Giant retroperitoneal lipoma

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Case report: This is a case report of a retroperitoneal lipoma. The patient was admitted with complaints of abdominal distention and early satiety. Contrast enhanced CT scan of abdomen showed a large mass of fat density arising from the retroperitoneum measuring 30 x 25 x 20 cm displacing the left kidney towards the midline and anteriorly. Fat plane was maintained with surrounding structures. The patient underwent exploratory laparotomy and the lipoma was excised. The lesion measured 30 x 20 cm and weighed 5.1 kg. Since the left kidney was displaced anteriorly and towards the midline, nephropexy was performed. Histopathology revealed benign lipoma. Post operative period was uneventful.

Key words: Lipoma, retroperitoneal mass, displaced kidney.

Introduction

Primary retroperitoneal lipomas are rare benign tumors that usually present as an abdominal mass or with patient complaints of pressure symptoms to adjacent organs.\(^1\) Histologically, lipomas originate from mature adipose tissue of the retroperitoneum, mesentery, or the gerotas fascia.\(^2\) Retroperitoneal lipomas must be carefully differentiated from liposarcoma of low-grade malignancy, in order to provide the correct treatment and postoperative follow-up\(^3\). A low grade liposarcoma is difficult to differentiate from a benign lipoma based solely on CT scan or MRI findings, but areas of enhancement or necrosis, and irregular margins are often seen on the CT scan of a liposarcoma.\(^4,5\)

Case report

A fifty year old lady presented with gradual abdominal distension and early satiety for duration of one year. She had history of weight loss of 10 kgs in one year. There was no history of fever, pain abdomen, and change in bowel or bladder habits. Her past medical history was insignificant. Physical examination findings revealed diffuse abdominal distension which was soft in consistency without any well-defined margins and dull on percussion. Abdominal ultrasonography (USG) revealed homogeneous hyperechoic lesion in the retroperitoneum displacing the left kidney anteriorly and medially. CT abdomen showed a large hypodense diffuse non enhancing mass lesion noted to be arising from the left side of abdomen and pelvis crossing the midline and occupying the right side as well (fig. 1).

Fig. 1: Giant retroperitoneal lipoma
The HU value was -107 suggestive of fat. Small bowel loops were aggregated to the right side and left kidney anteriorly (fig.2). The lesion was suggestive of lipoma.

Grossly the mass was 30 x 26 x 17 cm in size and weighed 5100 grams (fig.5). On cut section, lipomatus areas with focal hemorrhage were detected. The cut surface of the tumor was almost completely uniform light-yellowish color. The histopathological examination revealed benign neoplasm of fatty cells suggestive of lipoma (fig.6).

**Discussion**

Lipomas are the most common benign tumors of the adipose tissue. According to histopathological findings, they are subclassified into conventional lipoma, fibrolipoma, angiolipoma, fusiform cell lipoma, myelolipoma and pleomorphic lipoma. Retroperitoneal lipomas are extremely rare, slowly growing benign tumors of adipose tissue. Microscopically, lipomas consist of multivacuolated cells, small eosinophilic cells, and univacuolated adipocytes. Classic lipomas have CT characteristics similar to subcutaneous fat (between -65 and -120 Hounsfield units). Magnetic resonance imaging will reveal an intense signal on T1-weighted images. Retroperitoneal lipomas are relatively more common in adults with greater predisposition in females. Differential histopathological diagnosis with liposarcoma may be problematic, especially for tumors with low grade malignancy, which are denominated lipoma-like. Pathological examination for mitotic activity, cellular atypia, necrosis, and invasion allows for a definitive diagnosis. Total excision is the treatment of choice. As the lesion is well encapsulated without any infiltration to surrounding structures, resection is not problematic if performed in correct plane.
Conclusion

Giant retroperitoneal lipoma is a rare entity which presents as abdominal distension without associated symptoms. CT scan is helpful for planning resection. Intraoperatively these lesions are well encapsulated and total excision is the treatment of choice.

Reference