**Case Report:**

Preoperative Surprise of a Mass per Abdomen Mimicking Ovarian Neoplasm in a 50 Years Old Woman.

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**Citation**

**Abstract:** We report a large cystic tumour of about 40cms size in a perimenopausal woman mimicking ovarian tumour, with peroperative surprise of finding it as degenerated fibroid arising from fundus of the uterus.

**Key Words:** Ovarian neoplasm; Leiomyomata uteri; Degenerated

**Introduction:**
The most common gynaecological cause of distension of abdomen in a perimenopausal woman is ovarian neoplasms. We present an unusual presentation of massive degenerated fibroid mimicking a ovarian tumour in a perimenopausal woman. Fibromyomas are benign neoplasms, commonly encountered in gynaecological practice in the reproductive age group. As a result of diminished vascularity after menopause they shrink in size. Hyaline, cystic, calcareous, carneous and fatty degenerations are described. Sarcomatous degenerations are rare and occur in 0.5% of all myomas. This patient diagnosed as ovarian neoplasm underwent laparotomy and was surprisingly found to have a cystic tumour arising from the fundus of the uterus.

**Case Report:**
A 50 years old lady presented with chief complaint of gradual distension of abdomen and back pain since 8 years. She was a parous woman with two children and her menstrual cycles were regular with normal flow. Her last child birth was 25 years back. On examination (Fig.1), her abdomen revealed a large cystic mass of 40x38x40cms size, per vaginal examination showed cervix flushed with vagina, uterus and adnexa were not felt separately, mass was high up, parametria was supple.

*Figure 1: Preoperative photograph*

Ultra sound revealed a 24x27cm cystic mass, arising from the pelvis with thick septa and solid components. CT abdomen revealed a large multiloculated mixed solid cystic lesion with predominantly cystic component involving pelvis and abdomen measuring 38x32x50cms with multiple thin and thick septa(Fig.2).
Mass was abutting uterus with loss of fat plane and displacing it towards right side. Both ovaries were not separately visualized. There was no lymphadenopathy. An impression of ovarian malignancy was given. Her CA 125 was 253.30U/ml. A provisional diagnosis of ovarian malignancy was made. The patient was admitted and underwent laparotomy. Per operatively surprisingly the mass was found arising from fundus of uterus, multicystic, rubbery in consistency with no solid areas (Fig.3). It was well encapsulated with flimsy adhesions to omentum and peritoneum, weighing 19kgs. Both adnexa were grossly normal and uterus was atrophic. Total abdominal hysterectomy and bilateral salpingoopherectomy was done along with the excision of the tumour (Fig. 4).

**Discussion:**
Leiomyomata are the common tumours of uterus and the female pelvis. They are benign tumours composed mainly of smooth muscle cells but containing varying amounts of fibrous connective tissue. The tumour is well circumscribed but not encapsulated they have an incidence of around 50% seen in postmortem examination.[1] It is seen in women of childbearing age group, 30-40years (rarely before 20years), nulliparous or of low parity, only 20-30% are multiparous. The incidence was the same in premenopausal and postmenopausal uteri, although the average number of leiomyomata and the average size of the largest leiomyoma were greater in the premenopausal women.[1]

The growth of leiomyomata is dependent on estrogen production.[2] Continuous estrogen secretion, especially when uninterrupted by pregnancy and lactation, is thought to be the most important underlying risk factor in the development of myomata. After menopause, with regression of ovarian estrogen secretion, growth of leiomyomata usually ceases. There are rare instances, however, of postmenopausal growth of benign leiomyomata, suggesting the possibility of postmenopausal estrogen production either in the ovary or elsewhere. Post menopausal ovarian cortical stromal hyperplasia may be associated with an increase in estrogen secretion by the ovary. The postmenopausal ovarian stroma in a variety of presumably inactive ovarian tumours, including mucinous cysts and brenners tumours can also produce estrogen. When a pelvic tumour presumed to be uterine leiomyomata enlarges after menopause; one should think of the possibility of malignant change in the leiomyoma itself or in the adjacent myometrium, or of the growth of a new pelvic tumour of extraterine origin.

Leiomyomata are all interstitial or intra mural in the beginning and as they enlarge they extend in an internal or external direction, the tumour eventually become subserous or submucous in location. A subserous tumour can become pedunculated and occasionally parasitic, receiving its blood supply from another source, usually the omentum. Subserous leiomyomata may be pedunculated and simulate adnexal masses.[3,4] Submucous leiomyomata contain more smooth muscle tissue than subserous leiomyomata, sarcomatous change is more common in submucous tumours.[1] The most common change in leiomyomata is hyaline degeneration found in 60% of tumours.[5] Eventually these
may become liquefied and form cystic cavities filled with clear liquid or gelatinous material. Some times the cystic
change is so great that the leiomyoma becomes a mere shell
and is truly cystic tumour like in our case.
Calcified degeneration of leiomyomata may present as
calcified cyst or womb stones they are most often seen in
elderly women, black women and in women who have
pedunculated subserous tumours. Carneous or red
degeneration is seen occasionally in association with
pregnancy due to necrosis caused by interference with its
blood supply.[6] Fatty degeneration occurs occasionally. The
most important but rare, change in a leiomyoma is
sarcomatous degeneration with incidence given by Novak is
0.7%.[1] Sarcomas unlike fibrous tissue do not grate when
scraped with knife, the tissue is soft and homogenous, and is
described as resembling raw pork. All tumors with less than
five mitotic figures per 10 high power fields are considered
benign. More than 10 mitotic figures per 10 high power field
area called malignant, those in between can be called smooth
muscle tumors of uncertain malignant potential.
In conclusion cystic degeneration with solid areas and septae
in a fibroid mimics a ovarian malignancy in clinical
presentation. In these cases even tomography may be
muleading.[4] Magnetic resonance imaging may be helpful in
reaching accurate diagnosis preoperatively.[7,8] The
knowledge of differential diagnosis helps us in peroperative
decisions and post operative management of the patient.

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