Huge Liposarcoma of the Sigmoid Mesocolon: A Case Report

Liposarcoma is one of the most common primary neoplasms of the retroperitoneum. Mesenteric liposarcoma is rare, and to the best of our knowledge, only five cases of liposarcoma of the mesocolon have been reported in the English literature. The objective of this article is to represent a large well-differentiated liposarcoma of the sigmoid mesocolon (50×40×10 cm) in a 35-year-old man. Based on Medline search, this case is the largest case of liposarcoma of the sigmoid mesocolon reported in a relatively young patient.

Keywords: Liposarcoma, Mesentery, Mesosigmoid

Introduction

Liposarcoma is a malignant soft tissue tumor with a mesenchymal origin that has characteristic radiological and clinicopathological aspects. The most common location of liposarcoma is the lower extremities (56%) followed by the retroperitoneum (15-20%). Primary liposarcoma of the mesentery is rare and typically occurs in the fifth to seventh decade of life, with a slightly higher incidence in males than females.

Liposarcoma arising from the mesocolon is rare and only few cases of liposarcoma of the sigmoid mesocolon have been reported in the foreign literature. Although most liposarcomas weigh less than 1 kg, they may reach a very large size. There are reports of a 42 kg, a 28.6 kg, and an 18 kg mass in the published literature, but they are retroperitoneal in location. Liposarcomas are classified into five histological types, the most common type is the myxoid (50%) followed by the well-differentiated type (25%).

Here is a report of a huge (50×40×10 cm) well-differentiated liposarcoma of the mesosigmoid occurring in a 35-year-old man. To the best of our knowledge, there is no report of such a huge mesosigmoid liposarcoma in the English literature.

Case Presentation

A 35-year-old man presented with a 5-month history of constipation, nausea, vomiting, progressive enlargement of the abdomen and 8 kg weight loss. Physical examination revealed asymmetrical enlargement of the abdomen by a firm mass. Routine laboratory tests were normal except for anemia. Ultrasonography revealed a huge inhomogeneous hyperechogenic mass involving almost the entire abdomen.

On CT scan with oral and intravenous contrast, the extension of the mass was from the level of the liver down to the level of the urinary bladder. Although the main density of the mass was fatty, areas of soft tissue density and septation were also seen. The abdominal organs were displaced to the right and posterior by the huge mass (Figs. 1 & 2). The origin of the mass seemed to be from the left mesocolon. The differential diagnoses were retroperitoneal and peritoneal liposarcoma and other...
fatty abdominal masses.

At laparotomy, a large yellowish mass was detected adherent to the transverse and sigmoid colon. The sigmoid mesocolon was thick and the blood supply of the mass was through the mesosigmoid. The small intestine was pushed to the right and posterior by the mass. The tumor was separated from the transverse colon. The sigmoid and its mesocolon were resected. The size of the excised tumor was 50×40×10 cm.

Macroscopically, the mass was large, yellowish grey and without a capsule, while the microscopic examination showed a well-differentiated liposarcoma.

The patient was discharged from the hospital in good condition, and a two-year-follow-up showed no evidence of recurrence.

Discussion

The two most common locations of liposarcoma are the extremities and retroperitoneum.\textsuperscript{1-3} Mesenteric liposarcoma is rare.\textsuperscript{1,2,5-9} The small bowel mesentery is more usually involved. Liposarcoma, according to the World Health Organization, is classified into five histological types; namely, well-differentiated, dedifferentiated, myxoid, pleomorphic and the mixed type.\textsuperscript{13,14}

Up to now, there has been only five reported cases of mesocolon liposarcoma in the English literature,\textsuperscript{15} of which one was a case of dedifferentiated liposarcoma of the sigmoid mesocolon\textsuperscript{14}.

Some of the most common presenting symptoms in liposarcoma of the mesocolon are increasing abdominal girth, weight loss, constipation and abdominal discomfort. The patient in this case presented with the chief complaint of weight loss, progressive enlargement of the abdomen and constipation.

The first imaging modality for detection of an abdominal mass is ultrasonography, which in the present case showed a large, inhomogeneous and slightly hyperechoic mass.

Radiological imaging also affords evidence regarding diagnosis. One of the proper methods is CT scan which can demonstrate important characteristic findings such as the precise location, the extent of invasion and displacement of normal anatomic structures which are all helpful in distinguishing the location of the tumor.\textsuperscript{16}

In the present case, CT scan revealed a huge mass mostly showing fat density with islands and strands of soft tissue density (Fig. 1). The mass occupied almost the entire abdomen from the anterior to the posterior. Anatomic organs were displaced to the right and the posterior, indicating an intraperitoneal location of the mass. Accordingly, the origin of the tumor was on the left side (Fig. 2).

From the radiologic point of view, all fat-containing abdominal masses may be mentioned in the differential diagnosis.\textsuperscript{17} The treatment of choice is surgical resection with a sufficient surgical margin,\textsuperscript{18-20} which was done for this patient. Prognosis is based upon the histological subtype of the lesion. Well-differentiated lesions are considered low-grade malignancies.\textsuperscript{21,22}

Although few cases of liposarcoma of the sigmoid mesocolon have been reported before, such a huge tumor as in the present case has not been reported in a relatively young man.

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Fig. 2. A 35-year-old man with liposarcoma of the sigmoid mesocolon. A&B. CT scan shows huge inhomogeneous fat density mass filling almost the entire abdomen. The small bowel loops are displaced to the right and posterior by the mass.

References