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**Case Report** 

# One of the biggest broad ligament fibroids reported in India: a case report

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## **ABSTRACT**

One of the most common findings in gynecological practice is uterine leiomyoma, but giant leiomyomas are rare. Due to its size, it poses a major challenge with regard to diagnosis, treatment, and surgery. In this article, we report one such case in a 40-year-old woman who noticed abdominal distension and diffuse pain over the abdomen for 3 months. Increased frequency of menstrual cycles and passage of blood clots in menses were also noted. Ultrasonography revealed a large well-defined heterogeneous lesion, solid and cystic areas seen in the pelvis extending to the epigastric region superiorly and laterally up to the right and left hypochondrium. In addition, the patient had stones in the gall bladder. Gallstones and their association with Leiomyomas are discussed in the later part of this article. Grossly, the specimen was 6030 gm uterine leiomyoma measuring 33×28 cm in size located completely in the broad ligament of the uterus. Histologically, it had smooth muscle fibers with interspersed hyaline degeneration.

Keywords: Gall stones, Broad ligament fibroid

#### INTRODUCTION

Twenty percent of women in the reproductive age group have leiomyoma, the most frequent pelvic tumor outside of pregnancy, and its prevalence is rising as one becomes old. The overall incidence of broad ligament fibroid is <1%. It mostly comprises muscle tissue, while some fibrous connective tissue is also present, particularly in larger and older tumors. It is commonly referred to as a fibroid and is also known as myoma or fibromyoma.

This is a case of a 40-year-old woman with a large uterine mass. Multiple fibroid cysts of various sizes and varied consistency are densely adherent to the urinary bladder and the external iliac artery. The uterine mass is also densely adherent to the sigmoid colon posteriorly. The mass pushes the uterus towards the left, and the fallopian tube is present over the mass.

#### **CASE REPORT**

A 40-year-old woman P1L1 came to the OPD (Department of Obstetrics and Gynaecology, ESIC MEDICAL College and Hospital, Chennai) with a history of abdominal distension for 6 months and abdominal pain for 3 months. Increased frequency of menstrual cycles and passage of clots were reported during menses. No history of loss of appetite and constipation. But a history of loss of weight was reported. Menarche was reported around the age of 13. Previous LSCS was done. Had a positive history of hypertension for 3 months.

#### Examination

A 40-year-old lady of average build and nourishment who was conscious, and oriented. No pallor, icterus, cyanosis, clubbing, pedal edema, and no generalized

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lymphadenopathy. Blood pressure was 130/70 mmHg, Respiratory rate was 83 beats per minute. Systemic examination was normal. P/A: Abdominopelvic mass of 36 weeks size was noted, Lower border was not felt had a smooth surface and variable consistency. P/V: the cervix is pushed up, all fornices were full. P/R: free; no deposits.

## **Investigations**

Haemoglobin was 11.2 gm/dl, serum electrolytes were Na-131.9 mmol/l, K-2.39 mmol/l, Cl-97.6 mmol/l, Ca-0.304 mmol/l. Tumor markers such as CA-125, AFP, and CEA fall under the normal range. Ultrasonography of the abdomen evidence of a large T2 heterogeneously hypodense lesion seen in the central abdominal pelvic region and extending into both iliac fossae.

## Management

With the probable diagnosis of uterine leiomyoma, the patient was taken to an exploratory laparotomy.

## Operative notes

The exploratory laparotomy was conducted on October 8th,2024, from 10:51 AM to 4:00 PM. The large uterine mass was densely adherent to the urinary bladder, the mass contains multiple fibroids of various sizes and is densely adherent to the sigmoid colon posteriorly. The uterus was pushed to the left by the mass and the fallopian tube is located over the mass. The external iliac artery was densely adherent to the mass.

## Pathological findings

## Gross findings

A huge broad ligament fibroid having dimensions  $33\times28$  cm measured after complete excision of the mass and weighing 6030 gm. The mass was well encapsulated and is in a benign state.

#### Microscopy

This fibroid has spindle-shaped smooth muscle cells with hyaline degeneration.

## Radiological findings

## Gall bladder findings

This patient also had gall bladder stones that were reported in MRI.

## CT/MRI

A large well-defined heterogeneous lesion  $30.9 \times 16 \times 25$  cm, solid and cystic areas seen in the pelvis extending to epigastric region superiorly and laterally up to right and

left hypochondrium. Impressions large abdominopelvic T1 and T2 heterogeneous lesion probably uterine lesion-To consider sub mucosal or sub serosal fibroid.



Figure 1: Intraoperative photo of the leiomyoma presents in the broad ligament. The mass pushed the uterus to the left.

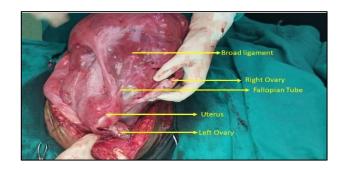


Figure 2: Intraoperative photo with labelled parts.



Figure 3: Pathology gross specimen showing multiple fibroids of varied sizes.



Figure 4: Cut section of the specimen showing yellowish-white areas.

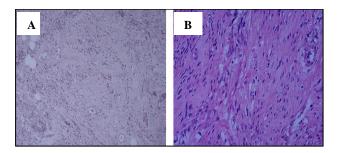


Figure 5: A) 40x Magnification. B) 100x Magnification.

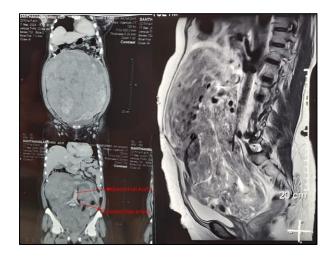


Figure 6: CT/MRI finding of the abdomen showing the extent of the mass.

### **DISCUSSION**

This case of broad ligament tumor is one of the biggest tumors that is reported to date in India. In addition, the patient also has gallstones, which could be due to the giant leiomyoma growth, however, it hasn't been validated properly and more studies and research have to be conducted in this area.

Gallstones (Cholelithiasis) could have an associated link with uterine fibroids according to the previously published article.<sup>2</sup> In this study, the author showed evidence of cases associated with leiomyoma and gallstones.<sup>2</sup> Other articles state that the high cholesterol saturation index in people with leiomyomas is the main cause of gallstones.<sup>3</sup>

This giant leiomyoma had great surgical difficulty as it altered the normal anatomical position of internal organs.<sup>4</sup> This fibroid was misdiagnosed to be abdominal fat, this is a common misinterpretation that was also reported in a Caucasian woman.<sup>5</sup>

Previously published case reports showed a 33-year-old woman presenting with a giant uterine fibroid after having a 10 to 15-year history of fibroids, she had not opted for

treatment because she had a fear of surgery.<sup>6</sup> In Some cases, women also tend to refuse myomectomy as it poses a risk of hysterectomy and later tend to present with giant fibroids.<sup>7</sup>

Uterine leiomyomas in post-menopausal women should not be ignored as it could lead to malignant transformation. Pelvic physical examination is an initial method of diagnostic evaluation, nevertheless smaller myoma size increases difficulty in palpating the mass, which may result in underdiagnosed cases. Therefore, additional diagnostic imaging is required to increase diagnostic sensitivity, and to further evaluate number, size, location, and extension of the mass. 9

#### CONCLUSION

This case of giant leiomyoma poses a diagnostic challenge, especially in obese patients. People with low socio-economic status and a high BMI tend to develop giant leiomyomas of this size as is evident in this case. In this case, the Woman had a high BMI that led to the ignoring of abdominal distension as she had a presumed thought of having abdominal fat.

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