



## BROAD LIGAMENT FIBROID MIMICKING AS OVARIAN TUMOR ON COMPUTED TOMOGRAPHY SCAN

**Mohini Aggarwal\***

Assistant Professor, Department of Obstetrics & Gynaecology, Adesh Institute of Medical Sciences and Research (AIMSR), Bathinda, Punjab, India. \*Corresponding Author

**Sandeep Kaur**

Junior Resident, Department of Obstetrics & Gynaecology, Adesh Institute of Medical Sciences and Research (AIMSR), Bathinda, Punjab, India.

### ABSTRACT

Broad ligament fibroids are the most common extrauterine fibroids to occur with overall incidence being rare. In our case the tumor was of large size, operated with possibility of ovarian malignancy. Intraoperatively it was found out to be broad ligament fibroid. Later histopathology report confirmed leiomyoma with degenerative changes. Broad ligament leiomyoma should be kept as an important differential diagnosis for solid adnexal or ovarian masses.

**KEYWORDS :** Broad Ligament Fibroid, Leiomyoma, Ovarian Malignancy

### Introduction

Fibroid is the commonest of all uterine tumors. Their classification depends upon origin and direction of growth. They are categorized into 3 groups :- subserous, interstitial, and submucous. Submucous fibroids originate beneath the endometrial layer and often project into endometrial cavity ; intramural or interstitial fibroids originate within the myometrium, and subserous fibroids originate from serosal layer and present as adnexal mass. Broad ligament fibroids are the most common extrauterine fibroids to occur with overall incidence being rare.<sup>1</sup> Main symptoms of fibroids are menstrual disturbances, dysmenorrhea, and pressure symptoms caused by the mass. Most common secondary changes are degeneration, infection, hemorrhage, necrosis, and rarely, sarcomatous changes.<sup>2</sup> Such fibroids being rare, difficulties arise in making the final diagnosis and further management of such patients.

### Case report

45 years old para 5, living 4 presented to our institute in OPD with complaint of mass in abdomen since 10 year which was initially of the size of cricket ball and then gradually increased over time. Now her CECT whole abdomen showed large multilobulated heterogeneously enhancing predominantly solid mass with areas of necrosis in abdominopelvic region measuring ~ 13.6×18×21 cm extending from rectouterine region to supraumbilical region; an area of chunky calcification seen within the mass; the mass was displacing uterus anteriorly and laterally to left side, urinary bladder anteriorly and laterally to right side, bowel loops towards left side and causing chinking of IVC at places; left ovary seen in iliac fossa but ovary on right side not seen separately; 18 mm lymph node seen in paracaval location retroperitoneally. First possibility of ovarian mass was kept and second of large subserosal uterine fibroid. There was no history of menstrual problem / fever / weight loss / anorexia. On examination, general condition of patient was stable. She was well oriented to time, place and person. Pallor was present. HR 88/min, RR 16/min, BP 124/78.

No lymphadenopathy was there. Systemic examination was normal. Per abdomen examination showed 28 weeks size uterus with firm consistency. On per vaginal examination firm to hard mass was felt, posterior fornix was full, cervix was taken up and bilateral fornices were also full and non tender. Laboratory investigations alongwith CA125 were within normal limits. Operative findings:- Patient was taken up for exploratory laparotomy with possibility of ovarian malignancy. Huge broad mass i.e. broad ligament fibroid measuring ~ 15×16×20 cm around 6 kg weight seen in abdominal cavity deviating uterus to left side. Myomectomy done. Bilateral fallopian tubes and ovaries normal. Intraoperatively urologist confirmed the patency of ureter. Ureter was kept away from the surgical field. Total abdominal hysterectomy done and specimen delivered outside. Post-operative course was uneventful. Histopathology findings:- consistent with Leiomyoma with degenerative changes seen.

### DISCUSSION

Broad ligament leiomyoma can arise from the uterus and invade the

broad ligament or it can arise from broad ligament itself. These tumors are usually asymptomatic and benign in nature. Sometimes they grow to a significant size and push uterus to contralateral side or it can compress the surrounding pelvic structure and produce various signs and symptoms. Location of tumors determine the symptoms.<sup>3</sup> It is very important to distinguish between benign and malignant nature of adnexal mass for optimal management of patient. The differential diagnosis for broad ligament leiomyoma should include ovarian masses, broad ligament cyst, lymphadenopathy and tubo-ovarian masses. In our case also the tumor was of large size, operated with possibility of ovarian malignancy. Intraoperatively it was found out to be broad ligament fibroid. Later histopathology report confirmed leiomyoma with degenerative changes. Secondary changes can occur in leiomyoma, most common being degeneration, infection, haemorrhage and necrosis. The cystic changes in lesion may mimic the metastatic malignant ovarian tumors.<sup>4</sup> Broad ligament fibroids are rare and can attain size large enough to mimic pelvic malignancy. Similar cases have also been reported for its rarity, and the diagnostic difficulties faced due to it. Magnetic resonance imaging (MRI) is extremely useful for differentiating broad ligament fibroids from masses of ovarian or tubal origin and from broad ligament cysts. The distinctive MRI findings of typical fibroids also are useful in distinguishing them from solid malignant pelvic tumors. This observation is important because broad ligament fibroids are associated with pseudo-Meigs syndrome and produce an elevated cancer marker CA-125 levels that may point to metastatic ovarian carcinoma, further causing diagnostic confusion.<sup>5</sup>

### CONCLUSION

Fibroids are usually benign and their management poses challenge when they are extrauterine. Extrauterine leiomyomas mimics ovarian tumours on clinical and radiological examination. Broad ligament leiomyoma should be kept important differential diagnosis for solid adnexal or ovarian mass.

**Figure 1**





#### REFERENCES

1. Kumar P, Malhotra N. Jeffcoate's Principles of Gynaecology. 7th ed. New Delhi: Jaypee Brothers; 2008. Tumors of the corpus uteri; p. 492.
2. Berek JS. Novack's Gynaecology. 15th ed. New Delhi: Lippincott Williams and Wilkins, Wolters Kluwer (India); 2007. Benign diseases of the female reproductive tract; p. 470.
3. Stewart EA. Uterine Fibroids. Lancet, 2001; 357(9252):293-298.
4. RajannaDK, Pandey V, Janardhan S, Datti SN. Broad ligament fibroid mimicking as ovarian tumor on ultrasonography and computed tomography scan. J Clin Imaging Sci. 2013; 3:8.
5. Low SC, Chong CL. A case of cystic leiomyoma mimicking an ovarian malignancy. Ann Acad Med Singapore. 2004;33:371-74.