Giant intra-abdominal liposarcoma

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CASE REPORT

We report the case of a 67-year-old male with epigastric pain and weight loss during the last nine months. Physical examination revealed a hard palpable mass in the epigastrium. An abdominal ultrasound identified a large, heterogeneous and hypovascular mass, which compressed the left hepatic lobe and the pancreas (Fig. 1). An abdominal contrast-enhanced computed tomography (CT) was performed and a large soft tissue mass, polylobulated, with an intra and retroperitoneal localization was found (Fig. 2). The diagnosis of dedifferentiated liposarcoma was achieved via a core needle biopsy (Fig. 3). The patient was referred for surgery and a laparotomy was performed. A mass of 30 x 30 cm and 3 kg in weight was found, which was resected together with a segment of infiltrated small bowel. The histological diagnosis was a dedifferentiated liposarcoma with submucosal infiltration of the duodenum.

DISCUSSION

Soft tissue sarcomas are rare neoplasms representing < 1% of tumors in adults. Between 12-15% are located in the retroperitoneum (1). They are often incidental findings and can reach large sizes before symptoms occur (2). The most common type in adults over 55 years of age is liposarcoma (> 40%). Contrast-enhanced CT is the first-line investigation and core needle biopsy usually confirms the histological diagnosis. Differential diagnosis includes tumors with a fatty component such as renal angiomyolipoma, adrenal...

Fig. 1. Abdominal ultrasound (transverse section) showing a heterogeneous hypoechogenic mass which is located next to different structures: inferior vena cava (VCI), abdominal aorta (Ao) and vertebral body (CV). The mass measures 15 centimeters (yellow arrows) and compresses the left hepatic lobe (LHI) and the pancreas.

Fig. 2. A. Abdominal contrast-enhanced CT in the portal phase, MPR reconstruction and coronal section. A large bilobed intraperitoneal soft tissue mass that displaces the root of the mesentery is seen with a heterogeneous density and hypodense tracts, compatible with a fatty tumor. The arrows indicate two hypodense nodules with more fat, within the duodenum. B. Left parasagittal section: two large hypodense nodules, with a lot of fatty tissue in the anterior pararenal space and retroperitoneum (arrows).

Fig. 3. Hematoxylin-eosin staining. Dedifferentiated liposarcoma: most of the tissue is composed of spindle cells, interspersed with multinucleated “floret type” cells (black arrow). Atypical adipocytes and lipoblasts are identified among them (yellow arrow).
myelolipoma, lipomas, hibernomas and extragonadal germ cell tumors. However, the absence of macroscopic fat on CT does not exclude the diagnosis of liposarcoma. Surgery is the definite treatment of these tumors but radiotherapy and/or systemic chemotherapy can also be associated (3).