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Case Report

Leiomyosarcoma: a rare complication of uterine fibroid

Shazia Parveen*, Noor Afshan Sabzposh, Amina Kuraisyh

Department of Obstetrics & Gynaecology, JN Medical College & Hospital, AMU, Aligarh, UP, India

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***Correspondence:**

Dr. Shazia Parveen,

E-mail: shzparveen@gmail.com

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ABSTRACT

Uterine sarcomas are rare tumours of mesodermal origin. Malignant change occurring in uterine fibroid is termed as leiomyosarcoma. They constitute around 2-6 % uterine malignancies and 25-36% of uterine sarcomas¹. The tumour is common in women between the age group 40-50 years. It has an aggressive course & usually metastasis goes to the lungs. The prognosis for women with uterine sarcoma primarily depends on the extent of disease at the time of diagnosis and mitotic index³. Women with tumor size >5 cm in maximum diameter have poor prognosis. These tumours should be diagnosed and managed with no delay and must be followed vigilantly as the rate of recurrence & metastasis is very high.

Keywords: Fibroid, Leiomyosarcoma, Mesodermal tumour

INTRODUCTION

Uterine sarcomas are rare tumours of mesodermal origin. Malignant change occurring in uterine fibroid is termed as leiomyosarcoma. They constitute around 2-6 % uterine malignancies and 25-36% of uterine sarcomas.¹ The tumour is common in women between the age group 40-50 years. It has an aggressive course & usually metastasis goes to the lungs.

CASE REPORT

A 50 years post-menopausal female presented to us in our OPD at JNMCH, AMU, Aligarh with the complaints of post-menopausal bleeding per vaginum off and on for 5 months and foul smelling discharge per vaginum for 15 days. She was P₆+O menopausal for past 8 years & was a known case of hypertension.

On examination she was pale and her vitals were stable. Her abdominal examination revealed a palpable mass of 16 week size in the supra pubic region which on per vaginum examination mass was confirmed having a soft consistency.

On per speculum examination she had foul smelling discharge. She was admitted to the ward and started with broad spectrum antibiotics. Her lab investigations revealed anemia Hb - 10g%, deranged RFT (BU - 84 mg%, SC - 2.3 mg%). USG revealed hypoechoic lesion in the anterior wall of the uterus size (74 cm x 53 cm x 53 cm) B/L ovaries were normal and endometrial thickness was not made out. MRI showed enlarged uterus with altered signal intensity lesion filling the endometrial cavity and cervical canal of size 12.2 cm x 8.2 cm x 8.7 cm without parametrial involvement with bilateral inguinal lymph node enlargement of size (2 cm x 1.26 cm). Uterine aspiration was done & HPE revealed uterine leiomyosarcoma. X ray chest was done it was normal.

The lump progressed in size & achieved a 20 week size and on per speculum examination tongue shaped mass was coming through cervical Os.

Total abdominal hysterectomy with B/L salpingo-oophorectomy was done bowel was explored it was normal. Specimen was sent for HPE which revealed stromal sarcomatous change with leiomyomatous differentiation.

In the post-operative period patient received combination chemotherapy (Vincristine, adriamycin and cyclophosphamide) & discharged from the ward in satisfactory general condition.

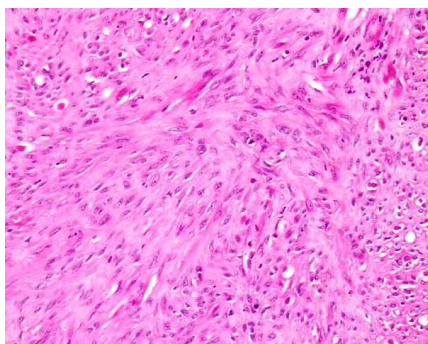


Figure 1: Histopathology report: shows spindle cells typical of uterine leiomyosarcoma



Figure 2: Polypoidal brown mass seen coming out from cervix involving whole of the uterus.

DISCUSSION

The etiology of ULMS is unknown but pre-disposing factors may include (40-60 years of age), African-American race & obesity it is not related to parity.²

The 3 most common histologic variants of uterine sarcomas are Endometrial Stromal Sarcoma (EES), leiomyosarcoma and carcinosarcoma (malignant mixed Mullerian tumors).

The incidence of sarcomatous change in benign uterine leiomyomas is reported between 0.13% and 0.18%.

Incidence of mixed mullerian sarcoma is 50%, leiomyosarcoma is 30%, endometrial stromal carcinoma is 15% and adenosarcoma is 5%.

Symptoms are of usually short duration (mean 6 months) include vaginal bleeding, pelvic pain, or pressure and abdominopelvic mass.² The diagnosis of uterine sarcoma

is made from histological examinations of entire uterus. Leiomyosarcoma tumors may be spindle shaped cell. On macroscopic appearance the outer surface is haemorrhagic, irregular & soft. Metastasis is by - blood stream - to lungs and kidneys. Through lymphatics - to pelvic LN in stage I & II (35% paraortic LN 15%). By direct spread - metastasis in peritoneum and omentum.

Mitotic count more than 10/HPF and atypical cell is warning sign. Treatment of stage I & II uterine sarcoma should include total abdominal hysterectomy with bilateral salpingo-oophorectomy & treatment of pelvic lymphatics by radiation/surgery. Strong consideration should be given to the use of adjunct chemotherapy to decrease the incidence of distant metastasis. Commonly used chemotherapeutic agents are vincristine, adriamycin (doxorubicin) and cyclophosphamide. Though surgical resection is beneficial for improving patient outcome, the 5 year survival rate for patient with stage I ULMS is 53% & 8% for stage II-IV.

CONCLUSION

The prognosis for women with uterine sarcoma primarily depends on the extent of disease at the time of diagnosis and mitotic index.³ Women with tumor size >5 cm in maximum diameter have poor prognosis. These tumours should be diagnosed and managed with no delay and must be followed vigilantly as the rate of recurrence & metastasis is very high.

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