

# A Big Ovarian Fibroma with Carcinoma Endometrium: A Rare Case Report

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**Abstract:** Ovarian fibromas are benign sex cord stromal tumours occurring in peri - menopausal and post - menopausal women. These tumours are composed of spindle fibroblastic cells producing collagen. They are almost always endocrine - inert and are rarely associated with hormone production, stimulating the endometrium to proliferate. <sup>[1]</sup> We report herein a case of a 60 - year - old woman presenting as pain in abdomen since past one year on and off and lump in abdomen since 2 years. Imaging studies, lump biopsy and endometrial biopsy revealed a left ovarian fibroma coexisting with endometrial adenosquamous carcinoma. She underwent left ovarian cystectomy with total abdominal hysterectomy with right salphingo ophorectomy with bilateral pelvic lymph node dissection with omentectomy. Histopathology showed cellular fibroma of left ovary and Endometrioid carcinoma, Grade 1, Cervix - Chronic non specific cervicitis and squamous metaplasia.

**Keywords:** Ovarian fibroma, endometrial carcinoma, endometrial hyperplasia, benign tumor, postmenopausal, histopathology

## 1. Introduction

Ovarian fibroma is a benign stromal tumor of the ovary, typically composed of spindle - shaped fibroblastic cells. Although usually non - functional and asymptomatic, it can sometimes be associated with hormonal activity, especially when combined with other stromal elements like thecomas.

A rare but notable association is seen between ovarian fibroma and endometrial carcinoma, particularly in cases where the fibroma is hormonally active. Estrogen produced by these tumors, or by associated stromal elements, can lead to endometrial hyperplasia and eventually endometrial carcinoma, especially in postmenopausal women. Therefore, in patients with ovarian fibroma, especially those showing signs of estrogen excess (e. g., abnormal uterine bleeding), endometrial evaluation is important to rule out concurrent pathology.

## 2. Case Report

A 60 year old female, Para 4 Living 4 with previous all vaginal delivery, post menopausal since 20 years, came with complain of pain in abdomen since 1 year and lump in abdomen since past 2 years.

On examination a firm to hard, irregular mass of 28 - 32 weeks was palpable in the hypogastrium extending to left iliac, lumbar, and umbilical regions and was mobile side to side and up and down. Vaginal examination revealed a uniformly enlarged uterus of 10-12 weeks felt separately from the left adnexal mass. Ultrasound abdomen and pelvis showed a left adnexal mass and a bulky uterus with thickened endometrium 8 mm. Magnetic resonance imaging showed a large well defined lobulated mass of 9.6x15x20cm extending from the hypogastrium to the epigastrium within the abdominal cavity, communicating with the uterus via a vascular pedicle. The mass shows heterogenous post contrast

enhancement with multiple non enhancing central cystic areas within. Left ovary is not seen separately from the lesion. Mild ascites is seen. Minimal right sided pleural effusion seen. Overall features are suggestive of benign neoplastic etiology - consistent with Ovarian Fibroma. Uterus of normal size with loss of endo - myometrial interface with widening of the junctional zone, Endometrium - 8mm. Features are suggestive of diffuse adenomyosis.

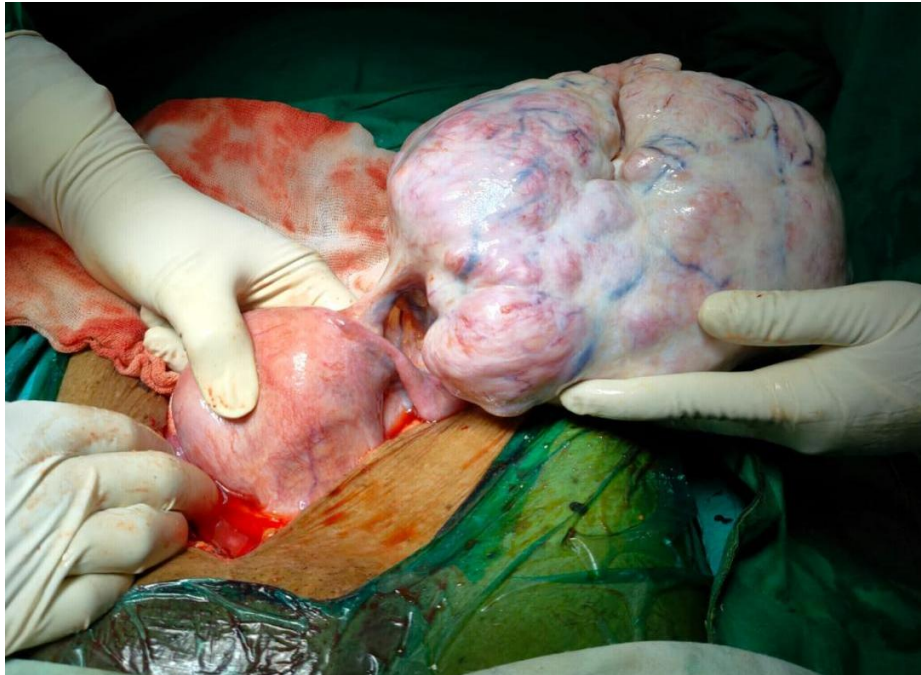


**Figure 1:** Ultrasound showing ovarian fibroma.

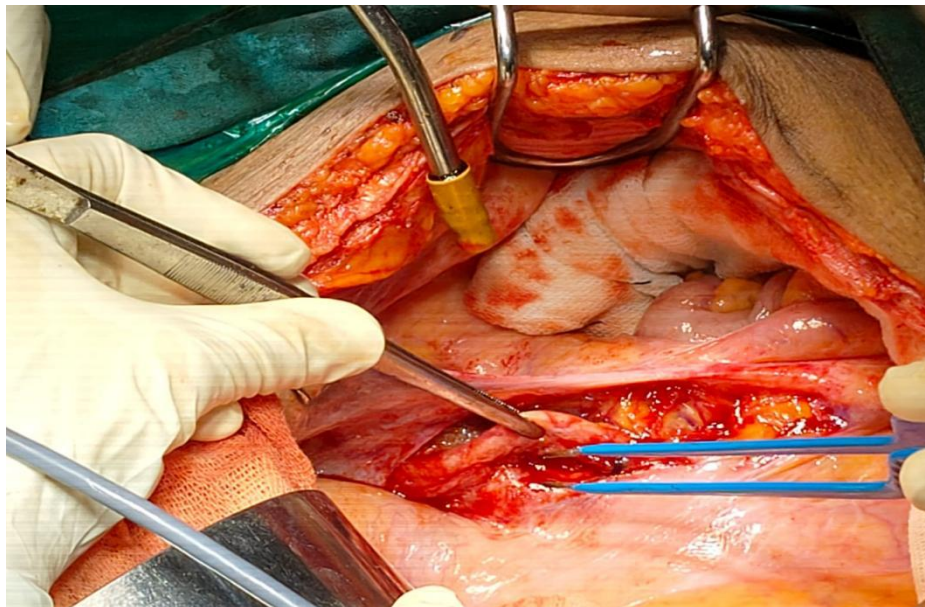
USG guided lump biopsy taken suggestive of SPINDLE CELL TUMOR, LOW GRADE OVARIAN FIBROMA.

Endometrial biopsy revealed Adenosquamous carcinoma.

On staging laparotomy, a 20 x 12 - cm - sized solid left ovarian tumor and a bulky uterus were seen. The right ovary, fallopian tube, intestines, liver and omentum were normal with minimal ascites. Left sided ovariectomy with Total abdominal hysterectomy with right sided salphingoophorectomy, infracolic omentectomy, and pelvic lymphadenectomy was performed.



**Figure 2:** Ovarian fibroma in situ findings



**Figure 3:** Retroperitoneal lymph node dissection.

Microscopic section from left Ovarian mass showed Benign spindle cell neoplasm, likely differential diagnosis - A. Ovarian fibroma

B. Inflammatory myofibroblastic tumor.

Right and left pelvic lymph nodes - Reactive hyperplasia and sinus histiocytosis.

Uterus - Endometrioid carcinoma, NOS. Grade 1

Pathologic stage classification (PTNM, AJCC 8 edition) - PT1aNO

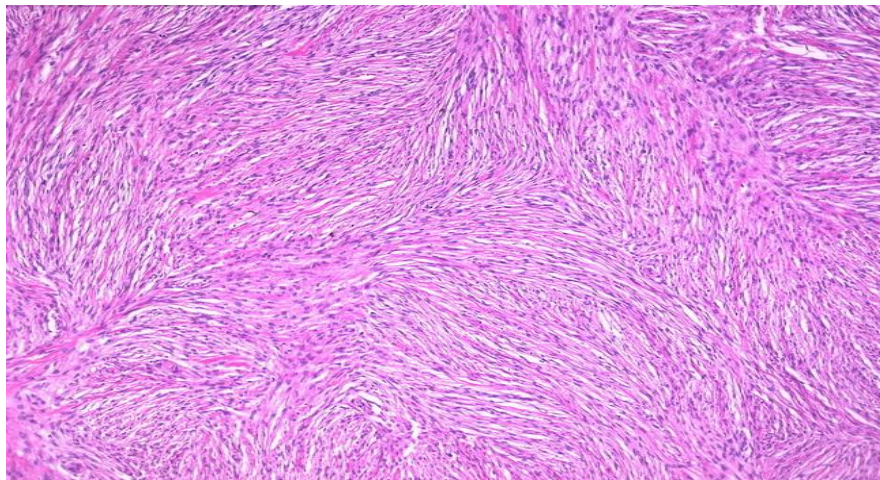
Cervix - Chronic non specific cervicitis and squamous metaplasia

Right ovary - Corpus albicans

Right and left fallopian tubes - No specific pathology

Omentum - Chronic inflammation





**Figure 4:** Histopathology of ovarian fibroma

### 3. Discussion

Ovarian fibromas are benign sex cord stromal tumours occurring in peri - menopausal and post - menopausal women. They comprise approximately 3% of all ovarian neoplasms. They are derived from the coelomic epithelium or the mesenchymal cells of the embryonic gonads.

They are usually unilateral in 90% and bilateral in 10 % cases. They grow slowly and can achieve a large size (upto30 cm). Grossly, the tumours are solid in majority of cases with cystic component in one - third of them. On histopathological examination, ovarian fibromas comprise spindle shaped fibroblastic cells producing collagen.<sup>[3]</sup>

Ovarian fibromas are usually asymptomatic with non specific clinical signs and may be incidentally detected on routine gynaecological examination or ultrasound in postmenopausal women. If symptomatic, patients usually present with abdominal pain, abnormal uterine bleeding or rarely adnexal torsion. Unlike other sex cord - stromal tumours, ovarian fibromas are almost always endocrine - inert. They arise from non - functioning stroma and rarely show oestrogenic activity.<sup>[4]</sup> However, occurrence of ovarian tumour in women presenting with postmenopausal genital bleeding and endometrial thickening on ultrasonography, raises the suspicion of oestrogen secretion by the ovarian tumour. The histological finding of proliferative endometrium or endometrial hyperplasia further suggests persistent unopposed oestrogen stimulation. In our case, ovarian fibroma coexisted with carcinoma endometrium; no other cause of hyperoestrogenism was found in the woman.<sup>[5]</sup> We present this case as ovarian fibroma has rarely been linked to endocrine activity in postmenopausal women leading to endometrial carcinoma.

### 4. Conclusion

Ovarian fibroma with minor sex cord elements is an uncommon tumor and its coexistence with endometrioid adenocarcinoma has been presented. The presence of estrogenic manifestations should alert a clinician of this entity and meticulous histopathological examination of the tumor is necessary to identify additional sources of

hormonally active elements in ovarian stromal tumor, such as sex cord elements.<sup>[6]</sup>

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