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## Case Report

# A rare case of uterine myxoid leiomyosarcoma

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### ABSTRACT

Myxoid leiomyosarcoma is an uncommon tumour and in most cases, it is recognised only after the surgery. A 65 years old female patient got admitted at our hospital with history of rapidly growing abdominal mass with pain in abdomen since last 3 months. During abdominal examination 32 weeks huge mass was noted and on prevaginal examination mass couldn't be separated from uterus. LDH was elevated, USG suggestive of vascular tumour of with neoplastic etiology of ovarain origin. CECT was done and findings suggestive of uterine adenocarcinoma with peritoneal carcinomatosis. Exploratory laparotomy with total abdominal hysterectomy with bilateral salphingoophorectomy with omentectomy with debulking surgery was performed. HPR reports suggestive of myxoid leiomyosarcoma with mitotic index of 10 with tumour cell necrosis suggestive of poor prognosis. Post-operative period patient had developed sudden myocardial infarction and shifted to ICU where she died due to ventricular fibrillation.

**Keywords:** Leiomyosarcoma, Peritoneal carcinomatosis, Debulking surgery

### INTRODUCTION

Uterine sarcomas account for 1% of all female genital tract malignancies and 3-7% of all uterine cancers.<sup>1</sup> Rare occurrences and histopathological diversity lead to lack of consensus on risk factors for poor outcome and optimal treatment.<sup>2</sup> Leiomyosarcoma has become the most common sub-type of uterine sarcoma after excluding carcinosarcoma.<sup>2</sup> Presentation may vary from abnormal vaginal bleeding (56%), a palpable pelvic mass (54%), and/or pelvic pain (22%).<sup>2</sup>

Epitheloid and myxoid leiomyosarcomas are two rare variants that may be difficult to recognize microscopically. Even when confined to the uterus at the time of diagnosis, leiomyosarcoma associated with poor prognosis as per WHO criteria.<sup>3-5</sup> Tumour stage is the single most important prognostic factor for uterine sarcomas.

Treatment of leiomyosarcomas includes total abdominal hysterectomy and debulking of the tumour if present outside the uterus. Tumour stage is the single most important prognostic factor for uterine sarcomas.

### CASE REPORT

A 68 years old female patient resident of Kandhar with history of rapidly growing mass in the abdomen and abdominal pain since, 3 months and history of loss of appetite. No history of bowel or bladder related symptoms. On examination patient was clinically pale, vitals stable and she was a known case of hypertension and on medication. On clinical examination mass was 32 weeks size, nodular in nature arising from pelvis extending upto epigastrium. Upper and lateral border of the mass couldn't be differentiated.

Mass was firm to hard in consistency, with restricted mobility and nontender. No free fluid, no hepatosplenomegaly. On per vaginal examination cervix was pulled up and mass couldn't be separated from uterus and bilateral adnexal fullness present. Ultrasonography reports showed ill-defined highly vascular lesion of 20×12×13 cm in pelvis extending into epigastric region with internal vascularity with bilateral ovaries not visualised superlatively suggestive of neoplastic ovarian etiology. CECT was done reports showed asymmetrical

heterogeneously enhancing soft density lesion not separately seen from body and fundus of the uterus with peritoneal carcinomatosis suggestive of endometrial adenocarcinoma. Report of pap smear indicated chronic cervicitis. Serum LDH was elevated, CA-125 and other laboratory investigations were within normal limit. Patient was posted for exploratory laparotomy after surgical fitness. Intraoperatively enlarged uterus of 30-32 weeks size with mass densely adherent to omentum and anterior abdominal wall. Mass was originating from uterine fundus. Lobulated mass with solid, cystic and hemorrhagic component within and abundant mucoid degeneration. Total abdominal hysterectomy with bilateral salpingoopherectomy with omentectomy with debulking surgery was performed.

Diffuse spread of semisolid mucinous tumour seedings into peritoneal cavity and omentum. Peritoneal biopsy was taken and sent for HPR. Gross specimen showed necrotic endometrial growth. Intra-operatively patient was transfused 3 units of blood. Histopathology reports suggestive of myxoid leiomyosarcoma with myxoid deposits on omentum with high mitotic index of 10 with tumour cell necrosis. Peritoneum was free from tumour cell infiltration. Post-operative period patient had 2 pints blood transfusion. On post-operative day 12 patient had developed sudden myocardial infarction and shifted to ICU and where she died due to ventricular fibrillation (VF).



**Figure 1: Lobulated mass of 32 weeks size with omental adhesions and peritoneal carcinomatosis noted.**



**Figure 2: Subserosal bosselated growth from fundus of the uterus measuring 20x15x15 cm.**



**Figure 3: Debulking surgery was performed and the specimen weighted 8 kg.**

## DISCUSSION

Myxoid leiomyosarcoma (mLMS) known as an aggressive tumour with high morbidity and mortality.<sup>6</sup> Pre-operatively it is difficult to diagnose LMS as there are no reliable diagnostic methods are available. High doppler score on USG suggested of malignant origin as in our case. Our patient presented with rapidly growing mass abdomen which could be one of the major presenting complaints other than abnormal vaginal bleeding.

Serum LDH was elevated which can be used as a useful biochemical marker in the evaluation of cases of LMS as in our case. Aim of the surgery was complete cytoreduction i.e. debulking surgery which included total abdominal hysterectomy with bilateral salpingoopherectomy with omentectomy as followed in most of the cases. Lymph node dissections are not usually recommended as their involvement is seen in <3%.<sup>7</sup> Diagnosis of LMS and determination of its stage are only based on HPR report after surgery. HPR reports revealed high grade tumour with necrotic cells with poor prognosis

## CONCLUSION

Due to their rarity, uterine sarcomas may not be suitable for screening. Peri- or postmenopausal women of above 45 years ago with abnormal uterine bleeding and rapidly growing uterine mass should be examined by D and C or endometrial biopsy with sophisticated imaging techniques to rule out LMS. As there are no satisfying or reliable data on adjuvant strategy or therapeutic modalities and hence treatment option to be considered on an individual basis and after decision-sharing with the patient. There is a need for uterine LMS registration centres regionally which can offer consented and consistent therapy recommendations to gain more knowledge of this rare malignancy.

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