

# Inflammatory Pseudotumor of the Liver: Clinical Case

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## Keywords

Inflammatory pseudotumor of the liver · Liver biopsy ·  
Nonsteroidal anti-inflammatory drugs

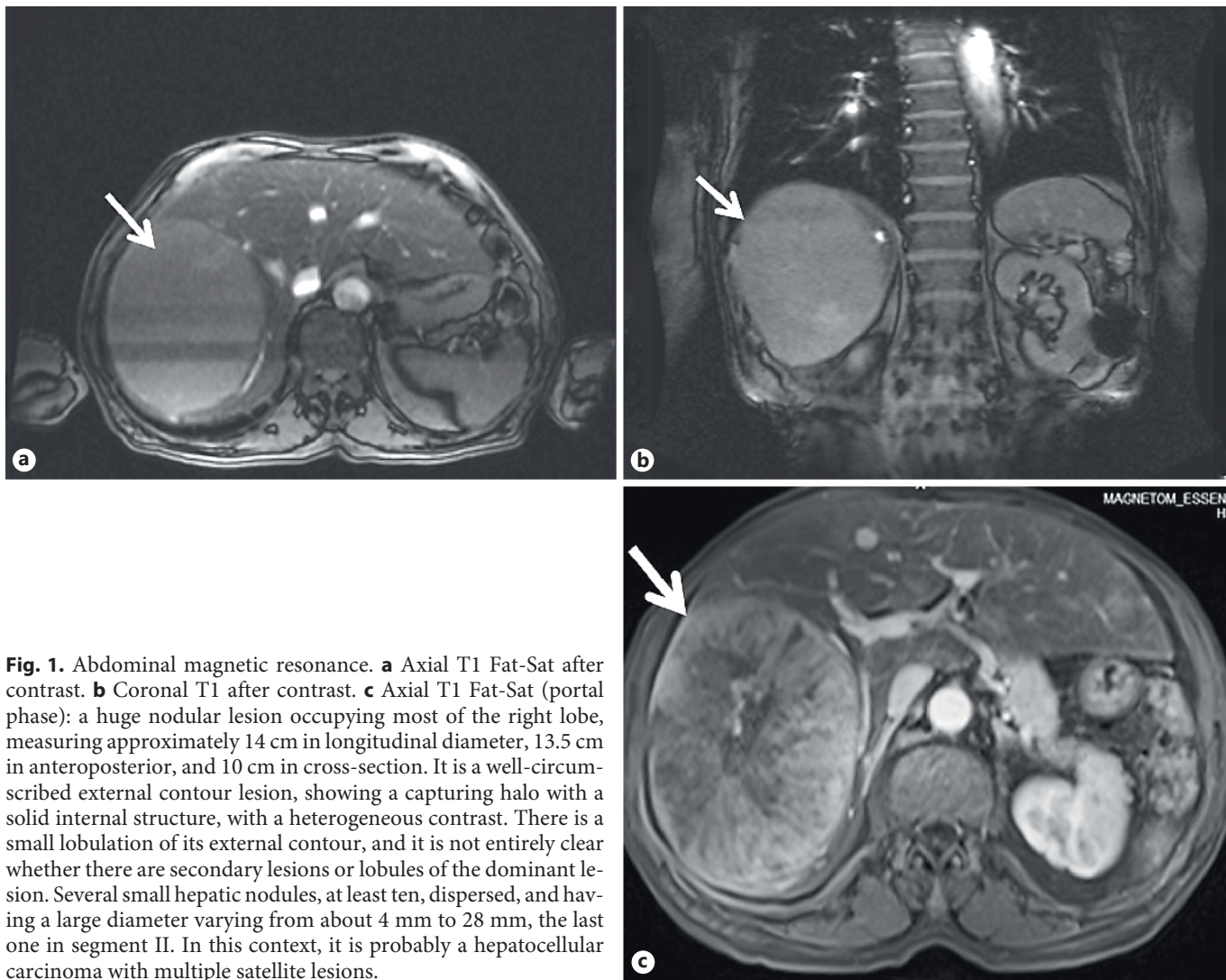
## Pseudotumor inflamatório do fígado: caso clínico

## Palavras Chave

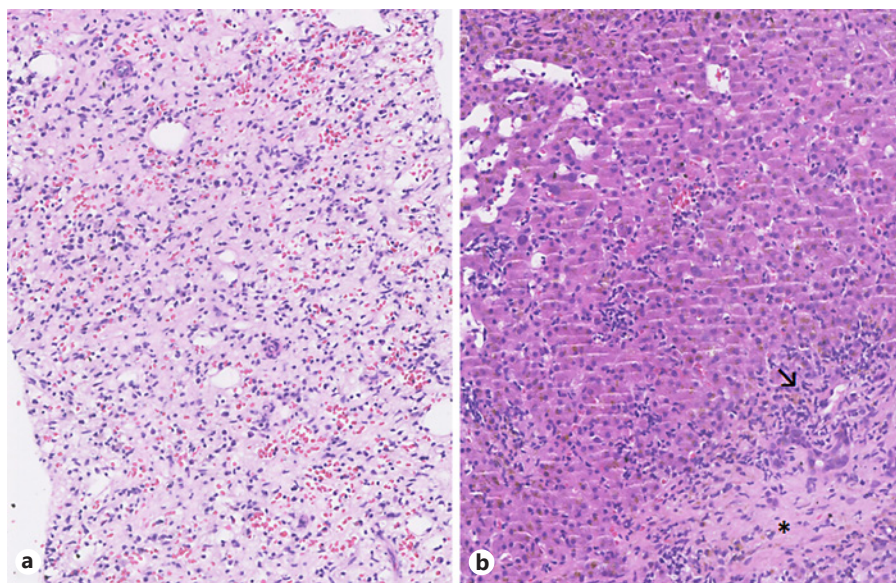
Pseudotumor inflamatório do fígado · Biópsia hepática ·  
Anti-inflamatórios não esteroides

The authors present the case of an 81-year-old man with hypertension and alcohol consumption (60–80 g/day) who was admitted to the Emergency Department with abdominal pain in the upper right quadrant, with 1 month of evolution, diarrhea (5–6 liquid stools per day), and slimming of 10 kg in the past 2 months. He had no fever or stigmas of alcoholic liver disease. Analytically, he had no increase in inflammatory markers, but because of these complaints, an abdominal computed tomography was performed, which showed a bulky mass. The mass occupied almost the whole right lobe of the liver, measured 14.5 cm of greater axis, and had well-defined contours and signs of intralesional necrosis at the central

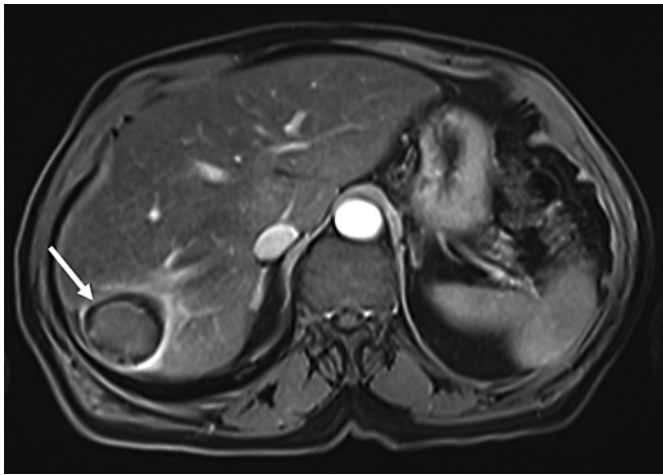
level. The patient was referred to the Ambulatory Liver Unit. In the first evaluation, a hard mass in the upper right quadrant was detected, with well-defined limits and slightly painful to deep palpation. In the etiological study, we highlight: hemoglobin 9.27 g/dL (normal: 13–18), mean corpuscular volume 109 fL (normal: 87–103), mean corpuscular hemoglobin (HGM) 35.3 pg (normal: 27–33), leukocytes 5,000/μL (normal: 4,000–11,000), platelets 377,000/μL (normal: 150,000–400,000), aspartate aminotransferase 33 U/L (normal: <40), alanine aminotransferase 23 U/L (normal: <41), gamma-glutamyltransferase 96 U/L (normal: 10–49), total bilirubin 0.6 mg/dL (normal: <1.2), albumin 3.6 g/dL (normal: 3.4–4.8), alkaline phosphatase 99 U/L (normal: 40–130), C-reactive protein 0.6 mg/dL (normal: <0.5), normal coagulation, renal function, and ionogram, negative viral serology (hepatitis B virus, hepatitis C virus, and human immunodeficiency virus), tumor markers: alpha-feto-protein 2.2 IU/mL (normal: 1–8), carcinoembryonic antigen 2.3 ng/mL (normal: <0.5), and CA19.9 77 U/mL (normal: 0–37). In order to better characterize the nodule, abdominal magnetic resonance imaging was performed, which described a well-circumscribed contour lesion, showing a halo with a solid internal structure with



**Fig. 1.** Abdominal magnetic resonance. **a** Axial T1 Fat-Sat after contrast. **b** Coronal T1 after contrast. **c** Axial T1 Fat-Sat (portal phase): a huge nodular lesion occupying most of the right lobe, measuring approximately 14 cm in longitudinal diameter, 13.5 cm in anteroposterior, and 10 cm in cross-section. It is a well-circumscribed external contour lesion, showing a capturing halo with a solid internal structure, with a heterogeneous contrast. There is a small lobulation of its external contour, and it is not entirely clear whether there are secondary lesions or lobules of the dominant lesion. Several small hepatic nodules, at least ten, dispersed, and having a large diameter varying from about 4 mm to 28 mm, the last one in segment II. In this context, it is probably a hepatocellular carcinoma with multiple satellite lesions.



**Fig. 2.** Transjugular liver biopsy (**a, b**; 40 $\times$ , hematoxylin-eosin staining) shows pieces of hepatic tissue, totally replaced by connective tissue (asterisk) accompanied by a moderate inflammatory infiltrate, predominately lymphoplasmacytic (arrow), accompanied by vascular congestion with erythrocyte overflow.



**Fig. 3.** Abdominal magnetic resonance (axial T1 Fat-Sat after contrast [portal phase]): inflammatory pseudotumor of the liver: in segment VII, a nodularity is detected in the capsule of 2.2 mm of heterogeneous content and intense uptake of the contrast product, measuring 41 × 45 mm in the axial plane, and absence of other hepatic nodularities.

heterogenous contrast uptake, which was interpreted as a probable hepatocellular carcinoma with several satellite lesions; the suprahepatic veins, the portal vein, and the hepatic artery remain permeable, with no other changes (Fig. 1). A liver biopsy was performed, which revealed histologic pattern of an inflammatory pseudotumor of the liver (IPT) (Fig. 2). He started nonsteroidal anti-inflammatory drugs (naproxen 500 mg/day), and about 1 year after starting the treatment, he was asymptomatic. He repeated imaging 1.5 years afterwards, which revealed a significant reduction of the hepatic lesion, cur-

rently measuring 41 × 45 mm (Fig. 3). He maintained treatment for 2 years and trimestral follow-up in the Ambulatory Liver Unit.

IPT is a rare benign lesion with only about 300 cases described in the literature [1]. It predominantly affects children and young adults (predominance of the 3rd decade), but can occur at any age, being more frequent in the Asian population, predominantly in males [2, 3]. The etiology and pathogenesis remain unknown, but it is assumed that it may result from an exaggerated inflammatory response directed to a particular aggression (inflammatory, infectious, autoimmune, trauma, or surgical processes) [2, 4]. IPT can appear as a single mass or multiple masses characterized histologically by the proliferation of fibroblasts and inflammatory cells [4, 5]. Diagnosis of IPT is challenging, because there are no clinical symptoms, signs, or laboratory or pathognomonic imaging of this pathology, often leading to an incorrect diagnosis [2]. Liver biopsy is necessary to establish a definitive diagnosis [2, 3, 5]. Treatment can be done with antibiotics, non-steroidal anti-inflammatory drugs, steroids, or just an expectant attitude [2, 5]. Surgical resection is not usually recommended [2]. In general, the prognosis is good [2, 3].

#### Statement of Ethics

This study did not require informed consent nor review/approval by the appropriate ethics committee.

#### Disclosure Statement

The authors declare no conflicts of interest.

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