University Journal of Surgery and Surgical Specialities

ISSN 2455-2860 2020, Vol. 6(8)

GRANULOSA CELL TUMOUR OF THE OVARY

VANITHA RUKMANI V.H.
Department of Obstetrics and Gynaecology, GOVERNMENT THENI MEDICAL COLLEGE

Abstract : Granulosa cell tumour of the ovary is a rare neoplasm. Incidence is 1-1.51,00,000 per year.70 yrs old postmenopausal woman presented with bleeding pv, diagnosed to have right adnexal cyst, proceeded with staging laporotomy and total abdominal hysterectomy with BL salphingooophorectomy done and biopsy proved as granulosa cell tumour of the ovary associated with simple endometrial hyperplasia.

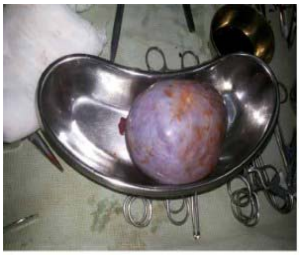
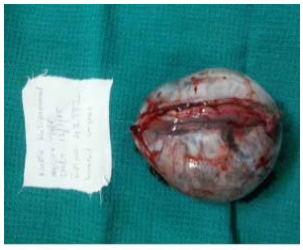
Keyword : Granulosa cell tumour, Endometrial hyperplasia, Staging laporotomy. if gte mso 9]> Normal 0 false false false EN-US X-NONE X-NONE MicrosoftInternetExplorer4

INTRODUCTION

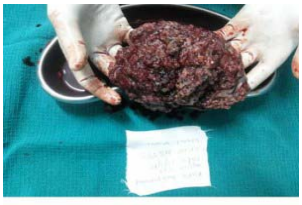
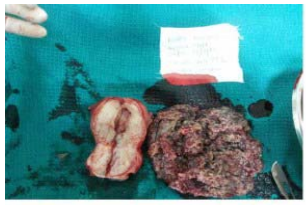
Granulosa cell tumour accounts for 1%-2%of all ovarian tumours. Unilateral in 95% of cases.Most common estrogenic ovarian tumour. Granulosa cell tumours comprises of two subtypes-adult and juvenile. Adult type occurs in menopausal and postmenopausal women of about 50 -55 yrs. In postmenopausal women it commonly present as postmenopausal bleeding.

CASE REPORT

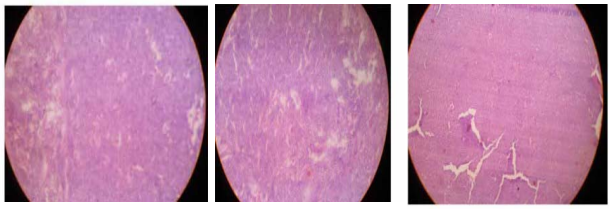
70 yrs old postmenopausal woman, P13L1, admitted with bleeding per vaginum for 6 months. Known hypertensive past 6 yrs on drugs and thyroid swelling from 7 yrs of age. On examination patient general condition was good, thyroid swelling present. On abdominal examination mass of size 12*12 cm seen occupying right iliac fossa and hypogastrium with smooth surface, cystic consistency, side to side mobility present. P/Vuterus anteverted, bulky, mass of size 10*8cm felt in right fornix, left fornix free. P/Rparametrium free, no nodules in pouch of Douglas. USG-Right adnexal complex mass 9.5*7.5cm with endometrial thickness 15 mm. MRI-well defined, multiloculated cystic lesion in right adnexa10*8 cm with endometrial thickness 15 mm. CA 125- 78.85IU/ml.All investigations including thyroid profile normal. Patient underwent fractional curettage, biopsy report showed simple endometrial hyperplasia with chronic cervicitis. Staging laporotomy done, there was no ascites and hence peritoneal washings taken. Right ovarian cyst 10*8*6cm present, left ovary normal, B/L tubes normal. Diagnosed as stage 1and hence proceeded with total abdominal hysterectomywith B/L salphingoophorectomy and infracolic omentectomy. Gross appearance of the specimen-10*8*6 cm ovarian cyst, smooth surface.

Cut section-nodular cystic and solid areas with blood clots.

Biopsy showed endometrium-simple hyperplasia, myometrium-myohyperplasia with adenomyosis, cervix-chronic cervicitis, ovarian tumour-granulosa cell tumour.



DISCUSSION

Granulosa cell tumour is a low grade malignancy and accounts for 1%-2% of all ovarian tumours. Palpable mass is found in 95% of cases. Increasing size of the mass can lead to dysuria, urinary frequency and constipation. Varies in size from few millimetres to 20 cm or more. They are cystic and soild and cysts characteristically contain blood clots, white to yellow depending on lipid content. The most characteristic pattern is microfollicular. Best morphological markers are Call – Exner bodies and round or oval, pale, deeply indented nuclei lacking pleomorphism. Endometrial cancer occurs in 5% of cases with granulosa cell tumours and endometrial hyperplasia is associated with 25% to 50% of cases. All the features are present in this case. Adult granulosa cell tumours are usually stage 1 at diagnosis in 65%-90% cases. In menopausal and postmenopausal women, the optimal treatment is bilateral salphingo oophorectomy with total hysterectomy. It is reasonable to conserve the opposite ovary and uterus of a young woman. The 10-year survival rate for stage 1 disease varies from 60%-90%,for more advanced disease survival is only 26%-49%.Patients with stage 1 tumours have much better prognosis than those with higher- stage tumours. A unique feature of GCTs is the occurrence of recurrences from 5 years to 25 years. Surgical stage is the most important prognostic factor. Inhibin is a useful marker for the disease. They stain positive for actin, vimentin, cytokeratin and mullerian inhibiting substance. The DNA ploidy of the tumours is correlated with survival.

CONCLUSION

Complete surgical resection is the main stay of treatment since residual tumour is associated with poor prognosis. Because hormonal overproduction occurs in GCTs, dilatation and curettage should be done to rule out neoplastic process of endometrium in all patients. Follow up every 3 months for first 2 years, every 6 months for additional 3 years and annually thereafter. Surveillance should include serial physical examination and serum tumour markers such as estradiol and inhibin A. Serum antimullerian hormone is a sensitive, specific and reliable marker of AGCT and useful to evaluate efficacy of treatment and to detect recurrence early. Patient should also have breast examination and mammography as they are at an increased risk of breast cancer.

REFERENCES

1.Bjorkholm E; Granulosa-cell and theca cell tumour. The clinical picture and long term out-come for the Radiumhemmet series. Acta Obstet Gynecol Scand 59;361,1980.

2.Fox H and Langly FA; A cliniclpathological study of 92 cases of granulosa cell tumours of the ovary with special reference to factors influencing prognosis.Cancer 35;231-41,1975.

3.Malmstrom H, Hogberg T,Risberg B et al:Granulosa cell tumours of the ovary:prognostic factors and outcome.Gynecol Oncol 52:50-5,1994.

4.Savage P,Constenla D,Fisher C et al:Granulosa cell tumours of the ovary:Demographics, survival and the management of advanced disease.Clinical Oncology 10:242-5,1998.

5.Miller BE, Barron BA, Wan JY et al:Prognostic factors in adult granulosa cell tumour of the ovary.Cancer,79:1951-5,1997.

6.Segal R, DePetrillo AD, Thomas G.Clinical review of adult granulosa cell tumours of the ovary. Gynecol Oncol 1995; 56:338-344.

7.Aboud E.A review of granulosa cell tumours and thecomas of the ovary. Arch Gynecol Obstet 1997;259:161-165.

An Initiative of The Tamil Nadu Dr. M.G.R. Medical University
University Journal of Surgery and Surgical Specialities

An Initiative of The Tamil Nadu Dr. M.G.R. Medical University
University Journal of Surgery and Surgical Specialities