

Intermittent fever in a patient with apparent fatty liver

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Gut 2006;55;774doi:10.1136/gut.2005.078378

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EDITOR'S QUIZ: GI SNAPSHOT

Intermittent fever in a patient with apparent fatty liver

Clinical presentation

A 41 year old female presented with non-specific abdominal pain and intermittent hyperpyrexia (38°C); she had been recently treated for apical granulomas with an otherwise negative medical history and clinical examination, including a normal body mass index. At presentation the patient had not received any medication for the past two weeks.

Laboratory investigations were within normal limits apart from: erythrocyte sedimentation rate 30 mm (normal range 5–20), aspartate aminotransferase/alanine aminotransferase 49/62 U/l (normal range 13–37/7–43), and serum alkaline phosphatase 168 U/l (normal range 44–132). Blood cultures were negative.

A chest *x* ray revealed no lesion and liver sonography demonstrated a patchy hypo-hyper-echoic polycyclic area in the anterior-superior parenchyma compatible with segmental fatty liver. Thoracic abdominal contrastographic computed tomography confirmed a large regular polycyclic borders area, hypodense compared with the remaining parenchyma, with no mass effect and/or any displacement of the vessels, resembling focal fatty areas (fig 1A, B); no other pathological

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Robin Spiller, Editor

signs were found except for small lymphoadenopathies adjacent to frenic pillars.

Question

Is it really fatty liver? What is your diagnosis? *See page 823 for answer* This case is submitted by:

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doi: 10.1136/gut.2005.078378

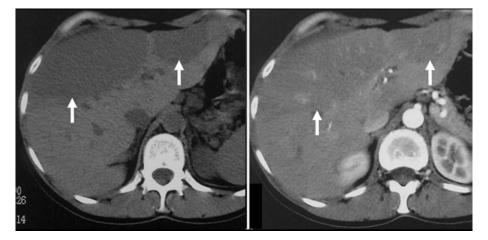


Figure 1 Direct (A) and iodinated (B) spiral computed tomography scans revealed regular polycyclic borders area (white arrows), hypodense compared with remaining parenchyma, with no mass effect and/or any displacement of the parenchymal vessels.



Answer

Gut 2006;55;823-

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EDITOR'S QUIZ: GI SNAPSHOT

Answer

From question on page 774

Magnetic resonance examination confirmed liver alteration (fig 2A, B) but without features typical of a fatty area (usually showing high signal intensity at T1 and highmedium at T2 acquisitions). Full biopsy demonstrated diffuse homogeneous stromal lymphocytic infiltration of the parenchyma (fig 3).

In the case of primary hepatic lymphoma, the most probable finding is a single well defined homogeneous lesion, hypoechoic at ultrasound and low attenuation at computed tomography: however, no group of signs is specific for its diagnosis and biopsy is always required. Conversely, secondary liver lymphoma can have a greater variety of appearances and is more likely to be multiple/diffusely infiltrating lesions.

Nevertheless, the exclusive diffuse infiltration of the upper portions of the organ with regular borders and without vessel displacement constitutes a very unusual presentation. This is probable due to stromal infiltration by slow growth, soft tissue of small lymphomatous cells without great nodules; consequent ultrasound waves scattering could also explain the patchy hypo-hyper-echoic pattern.

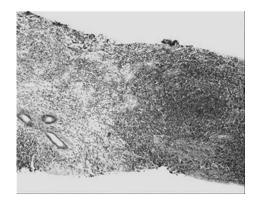


Figure 3 Haematoxylin-eosin staining shows diffuse lymphomatous invasion of liver tissue (magnification ×10).

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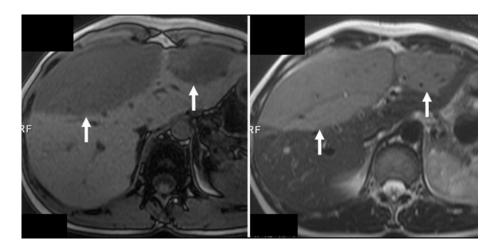


Figure 2 Magnetic resonance scans confirming the presence of ultrasound/computed tomography detected area (white arrows), which appears hypointense at T1 (A) and hyperintense at T2 (B) weighted acquisition.