

Giant myxoid liposarcoma of mesentery: A rare case with review of literature.

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Abstract

Myxoid Liposarcoma is the most common type of liposarcoma, commonest location being extremities and retroperitoneum. Primary myxoid liposarcoma of mesentery is rare. These cases are diagnosed late because of their location and insidious progression.

We report a case of myxoid liposarcoma arising from the mesentery in a 50-year-old male patient presenting with abdominal distension for 6 months. The case is presented to highlight its giant size, rare location as well as its insidious course.

Keywords: Giant, Liposarcoma, Mesentery, Myxoid.

Introduction

Myxoid Liposarcoma is the most common type of liposarcoma. It arises from the adipose tissue of the extremities as well as retroperitoneum^{1,2,3}. Primary

mesenteric myxoid liposarcoma is very rare². We describe a case of giant myxoid liposarcoma arising from mesentery to highlight its clinical course, pathological features and treatment protocol.

Case report

50-year-old male patient presented with complaint of abdominal distension and abdominal mass for 6 months accompanied with constipation. Computed tomography scan of the abdomen and pelvis revealed a primary neoplasm of the mesentery displacing colon posteriorly and was diagnosed as desmoid tumour on radio-imaging modalities. Exploratory laparotomy was performed and the mass was removed surgically. The mass along with the omentum and intra-abdominal lymph nodes were sent for histopathological examination.

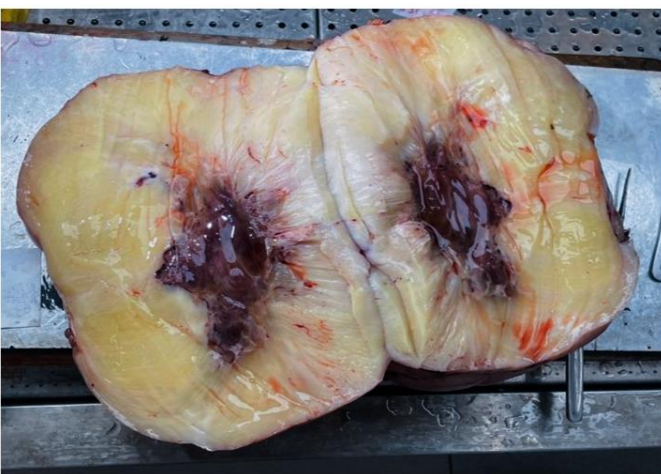
Histopathological examination

Gross examination

Histopathological examination revealed a huge tumour received in two parts, both being huge, grey white to grey yellow bosselated masses. Larger mass measured 40 x 30 x 30 cm and weighed 10 kg while smaller mass measured 30 x 20 x 20 cm and weighed 8 kg. Cut section of both masses revealed gelatinous grey white to grey yellow appearance with focal areas of hemorrhages. Figure 1: Giant, bosselated tumour masses received in 2 parts



Figure 2: Cut section of tumour showed lobulated, gelatinous, grey yellow to grey white areas with focal areas of hemorrhages.



Microscopy

Microscopy revealed a soft tissue tumour composed of stellate cells and spindle cells evenly distributed in a

myxoid stroma. Round lipoblasts were seen which showed enlarged vesicular nuclei with heterogenous chromatin and vacuolated cytoplasm. Plexiform vasculature composed of thin-walled arborizing and curving capillaries resembling chicken wire fencing appearance was noted.

Considering these features, the tumour was diagnosed as giant myxoid liposarcoma arising from mesentery. Excised omentum and intraabdominal lymph nodes were free from tumour.

Figure 3: Microscopy revealed stellate cells set in a myxoid stroma with thin-walled arborizing and curving capillaries resembling chicken wire fencing appearance (40X H&E).

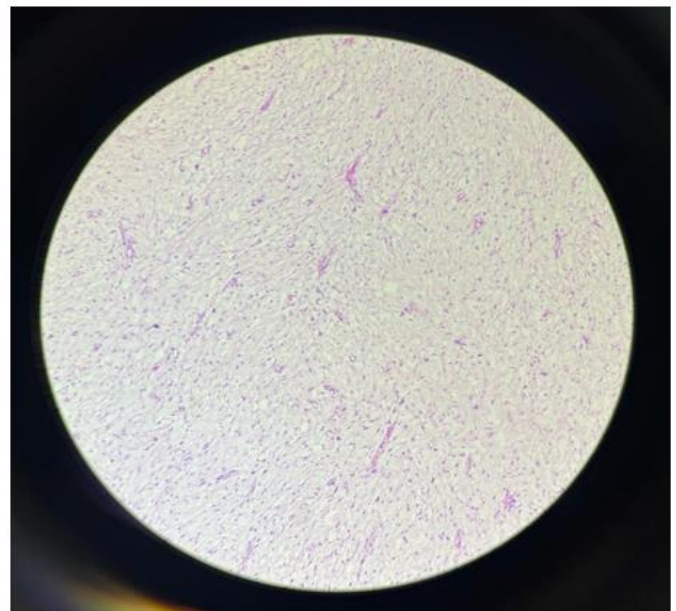
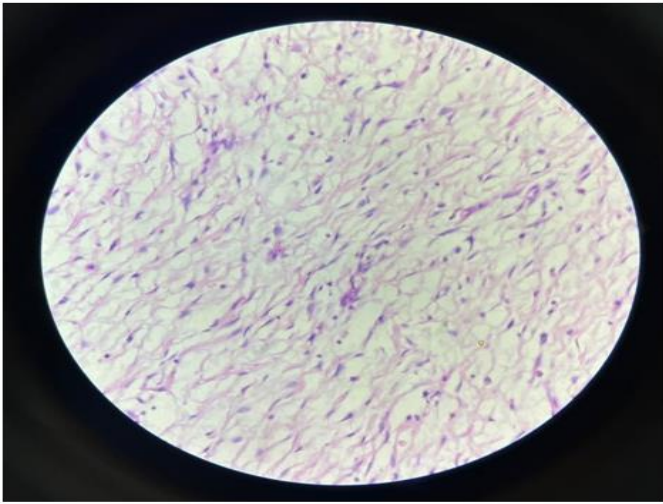


Figure 4: Round vacuolated lipoblasts with eccentrically placed nuclei are noted. (100 X, H&E)



Discussion

Myxoid liposarcoma is histologically defined as a tumour composed of lipoblasts and myxoid stroma with characteristic fine branching vessels⁴. WHO has defined liposarcoma into 4 types namely myxoid liposarcoma (56.2%), well differentiated liposarcoma (21.9%), pleomorphic liposarcoma (17.8%) and dedifferentiated liposarcoma (6.8%)¹. Myxoid subtype has higher risk of metastasis and recurrence⁵. Mean age group is 42 years with male predominance^{6,7}. In our case, the patient was a 50-year-old male. Clinical presentation of myxoid liposarcoma in mesentery is gradual abdominal distension, abdominal pain, urinary obstruction and occlusive symptoms². In our case, the clinical presentation was abdominal distension, abdominal pain and constipation. In case of abdominal location, ultrasound is the first line of investigation which shows a multilobated mass of variable size⁸. The mesenteric origin is suggested by presence of intestinal loops in between the tumour tissue and anterior abdominal wall⁸. On gross examination, the tumour is soft to firm and fleshy. Cut section shows gelatinous appearance with yellowish tinge⁸. Immunohistochemical examination is not indicated in the presence of histomorphological features. Findings of immunohistochemistry are

excretion of S100 protein and absence of HMGA2 and MDM2⁶. The prognosis of this tumour is based on its location and histological type. In abdominal location, the prognosis is worse. Five-year survival rate of myxoid liposarcoma is 41.9% in case of abdominal location versus 66.7% for other sites⁷. The treatment is complete surgical excision with wide surgical margins followed by radiation with or without chemotherapy in high risk patients⁸.

Conclusion

Primary myxoid liposarcoma in mesentery is extremely rare. Because of its insidious evolution, the diagnosis is often late. Histopathological examination plays a pivotal role in the diagnosis hence deciding the course of proper management for the patient.

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