

Primary Ovarian Leiomyoma In A Post-menopausal Female – A Rare Incidental Finding

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ABSTRACT

A 50-year old post-menopausal female presented with abdominal pain and bleeding per vaginum. Initially fractional curettage was done which showed simple hyperplastic changes. Later on Panhysterectomy was done. On gross examination left ovary showed a well circumscribed nod-

ule of about 1.2 cm which was diagnosed as leiomyoma histopathologically. Post-operative period was uneventful.

Synopsis: Primary ovarian leiomyoma is a rare benign tumour of ovary seen in women aged between 20 years to 65 years.

Key Words: Ovarian leiomyoma Post-menopausal female Panhysterectomy

INTRODUCTION

Primary leiomyoma is a rare benign tumour of ovary. Ovarian leiomyoma can be confused with other spindle cell tumours such as fibroma and fibrothecoma which display gross anatomical and histological similarities. In the absence of hormonal therapy, the occurrence of a solitary ovarian leiomyoma without uterine involvement is quite rare in post-menopausal women. We present here a case of ovarian leiomyoma diagnosed in a post-menopausal female as an incidental finding after panhysterectomy.

MATERIALS AND METHODS

A 50-year old postmenopausal female, Para-4 attended outdoor patient department for evaluation and treatment of abdominal pain and bleeding per vaginum. Per speculum examination was normal. On per vaginal examination normal size uterus was felt. Her general and physical examination did not reveal any significant abnormality. Haematologic investigations showed mild degree of anemia. TLC & DLC were within normal limits. Chest X-ray and ECG were unremarkable. CA-125 was 41 units. Initially fractional curettage was done to rule out the possibility of endometrial carcinoma. Histopathology report revealed mild hyperplastic changes due to estrogen effect. Panhysterectomy was planned. On histopathological examination, specimen showed simple hyperplastic changes in endometrium and ovarian leiomyoma in left ovary. Post-operative period was uneventful.

RESULTS

Pathological findings

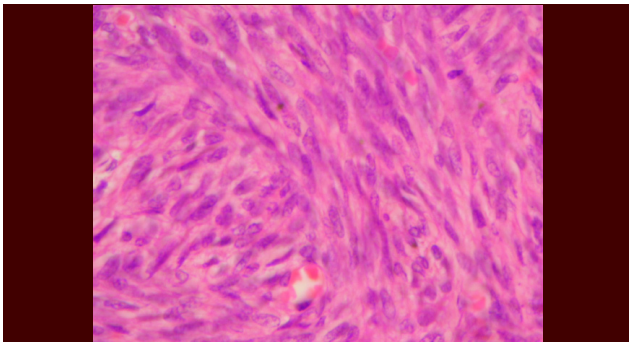
Gross: Uterus with cervix and bilateral adnexa was received. On gross examination endometrial thickness was about 0.3 cm. Left ovary was large for the age. It was 2.8x2.0x1.0 cm in size. On cutting a well circumscribed nodule of about 1.2 cm in diameter with whorled cut surface was seen [Table/Fig-1]. Rest of the ovary did not show any significant gross abnormality.



[Table/Fig-1]: Panhysterectomy specimen showing leiomyoma (arrow)

Microscopic examination: Sections from left ovary shows a circumscribed lesion composed of interlacing bundles of plump cells having oval vesicular nuclei and bipolar amphi-

philic cytoplasm [Table/Fig-2]. Few interspersed thin walled vascular channels were also seen. There was no evidence of cytological atypia or increased mitotic index. Theca cells could not be appreciated. Cervix showed features of chronic cervicitis and endometrium revealed simple hyperplasia. Right ovary and both sided tubes were unremarkable.



[Table/Fig-2]: High power (40X) H&E stained section showing interlacing smooth muscle bundle

DISCUSSION

Leiomyoma is one of the rarest of solid tumours of the ovary, commonly seen in women aged between 20 years and 65 years old [1]. Approximately 16% of cases occur after menopause [2]. In the present case patient was post-menopausal. Ovarian leiomyoma should be distinguished from tumours of fibroma-thecoma group, leiomyoma arising in broad ligament and uterine leiomyoma becoming parasite on ovary. Ideally ovarian leiomyoma should be entirely within the ovary with no similar lesions in the uterus or elsewhere. However ovarian leiomyoma are usually associated with uterine leiomyoma [3]. Ovarian leiomyoma probably arises from smooth muscle cells in the ovarian hilar blood vessels but other possible origins

include cells in the ovarian ligament, smooth muscle cells or multipotential cells in the ovarian stroma, undifferentiated germ cells, or cortical smooth muscle metaplasia [4].

In this case uterus shows simple hyperplasia of endometrium pointing to a possible hormonal derangement. Myometrium was unremarkable. Tumour size may vary, however most tumours are less than 3cm. Most ovarian leiomyomas are asymptomatic and found incidentally. Sometimes these tumours may present with a palpable abdominal mass, ascites or hydronephrosis. In large sized tumour secondary changes such as hyalinization, haemorrhage, calcification and cyst formation can be seen. To explain histogenesis of this tumour several theories have been proposed. According to the most accepted, tumour arises from the smooth muscle of the ovarian ligament where they enter the ovary or from the smooth muscle of the ovarian blood vessels.

This case of leiomyoma of ovary in post-menopausal female is presented due to its rarity. Associated simple hyperplasia of endometrium indicates hyperestrogenism as seen in uterine leiomyoma. Uterine leiomyoma was not present in this case.

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