

# Benign Metastasizing Leiomyoma: A Very Rare Case Report

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## ABSTRACT

We report a case of benign metastasizing leiomyoma (BML) recurring after 4 years of total abdominal hysterectomy with bilateral salpingo-oophorectomy for fibroid uterus. Probably in this case, recurrence was due to extragonadal source of estrogen and progesterone. Therefore, patient was put on antiestrogen and antiprogestone therapy, after hysterectomy to prevent further recurrence. Through this case, importance of surgery combined with antiestrogen and antiprogestone therapy is emphasized.

**Keywords:** Fibroid uterus, Leiomyoma, Benign metastasizing leiomyoma.

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## INTRODUCTION

Uterine leiomyomas, popularly known as fibroids, are benign tumors that arise from the smooth muscle cells of the uterus, but contain varying amount of fibrous tissue. They vary in size from small seedling myoma to large ones. These may be single or multiple in number, rarely they are malignant however recurrences are not uncommon. Hematogenous spread of leiomyoma leading to benign metastasizing myoma is very rare, especially after hysterectomy and bilateral salpingo-oophorectomy.

## CASE REPORT

A multiparous 50 years old woman reported to gynecological OPD of Hind Institute of Medical Sciences, Safedabad Barabanki, with complaints of swelling in whole of the abdomen since last 10 months with increase in size for 6 months. Recently, she had developed dull aching pain in the abdomen.

She gave history of TAH with B/L salpingo-oophorectomy 4 years ago at Queen Mary's Hospital, Lucknow, for huge subserous leiomyoma.

On examination, a huge, nontender mass of size about 28 × 25 × 25 cm, having firm to hard consistency, was occupying whole of the abdomen and lower pole of the tumor could not be reached but it was mobile side to side.

A huge, multicystic mass with moderately echogenic component was confirmed by USG, but its origin could not be known. CT scan revealed, a large well-marginated intraperitoneal mass of approximately 23 × 19 × 13 cm, predominantly

cystic with few solid areas showing postcontrast enhancement. Wall of the tumor was irregularly thickened at places with extensive septation, with right side hydroureter and hydronephrosis. No ascites or lymphadenopathy was found. CA-125 was <35 IU/ml.

On laparotomy, a huge mass with variegated consistency was adherent to the loops of bowels, including sigmoid and transverse colon. Solid white masses of different sizes, four in number, were removed along with the bigger mass (Fig. 1). However, peroperative origin of masses could not be ascertained. Small to very tiny similar whitish nodules were seen in retroperitoneal and mesenteric areas, near to major vessels.

On histopathological examination, tumors were found to be benign metastasizing leiomyoma, having intravascular embolus (Fig. 2).

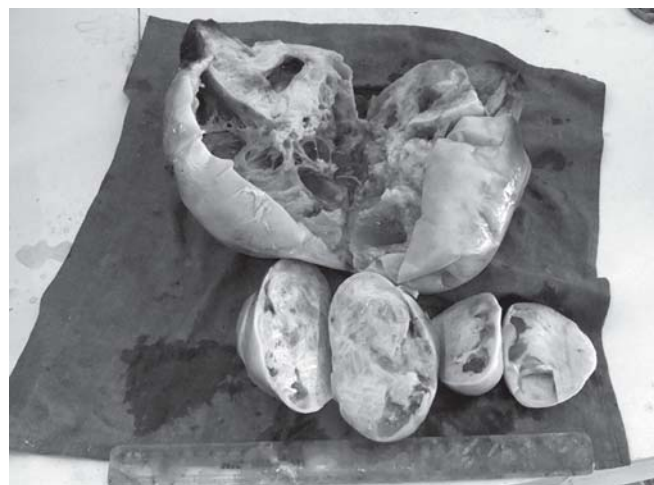


Fig. 1: Gross picture of tumors (BML)



Fig. 2: Microscopic: HPF (arrow) showing intravascular tumor embolus

Postoperative recovery was uneventful and patient was discharged with advice of antiprogesterone (mifepristone 50 mg daily) and aromatase inhibitors (Letrozole—1.25 mg daily) to prevent further recurrence.

## DISCUSSION

Uterine leiomyoma is monoclonal and the most common gynecological neoplasm in women of reproductive age, with more prevalence in black races above the age of 30 years.<sup>1,7</sup> Prevalence rate of this tumor is about 50% with frequency of rare malignancy rate of 0.13 to 6.0%.

Uterine fibroid having peculiar pattern of growth, including intravascular and peritoneal dissemination, are called benign metastasizing leiomyoma (BML). It metastasizes mostly in lungs but our case belongs to peritoneal and intravascular leiomyomatosis, making it most rare.<sup>4</sup>

BML are always positive for estrogen and progesterone receptors and can recur, even after hysterectomy, as in this case.<sup>1,2</sup>

Such leiomyomas having mitosis <5/HPF are considered not having malignant potential and this case belonged to benign category, but hematogenous invasion has made possibility of recurrence, even after few years of surgery.<sup>3</sup>

Knowing that these tumors are positive for estrogen and progesterone receptors and the source of estrogen and progesterone being extragonadal are responsive to antiprogesterone and aromatase inhibitors, like mifepristone (RU-486), and letrozole respectively,<sup>5,6</sup> to prevent further recurrence.

## REFERENCES

1. Rivera JA, Christopoulos S, Small D, Trifiro M. Hormonal manipulation of benign metastasizing leiomyomas. Report of two cases and review of the literature. *J Clin Endocrinol Metabol* 2004;89(7):3183-88.
2. Robboy SJ, Benteley RC, Butnor K, Anderson MC. Pathology and pathophysiology of uterine smooth muscle tumors. *Environ Health Perspect Suppl* 2000;5:779-84.

3. Bell SW, Kempson RL, Hendrickson MR. Problematic uterine smooth muscle neoplasms. A clinical pathologic study of 213 cases. *Am J Surg Pathol* 1994;18:535-58.
4. Codaband F, Ulmann A, Baulieu EE. RU 486 (mifepristone): Mechanism of action and clinical uses. *Annu Rev Med* 1997;48:129-56.
5. Eisinger SH, Meldrum S, Fiscella K, Le Roux HD, Guzick DS. Low dose mifepristone for uterine leiomyomata. *Obstet Gynecol* 2003;101:243-50.
6. Sumitani H, Shozu M, Segawa T, Murakami K, Yang HJ, Shimeda K, et al. In situ estrogen synthesized by aromatase P 450 in uterine leiomyoma cell, promotes cell growth probably via an autocrine/intracrine mechanism. *Endocrinology* 2000;141:3852-61.
7. Wise LA, Pulumor JR, Stewart EA, Rusenberg L. Age specific, incidence rate for self reported. Uterine leiomyomata in black women is health study. *Obstet Gynecol* 2005;105(3):563-68.

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