

## Silent Thecoma of Ovary - A Rare Case

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### INTRODUCTION

Theca cell tumours are benign ovarian tumours. These tumours are of stromal origin. Most commonly they are seen in premenopausal and postmenopausal women. Usually they are asymptomatic and are found incidentally. Ovarian cancers can be of benign and malignant type. According to WHO classification, they are classified as epithelial, germ cell, sex cord stromal tumours and others.<sup>1</sup> Among them epithelial ovarian cancer are most common, and the least common variety is of sex cord stromal tumours. About 1% of ovarian cancers are thecoma.<sup>2</sup> These tumours are most commonly found in postmenopausal women however about 2% of stromal tumours occur in young girls.<sup>3</sup> Theca cell tumours are also known as hormone producing tumours as they produce oestrogen hormone. Usually the patient presents with complaint of post-menopausal bleeding because of the oestrogen which is secreted by theca cell tumours. Imaging modalities (ultrasonography and CT scan) are of little help in differentiating thecoma from other types of ovarian tumours, because of radiological close resemblance to other tumours.<sup>4</sup> Here we enlightened the symptomless presentation of such a huge thecoma which was diagnosed incidentally.

### PRESENTATION OF CASE

A 53 years old, second para with 2 living children and post-menopausal since 7 years presented to OPD of a rural tertiary care centre with the chief complaint of acidity since few days. There was no significant medical, past or family history. On examination, vitals were normal. Cardiovascular and respiratory examination findings were normal. On abdominal examination, a large solitary abdominal mass around 20 - 22 weeks size of gravid uterus was felt more towards left side of abdomen, which was heterogeneous in consistency, painless and mobile. Per speculum examination and per vaginal examination were normal. Patient was admitted.

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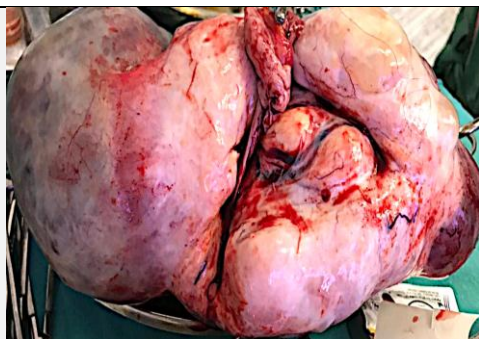
### CLINICAL DIAGNOSIS

Ca Ovary

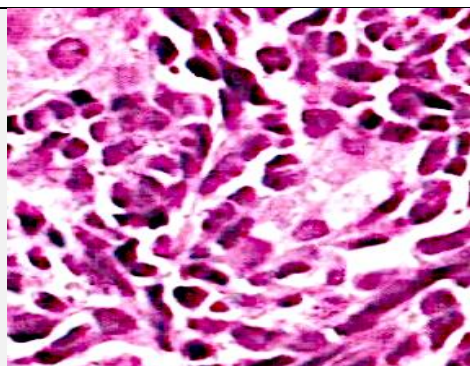
### DISCUSSION OF MANAGEMENT

Ultrasonography of abdomen and pelvis was done, suggesting a large solid cystic mass around 21 x 11 cms seen in the pelvis extends up to the lower abdomen which shows mild vascularity within. CT scan of the abdomen and pelvis suggesting a lower abdomino-pelvic, large well defined solid cum cystic lesion around 23 x 14 x 16 cms.

It has cranial large cystic lesion with caudal heterogeneous enhancing solid component appearing as neoplastic ovarian tumour. Ovary was not visualized separately from mass. Subtle omental thickening noted. Visualized uterus small sized and appears normal. The tumour markers were within normal range except CA125 which was 139U/ml, moderately increased. Clinical suspicion of ovarian malignancy was made. With informed consent exploratory laparotomy was done. Intraoperatively a large abdominal mass around 23x14x16 cm found which was partially solid and partially cystic attached to uterus at left infundibulopelvic ligament. Omentum showed deposits. Around 200 cc of ascitic fluid was present which was collected and sent for cytology. Frozen section report of fresh specimen was sent, and report was suggestive of sex cord stromal tumour. Total abdominal hysterectomy along with bilateral salpingo-oophorectomy was done. Partial omentectomy was done. Final histopathology report was suggesting thecoma of left ovary, omentum and peritoneal fluid were free from malignancy. Post-operative period was uneventful and patient was discharged on day 9.



*Figure 1. A Large Ovarian Mass with Solid Cystic Heterogeneous Appearance Weighing 2.2 Kgs*



*Figure 2. Spindle Cells with Eosinophilic Nuclei Which is a Peculiar Feature of Thecoma of Ovary*

### DISCUSSION

Sex Cord Stromal Tumours (SCST) are a rare type of ovarian neoplasm. Among them thecoma are the rarest one, contributing 1 % of all ovarian neoplasm.<sup>5</sup> As per revised WHO classification (2014) SCST are classified into pure stromal tumours, pure sex cord tumours, and mixed sex cord–stromal tumours<sup>6</sup>. Thecoma is included under pure stromal tumours of ovary. Ovarian SCSTs are derived from the coelomic epithelium and mesenchyma of the embryonic gonads.<sup>3</sup> Theca cell tumour composed of lipid laden cells with fibroblast.<sup>7</sup> Theca cell tumour is well known for its hormonal activity. Theca cell secretes oestrogen hence sometimes patient presents with symptoms related to hyperoestrogenaemia such as abnormal uterine bleeding, endometrial hyperplasia, endometrial cancer.<sup>8</sup> In most of the cases thecoma presents as unilateral mass affecting both premenopausal and postmenopausal women<sup>9</sup> (like in our case). Fibroma, one of the variants of SCST can present with ascites, right sided hydrothorax and benign ovarian mass which is known as Meigs's syndrome.<sup>10</sup> In our case we accidentally found the abdominal mass. Patient didn't have any complaints. Patient assumed that she was putting on weight and didn't felt any mass. In one study Chen and et al,<sup>8</sup> concluded that thecoma and fibroma often occur in postmenopausal women with no obvious clinical symptoms. If mass is large patient may present to you with complaint of pain in abdomen and mass per abdomen. In our case despite the huge mass patient was asymptomatic. Sometimes radiographic imaging modalities specifically ultrasonography and CT scans are unable to differentiate between thecoma and other solid ovarian tumours.<sup>11</sup> Clinically she was suspected to be a case of ovarian malignancy as the mass was huge, moderately raised CA125 value and CT scan showed neoplastic ovarian tumour but histopathology was suggestive of thecoma of ovary.

### CONCLUSIONS

Thecoma is a rare benign tumour of ovary. There are certain symptoms by which it presents. Sometimes with a huge abdominal mass, patient can be asymptomatic. So, need of meticulous examination, keeping in mind the possibility of benign mass is necessary. Surgery is the mainstay treatment.

Thecomas account for less than 1% of all ovarian tumours but are considered the most common form of functioning ovarian tumours. They are more frequent in peri menopausal and postmenopausal women. Thecomas are rarely malignant and are only occasionally associated with ascites or the Meigs' syndromes. They generally exhibit estrogenic changes, but virilising thecomas have been reported. They are seldom bilateral or calcified grossly thecomas are firm or rubbery in consistency and vary from white to yellow to orange in colour. Oedema may be present, but cyst formation is rare.

Histologically, the typical thecoma is composed of masses of oval or spindle-shaped cells with round nuclei and pale vacuolated lipid-laden cytoplasm separated by collagen forming spindle cells like those seen in fibromas. The luteinized thecoma additionally contains scattered islands of round polyhedral cells representing theca lutein or stromal lutein cells. The microscopic features of fibromas and

thecomas may merge imperceptibly so that terms such as fibrothecoma or thecofibroma are quite common. The sonographic appearance of ovary thecomas account for less than 1% of all ovarian tumours but are considered the most common form of functioning ovarian tumour.

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