LETTER / Gastrointestinal imaging

Primary plasmacytic hepatic lymphoma mimicking hepatocellular tumor on MR imaging

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Dear Editor,

Plasmacytic hepatic lymphoma is a rare type of tumour whose presentation may be misleading on imaging. This is a case report about a 50-year-old man with a history of non-Hodgkin’s lymphoma (NHL) treated by chemotherapy and who had been in remission for 6 years. CT scan monitoring revealed a large, hypoattenuating hepatic lesion with no calcifications. No involvement of peripheral or distant lymph nodes or splenomegaly or other visceral lesions were observed. Abdominal MR imaging examination (Figs. 1–4) confirmed the presence of a well-delineated, lobulated mass located in segments 6, 7 and 8 and measuring 18 × 13 cm in the axial plane. The lesion was hyperintense on T2-weighted images and showed rapid enhancement after intravenous administration of a gadolinium chelate. The lesion was surrounded by a hypointense capsule presenting areas of retraction in contact with the lesion with a finger-shaped central area, hyperintense on T2-weighted images.

Figure 1. MRI, axial T2-weighted slice. A well-delimited, moderately hyperintense liver lesion with a lobulated contour and a markedly hyperintense central scar (arrow) is visible in segments VI, VII and VIII.

Figure 2. During the arterial phase of the gadolinium chelate injection, moderate, heterogeneous, early enhancement of the lesion was observed with no enhancement of the scar (arrow).

Figure 3. Homogenization of the lesion in the venous phase.
and showing slow enhancement after contrast injection. Anatomopathological examination of tissue sample obtained by percutaneous puncture of the lesion revealed the presence of a plasmacytic hepatic lymphoma (Figs. 5 and 6).

Discussion

On imaging, hepatic lymphoma often presents as solitary lesion with diameter of up to 20 cm [1]. A central area showing slow enhancement mirrors that of focal nodular hyperplasia and fibrolamellar hepatocellular carcinomas [2,3].

The MR imaging features of the lobulated lesion that enhances rapidly after gadolinium-chelate injection with a central stellar area that enhances slowly is suggestive of fibrolamellar hepatocellular carcinoma in which central calcifications may be present in 50% of tumors as well as areas of necrosis [2,3]. Enhancement was intense but heterogeneous with no enhancement of the central part, which was hypointense in T1- and T2-weighted images. However, delayed enhancement of the scar was unusual [2,3].

Capsular retraction adjacent to a hepatic tumour is very suggestive for malignancy, being associated with epithelioid hemangioendotheliomas, intrahepatic cholangiocarcinomas and breast cancer liver metastases [4,5]. However, the sign is not pathognomonic because it has also been described with benign tumours such as sclerosing hemangiomas [4,5].

The prevalence of hepatic lymphomas secondary to NHL is estimated to be between 15 and 60% [6,7]. Diagnosis and localisation of lymphoproliferative disease in the liver is easy when the lymphoid cell infiltrate has the same cyto- logical and immunohistochemical features as the primary lymph node lesion [7]. Splenic involvement is almost always present.

The criteria used for the diagnosis of primary NHL of the liver are the presence of a solitary hepatic lesion with no lymph node involvement or splenomegaly or other visceral lesions and an absence of concomitant haematological disorders [7]. 18FDG PET/CT scanning is very useful for assessing the extent of lymphoma and to confirm that the tumour has a single location [8].

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

References


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