CASE REPORT

ENDOMETRIAL HYPERPLASIA DUE TO GRANULOSA CELL TUMOUR PRESENTING WITH MENORRHAGIA: CASE REPORT

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ABSTRACT: A 55 year old patient present with menorrhagia. Endometrial biopsy was done revealing hyperplasia of endometrium following which total abdominal hysterectomy with bilateral oophorectomy was carried out to rule out any hidden focus of endometrial malignancy. The histopathology revealed simple endometrial hyperplasia with microscopic focus of granulosa cell tumour in the right ovary. We in this case report are highlighting importance of screening of ovarian tumour in perimenopausal patients presenting with menorrhagia.

KEYWORDS: Endometrial hyperplasia, Granulosa cell tumour, Menorrhagia.

INTRODUCTION: Postmenopausal bleeding is very uncommon clinical presentation in ovarian tumours. Sex cord stromal tumours are the most common functional tumours of ovary.¹ Hyperestrogenism is commonly caused by granulosa cell tumour and thecomas, whereas patients with sertoli-leydig cell tumours manifest hyperandrogenism. However granulosa cell tumour are rare, accounting for only 2-3% of ovarian malignancies.² It constitutes one of the rare causes of delayed menopause. In this case report we are highlighting granulosa cell tumour in normal appearing ovary in perimenopausal patient having endometrial hyperplasia presenting with menorrhagia.

CASE REPORT: A 55 year old patient presented with menorrhagia. On examination uterus was bulky and on ultrasonography increased endometrial thickness was seen, but the adnexa was normal. Endometrial biopsy was performed and on histopathology simple hyperplasia of endometrium was reported. Total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed. Histopathological examination of hysterectomy was done and endometrium showed simple hyperplasia and granulosa cell tumour was seen in right ovary and other ovary was normal. Immunohistochemistry was positive for inhibin.

DISCUSSION: Granulosa cell tumour is the most common malignant sex cord-stromal tumour, accounting for 70% of all sex cord-stromal tumours.^{2, 3} But Granulosa cell tumour is a rare neoplasm accounting for approximately 1.5-3% of all ovarian malignancies.⁴ They are of two types juvenile [5%] or of the adult type [95%]. In adult granulosa cell tumour the most common endocrine manifestation in the perimenopausal and menopausal age group is abnormal uterine bleeding and the most common presentation is endometrial hyperplasia [50%]⁵ and another 8-33% have endometrial adenocarcinoma.

In this case we are highlighting that granulosa cell tumour could be cause of dysfunctional uterine bleeding hence importance must be given to accurate imaging and histopathological examination of ovaries. Majority of granulosa cell tumours are unilateral and on sonography appear as round to ovoid masses that are multicystic with solid areas.⁶ Microscopically granulosa cell

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tumours are composed of granulosa cells, theca cells and fibroblasts and they exhibit various patterns like microfollicular, macrofollicular, trabecular and insular. The microfollicular pattern is characterized by the presence of Call-Exner bodies. The granulosa cells have scant cytoplasm and round to ovoid nucleus with longitudinal groove. They are immunoreactive for inhibin.

Granulosa cell tumours have a low malignant potential and have good prognosis. There are various factors which are helpful in predicting survival. Chan et al, found age<50years, small tumour size and absence of residual disease are prognostic factors.⁵ Patient need to be made aware about the need for long term follow up despite of relative indolent nature, late recurrences are seen.⁷

In this case report we are highlighting the fact that granulosa cell tumour is one of the rare tumours of ovary but any patient presenting with perimenopausal menorrhagia the possibility of granulosa cell tumour must be kept in mind. Early diagnosis and treatment is key for prolonged survival in this age group.

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Figure 1

Figure 2

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