



## Case Report

### RETROPERITONEAL LEIOMYOMA

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#### Abstract

Leiomyoma is a common benign condition for which many hysterectomies are performed every year. Leiomyomas found retroperitoneally are a rare entity, especially primary. We report here a case of 44-year-old, para 5+0 who presented with mass in the abdomen and lower abdominal pain. CT- scan shows a huge retroperitoneal soft tissue mass. The mass was removed completely. Histopathological findings were consistent with leiomyoma. Retroperitoneal leiomyoma is a rare neoplasm and treatment is surgical removal.

**Key words:** Leiomyoma, Retroperitoneum, Uterus.

#### Introduction

Leiomyoma is a common benign condition arising from smooth muscle cells. Approximately 20%-30% of women older than 35 years have uterine leiomyomata that are manifested clinically.<sup>1,2</sup> Retroperitoneal leiomyoma is a rare occurrence and recently been recognized as distinctive lesions with similar histology as uterine leiomyoma. Poliquin et al.<sup>3</sup> studied revealed several cases of retroperitoneal leiomyoma. This rare entity is usually misdiagnosed preoperatively even with diagnostic imaging. Their unusual growth pattern may even mimic malignancy and can result in a clinical dilemma. We report a rare case of a large retroperitoneal leiomyoma.

#### Case Report

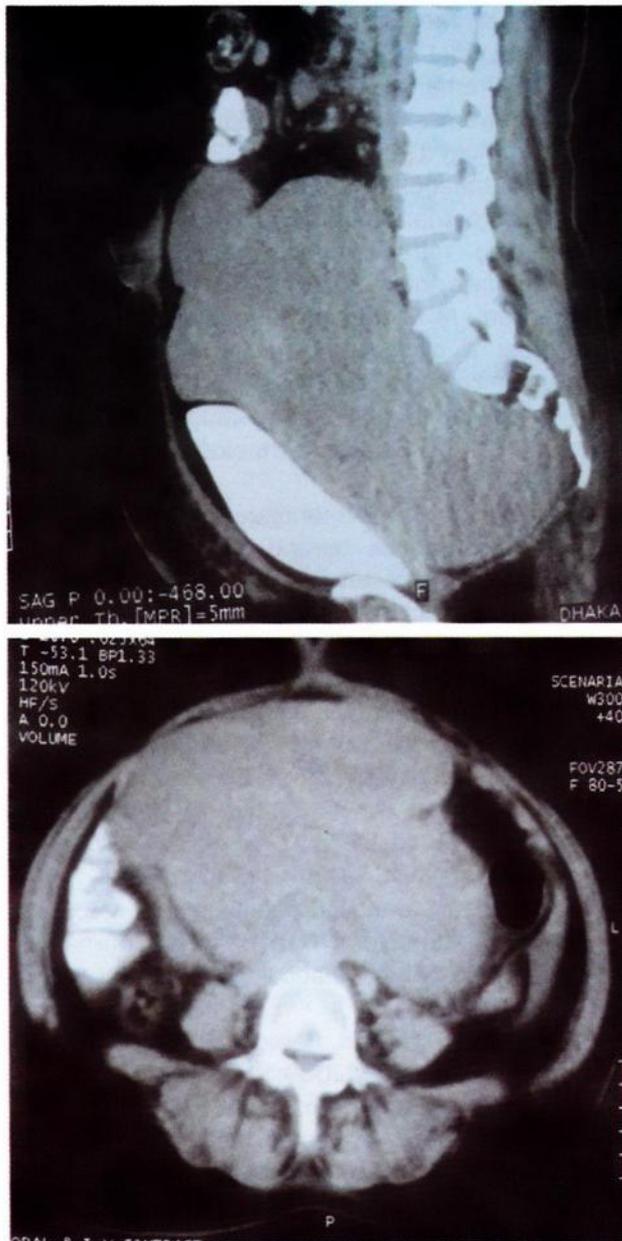
A 44-year-old woman, para 5+0, all alive and delivered by normal vaginal delivery got admitted in our unit

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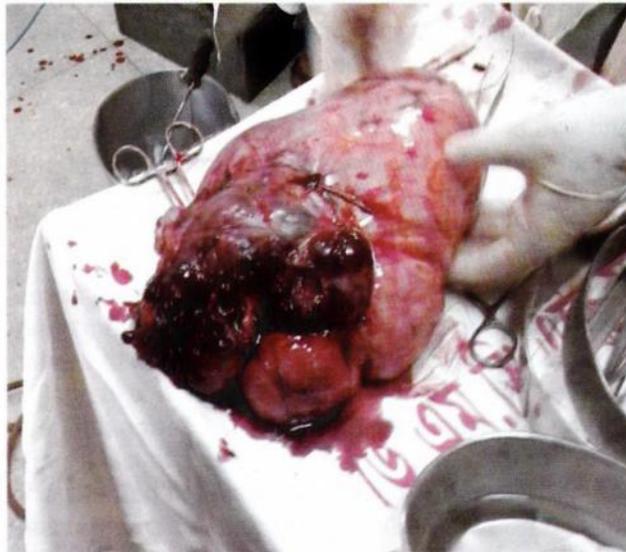
with the history of laparotomy 2 months back in a district level private hospital. Patient underwent laparotomy for the complaint of lower abdominal pain and mass in the abdomen for 1 year. The attempted laparotomy was closed because of a huge retroperitoneal mass which was closely adhered with sigmoid mesocolon. Patient failed to show the histopathology report of biopsy material taken during operation. She had a normal and regular menstrual cycle. There was no associated vaginal discharge. Patient had no bladder and bowel symptoms and there was no history of anorexia, weight loss, jaundice, cough, fever and bone pain. Abdomen is distended from lower abdomen up to supraumbilical area. There is a lower midline scar. A firm, non tender intra abdominal lump extending from the pelvis to left upper abdomen. The mass is irregular in outline with restricted mobility, approximately 30x20 cm in size, surface is smooth and does not moves with respiration. Liver was not enlarged, no ascites and no abdominal lymphadenopathy. On per vaginal examination posterior fornix appeared full and no other abnormality. The haemoglobin concentration was 10.6 gm/dl, total count of WBC was 7500/cmm, chest X-ray and urinalysis were normal. Ultrasonography revealed a large lobulated complex mass lesion arising from pelvis which cannot be separated from uterus and adnexa and impression is complex intra abdominal mass. CT scan of abdomen revealed a fairly large mildly enhancing soft tissue density mass lesion having irregular lobulated outer margin arising from pelvis extending above the umbilicus. Mass pushes urinary bladder anteriorly and

bowel loops upwards. Both kidneys are normal in size. Perilesional fat plane is maintained. No ascities or lymphadenopathy is found. Uterus is found to be separated from bottom of lesion (Fig-1).

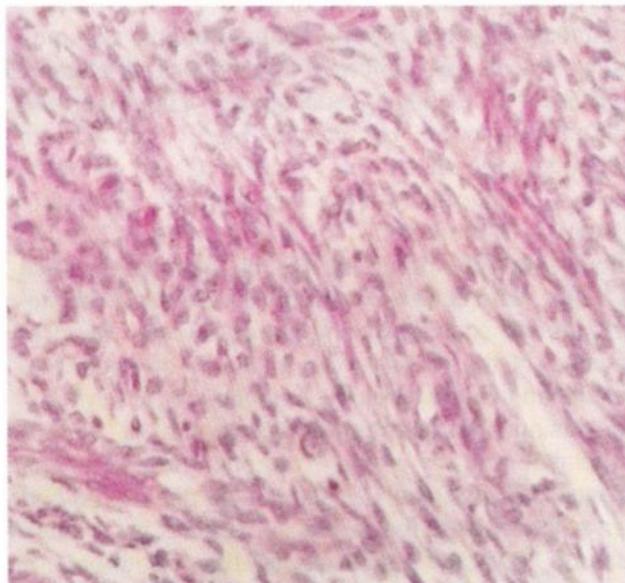


**Fig:1** CT scan of mass.

USG guided FNAC revealed benign spindle cell tumour. So our working diagnosis is retroperitoneal soft tissue tumour. Intraoperatively a large firm retroperitoneal mass extending from pelvis to upper abdomen was found to be separated from uterus. Adnexal structures could not be delineated separately. The mass was removed completely. Both ureters were delineated properly. No abnormality was found in uterus. Ovary and uterine tubes were found intact. (Figure-2).



**Fig:2**, Specimen after removal



**Fig:3**, Histopathological photograph

The postoperative period of the patient was uneventful. Histopathological examination confirmed the the diagnosis of retroperitoneal leiomyoma (Fig-3).

#### Discussion

Uterine fibroids are the most common benign solid pelvic tumours in women<sup>4</sup> and are present in about 80% of all hysterectomy specimens.<sup>5</sup> The most common sites of fibroids in uterus; however, it can originate wherever smooth muscle cells exist.<sup>4,6,7</sup> The extrauterine leiomyoma presentations mentioned in the

literature are benign metastasizing leiomyoma, disseminated peritoneal leiomyomatosis, intravenous leiomyomatosis, parasitic leiomyomata and retroperitoneal growth and the unusual sites of origin include the vulva, ovaries, urinary bladder and urethra. Some rare locations are sinonasal cavities, orbits, kidneys and skin.<sup>8</sup> Retroperitoneal fibroids are rarely diagnosed even with imaging techniques like USG, CT and MRI and in most of the case reports of retroperitoneal leiomyomata, preoperative diagnosis of the growth was made to be either subserous fibroid, ovarian malignancy or fibroma.<sup>9,10</sup> But in this case our provisional diagnosis was retroperitoneal soft tissue tumour. In a study by Kho and Nezhat, twelve cases were studied and they reported 83% of patients had prior abdominal surgery and 67% patients had prior myomectomy.<sup>11</sup> They suggested iatrogenic parasitic myoma formation as the cause of retroperitoneal fibroid. In this case there was no prior surgical history or any uterine fibroid. With regard to their pathological origin, it is unclear whether this retroperitoneal lesion arise from the hormonally sensitive smooth muscle element<sup>12</sup> or from the embryonal remnants of müllerian or wolffian duct.<sup>13</sup> Kang et al.<sup>14</sup> suggested primary multifocal origin of retroperitoneal fibroids. Common symptoms of retroperitoneal fibroids include abdominal discomfort, fatigue, backache, dyspareunia and urinary and bowel complaints. More than 40% of patients affected by this retroperitoneal condition have a concurrent uterine leiomyoma or a remote history of hysterectomy for treatment of a uterine leiomyoma.<sup>3</sup> The reporting of such cases dates back to 1903, when Lewers<sup>15</sup> reported a case of retroperitoneal fibroid of thirteen and a half pounds. Surgical removal of the mass is the mainstay of treatment, which can be by laparotomy or laparoscopic removal. Conclusion. Retroperitoneal leiomyoma is a rare neoplasm and by doing thorough investigations (clinical, USG, CT scan, image guided aspiration) one can still anticipate the rare occurrence of this benign tumour. Complete excision is the treatment of retroperitoneal leiomyoma. The prognosis of the patients with retroperitoneal leiomyoma is good.

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