Letters to the Editor

Hepatic adenomatosis: A rare cause of liver transplant

Key words: Hepatic adenomatosis. Liver transplant.

Dear Editor,

Hepatocellular adenoma is the most common benign epithelial liver tumour, with an estimated average incidence of 3 cases/million people/year. It was first described by Edmondson in 1958 (1,2).

Hepatic adenomatosis (HA) was described by Flejou et al. in 1985, who reported 13 patients with multiple hepatocellular adenomas. The diagnostic features were: a) Presence of multiple hepatic nodules; b) similar distribution in both sexes; c) no confirmed association with prolonged oral contraceptive intake; d) presence of elevated serum alkaline phosphatase and GGT. Fewer than 4% of all HA cases require orthotopic liver transplantation (OLT) (3).

Case report

A female, 31 years-old, with a long history of oral contraceptive use, presented in the emergency room with acute abdominal pain and dyspepsia. Physical examination revealed moderate hepatomegaly. She presented moderate anaemia and liver function tests were normal. An abdominal CT identified a large liver mass measuring 17 x 16 cm, with a heterogeneous appearance and signs of bleeding, located in the right hepatic lobe (Fig. 1A). A fine needle aspiration was performed, which revealed no evidence of malignancy. The patient underwent a right hepatectomy.

The removed piece of liver measured 22 x 18 x 14 cm and weighed 2,300 g. Gross multiple nodular lesions with intratumoral haemorrhagic areas were observed (Fig. 1B). Microscopic examination revealed hepatocytes with foamy cytoplasm, with round nuclei and multiple uniform adenomatous nodules with varying degrees of steatosis (Fig. 1C). Taken together, the clinico-pathological findings were consistent with an HA with extensive involvement of the right hepatic lobe. Two years later, two new small lesions were observed in the left hepatic lobe. These were also resected (Fig. 1D).

After four asymptomatic years, the patient presented again with a clinical picture of acute abdominal pain. Abdominal CT revealed two large liver tumour lesions (Fig. 1E). Finally, the patient underwent an OLT (Fig. 1F). Three years later, she continues to be healthy and disease-free.

Discussion

The customary treatment of HA with localised lesions in one lobe is partial surgical resection by segmentectomy, hemi-hepatectomy or extended lobectomy (4-6).

Patients with multifocal lesions should be periodically monitored by serial measurements of serum alpha-fetoprotein and the periodic use of imaging techniques, principally magnetic resonance imaging, carried out at least, annually.

Disease progression is confirmed by the presence of large subcapsular adenomas (> 4 cm). The risk of malignancy and the presence of persistent symptoms are indications for performing partial resections of multifocal lesions. Partial resection is the preferred option, unless this is technically impossible (7,8).

Liver transplantation is the last therapeutic option. The indications for carrying this out include continuously elevated serum AFP, suspicion of malignancy from imaging techniques and/or PAF or BAF positivity in highly symptomatic patients, or those with marked hepatomegaly, or a history of repeated complications of adenomas, as occurred in the case described here (9,10).
Fig. 1. CT and pathological studies. A. Contrast-enhanced CT at the onset of the disease, showing a huge mass (white arrow) in the right hepatic lobe. Zones are observed with intratumoral bleeding (white arrowheads). B. Right hepatectomy. Several nodules yellowish-brown in colour, well defined and different sizes and shapes (black arrows). Presence of intratumoral bleeding (arrowhead). C. Microscopy of the liver corresponding to the right hepatic lobe resection. To the left is the normal parenchyma adjacent to the tumour, showing no remarkable changes (black asterisk). To the right, there is a well-defined area corresponding to one of the hepatic tumours. Steatotic changes occur with preserved architecture (white asterisk). Methenamine silver stain, 100x. D. Contrast-enhanced CT prior to the two lumpectomies. Presence of two isodense subcapsular nodular lesions (white arrows). E. Contrast-enhanced CT prior to OLT. Liver enlarged, occupying most of the abdominal cavity. Presence of two large liver tumour lesions (white arrows) with areas of intratumoral haemorrhage (white arrowhead). F. Post-contrast CT of OLT. Presence of post-surgical changes.
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References