
- The gross appearance of the cut surface of the right ovarian tumor, measuring 9×7×5 cm in diameter, showed
- Capsulated tumour. cut surface showing grey and white areas with fibrosis present.
- Microscopic examination of the right ovary showed

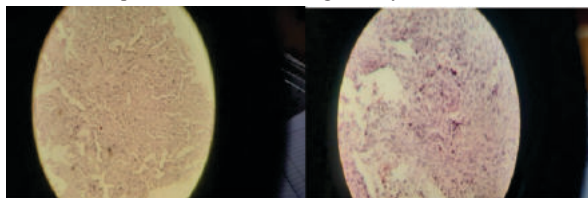


Figure No 5 And 6

tumour cells arranged in microfollicular, pseudopapillary, nesting and trabecular pattern. These cells have round to oval hyperchromatic nucleus with moderate amount of vacuolated cytoplasm with occasional nuclear grooving. Cell nests are surrounded by fibrous tissue. The typical findings for AGCT such as longitudinal nuclear grooves (coffee-bean nuclei) and Call-Exner bodies were not identified. Accordingly, the definitive diagnosis of JGCT FIGO STAGE 1A led to no additional treatment.

DISCUSSION

In our case she presented with features of AUB and she was FIGO STAGE 1, fertility conserving surgery, unilateral salpingo

oophorectomy was done . She was followed up .At the end of 1 year she was asymptomatic and normal.At presentation, 90% of juvenile granulosa cell tumors are FIGO stage I, confined to the ovary. This stage carries a very favorable prognosis and a 5 year survival rate of 90-100%.

CONCLUSION

Juvenile granulosa cell tumors are less likely than adult granulosa cell tumors to recur after resection of stage I tumors, however if they do, their clinical course is more likely rapid and aggressive, with early relapses and poor outcomes.

Conflicts Of Interest

No Conflicts Of Interest

REFERENCES

1. Inada Y et al. Rapidly growing juvenile granulosa cell tumor of the ovary arising in adult: a case report and review of the literature. J Ovarian Res. 2018 Dec 14
2. Rusterholz KR, MacDonald W. An Unusual Case of Juvenile Granulosa Cell Tumor of the Ovary. Radiol Case Rep. 2016 Oct 4
3. Parikshaa G, et al. Juvenile granulosa cell tumor of the ovary: A comprehensive clinicopathologic analysis of 15 cases. Ann Diagn Pathol. 2021 Jun
4. Zhang YN, Huang SF. [Clinicopathologic study of juvenile granulosa cell tumor of ovary]. Zhonghua Bing Li Xue Za Zhi. 2010 Oct