Uterine Sarcoma: Case Reports of Two Histological Variants

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Uterine sarcomas are rare tumours of mesodermal origin and constitute less than 1% of all gynaecologic malignancies and 2-6% of all uterine malignancies. The three most common histological variants of uterine sarcoma are Endometrial Stromal Sarcoma (ESS), Leiomyosarcoma (LMS), and Malignant Mixed Mullerian tumour (MMT) of both homologous and heterologous type. The only documented etiological factor in 10-25% cases is prior pelvic radiation. The prognosis for uterine sarcoma is primarily dependant on the extent of the disease at the time of diagnosis.

Surgery is the mainstay of the treatment for stage. I-III and should include total hysterectomy with bilateral salpingo-oophrectomy, and treatment of the adenopathy by irradiation or surgery. Stage IV disease must be treated with combination chemotherapy.

We report 2 cases of these rare tumours in postmenopausal women with no history of prior radiotherapy. Both the cases differed markedly in their clinical presentation.

Case 1

A 57 year old, Para 5, LD 25 years ago, postmenopausal for 15 years, presented in the Gynaec OPD with H/O progressive pain in lower abdomen for the last six months, watery discharge P/V since three months, blood stained since the last two months. There was H/O menorrhagia preceding menopause. There was no history of prior radiation.

On examination patient was obese, B.P. was 140/100 mm of Hg and there was no significant adenopathy.
P/A examination was unremarkable. P/S examination
revealed polypoidal growth protruding through os with

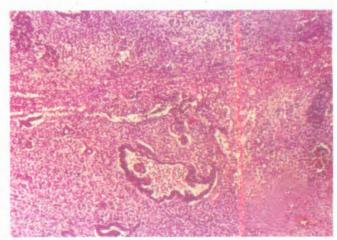


Fig. 1 : Microphotograph showing Mixed Mullerian Tumour (Low power).

dirty discharge. On P/V the uterus was enlarged corresponding to 10-12 weeks of pregnancy. Fornices were clear. Investigations included haemogram, renal profile, blood sugar, x-ray chest and ECG, which were within normal limits. Ultrasound suggested possibility of a growth within the endometrial cavity. With a provisional diagnosis of Endometrial carcinoma, the endocervical growth was biopsied. Histopathology revealed carcinosarcoma mixed Mullerian tumour. Exploratory laparotomy was undertaken three days later. At laparotomy the uterus was uniformly enlarged to 10-12 weeks of pregnancy and was soft in consistency with smooth external contour. Both ovaries were atrophic. The para-aortic nodes appeared grossly normal. A total abdominal hysterectomy with bilateral salpingooophrectomy with wide vaginal cuff excision was done. On cut section the uterine cavity was filled with friable polypoidal growth measuring 70x70mm. An ill-defined nodule was seen in the upper part of the cervix. No

myometrial invasion was appreciated. HPE revealed a mixed pattern, i.e., papillary endometrial adenocarcinoma involving entire endometrial cavity and carcinosarcoma (Malignant Mixed Mullerian tumour) from isthmus (Fig.1). There was intermingling of these two patterns at the junctional area. Both ovaries and tube were unremarkable. Postoperative period was uneventful. The patient was discharged on the 12th post operative day and referred for radiotherapy.

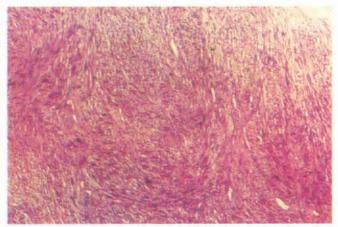


Fig 2: Microphotograph showing Sarcomatous Degeneration in Fibroid (low power)

Case 2

A 45 yrs old, Para 6, post menopausal lay, presented to us on 7.7.99 with the c/o retention of urine off and on for one month and an abdominal lump noticed since two months. She attained premature menopause at 30yrs. Her previous menstrual history was normal. She had no history of diabetes, weight loss, weakness or any discharge or bleeding per vaginum.

On examination she was thin and hypertensive (190/120 mmHg). On P/A examination an intraabdominal mass of 24-week size of pregnancy with nodular surface and firm with restricted mobility was seen arising from pelvis. On P/S examination the cervix was atrophic, pulled high up and pushed to left. On P/V examination the same mass was felt through posterior and lateral fornices dissecting the rectovaginal septum almost upto the introitus. Uterus was inseparable from the mass. No bleeding or vaginal discharge was noted.

On P/R examination the rectal mucosa was free. The mass was felt to extend up to right pelvic wall.

Relevant investigations were within normal limits. On USG a large solid multilobulated mass attached to the posterior surface of uterus was seen. Both ovaries were normal. MRI revealed a large multilobulated mass showing a whorled appearance, occupying whole of true pelvis inseparable from the uterus. IVU revealed a large indentation on the right side of the urinary bladder by a large soft tissue density mass that was also compressing / encasing the lower right ureter with resultant hydroureteronephrosis.

With a provisional diagnosis of an impacted fibroid uterus with? malignant change, the patient underwent laparotomy, which revealed a large lobulated mass, measuring 15x20x7 cm, comprising of multiple fibroids arising from the right postero-lateral uterine wall encroaching onto the right broad ligament almost up to the pelvic wall and a large cervical fibroid deeply impacted in the true pelvis obliterating the POD. The tumor was extremely vascular with variable consistency, at places soft and friable. The bladder was adhered and pulled right up to the round ligament and stretched over the anterior cervical fibroid. The ileal and the rectosigmoid loops were also adhered posteriorly. Fibroids were enucleated and a hysterectomy with bilateral salpingo-oophrectomy with removal of cuff of vagina was performed. There was considerable bleeding from the tumor base. Haemostasis was ensured using vascular clamps and fresh blood transfusion. Post-operative period was uneventful. Histopathological examination revealed leiomyoma with secondary changes with some sections showing features of leiomyosarcoma like increased mitotic figures and marked pleomorphism of tumour cells including bizarre forms. Therefore it was diagnosed as leiomyoma with sarcomatous changes (Fig. 2). The patient was subsequently referred for adjuvant radiotherapy. On follow up a year later patient is well with no local recurrence.

The above cases emphasize the need to consider sarcomas in rapidly enlarging uterus or vaginal bleeding with polypoid mass protruding through a dilated cervix in post-menopausal patients.