

Introduction:

Broad ligament LMS is very rare with less than 30 cases reported in English literature. Gardner et al. proposed the definition of tumor of broad ligament as “Tumors occurring on or in the broad ligament and completely separated from and in no way connected with either the uterus or the ovary”.

Case report:

A 60-year-old postmenopausal female presented with complaints of mass per abdomen and history of weight loss since 6 months and fever since 2 days. Per abdominal examination showed a pelvic mass of 24 weeks gravid uterus size with variable consistency. Ultrasound examination showed heterogenous abdominopelvic mass of 19.7x11cm causing mass effect on bowel loops, bladder and uterus. Contrast CT showed additional areas of necrosis. Tumor markers were within normal limits. Patient underwent exploratory laparotomy with retroperitoneal tumor excision with total abdominal hysterectomy with B/L salpingo-oophorectomy. A retro peritoneal mass of 16x10x8cm was sent for HPE and reported as broad ligament leiomyosarcoma. IHC was positive for Desmin and Smooth muscle Actin (SMA).

Discussion:

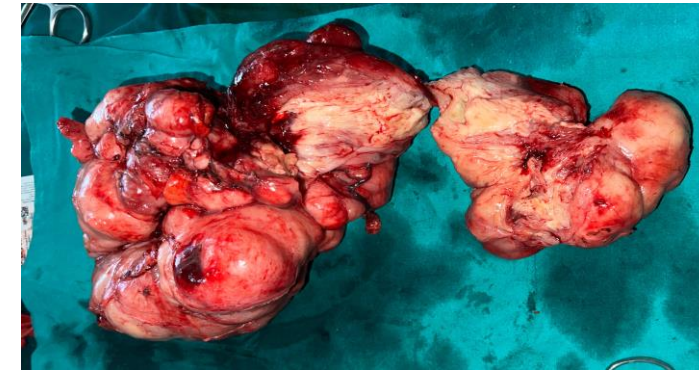
LMS occurs commonly in postmenopausal women. The clinical manifestations of the cases are nonspecific including abdominal pain, distension, nausea, constipation, and malaise. The diagnosis of LMS relies on the presence of three criteria: coagulative tumor cell necrosis, cytologic atypia, and mitotic activity. In the absence of cell necrosis, the diagnosis of LMS needs diffuse moderate to severe cellular atypia and more than 10 mitoses/10 HPFs. IHC studies showed the tumor cells to be positive for SMA, Desmin and Vimectin. Initial treatment is usually excision of mass, followed by total abdominal hysterectomy, and bilateral salpingo-oophorectomy with or without adjuvant chemotherapy and radiotherapy.

Conclusion :

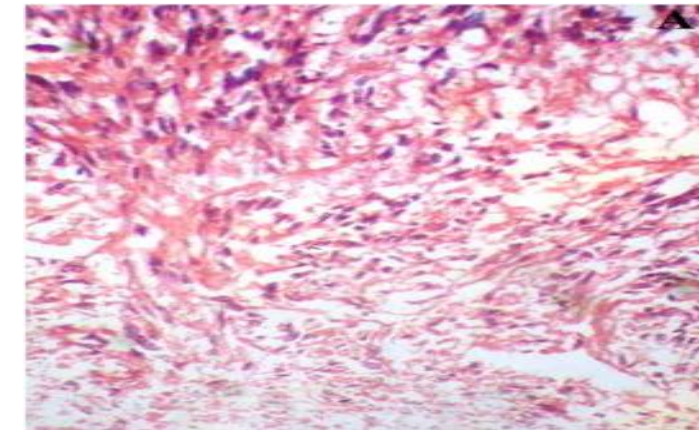
Primary leiomyosarcoma of the broad ligament is a very rare and highly malignant gynecological tumor. High index of suspicion, early diagnosis and prompt surgical intervention can prevent distant metastasis and increase the survival rate.

References:

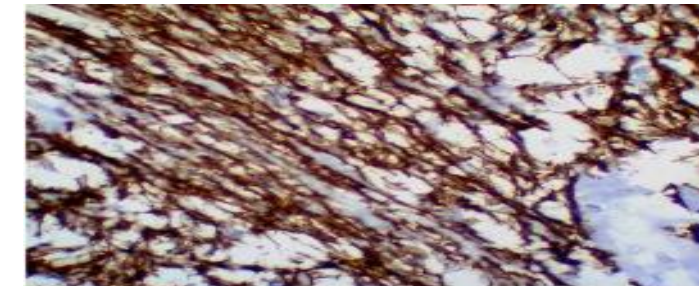
Gardner G.H., Greene R.R., Peckham B.: “Tumors of the broad ligament”. Am. J. Obstet. Gynecol., 1957, 73, 536
 Gupta D, Singh G, Gupta P et al (2015) Primary leiomyosarcoma of the broad ligament: a case report with review of literature. Human Pathol Case Rep 2(3):59–62



Specimen after tumor excision



Malignant spindle cells with areas of necrosis



IHC positive for SMA