

Title:

Hepatic splenosis, description of an unusual behavior on contrast-enhanced ultrasonography (CEUS)

Authors:

Sergio Escribano Cruz, Elena Garrido Gómez, Raquel García Latorre, Miguel García González

DOI: 10.17235/reed.2023.9530/2023

Link: [PubMed \(Epub ahead of print\)](#)

Please cite this article as:

Escribano Cruz Sergio, Garrido Gómez Elena, García Latorre Raquel, García González Miguel. Hepatic splenosis, description of an unusual behavior on contrast-enhanced ultrasonography (CEUS). Rev Esp Enferm Dig 2023. doi: 10.17235/reed.2023.9530/2023.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

IPD 9530 inglés

Hepatic splenosis, description of an unusual behavior on contrast-enhanced ultrasonography (CEUS)

Sergio Escribano Cruz¹, Elena Garrido Gómez¹, Raquel García Latorre², Miguel García González¹

Services of ¹Gastroenterology and Hepatology and ²Diagnostic Radiology. Hospital Universitario Ramón y Cajal. Madrid, Spain

Received: 20/02/2023

Accepted: 22/02/2023

Correspondence: Sergio Escribano Cruz

e-mail: escribanosergio0@gmail.com

Conflict of interest: the authors declare no conflict of interest.

Keywords: Hepatic splenosis. Contrast-enhanced ultrasonography.

Dear Editor,

The case was a 47-year-old asymptomatic male with a personal history of splenectomy during childhood. He was referred to our outpatient clinic to complete the study of a space-occupying liver lesion. The initial diagnostic suspicion was liver adenoma, given its behavior on magnetic resonance imaging (Fig. 1) and the absence of previous liver disease.

Intravascular contrast-enhanced ultrasound (CEUS) (SonoVue®) was performed. The lesion showed rapid centripetal enhancement, remaining enhanced in the portal phase with dim washout in the late venous phase (Figs. 2 and 3). Given the therapeutic implications of the diagnosis of a hepatic adenoma, an ultrasound-guided percutaneous biopsy with an 18-gauge core needle was performed. The anatomopathological study confirmed the presence of hepatic splenosis.

Discussion

Hepatic splenosis can present as isolated or multiple foci (1). There is little published information on the behavior of hepatic splenosis in CEUS (2-4), which prevents any behavior from being generalized. The most frequently described behavior is hyperenhancement in the arterial phase without subsequent washout, not a specific behavior that can lead to the misdiagnosis of other entities such as hemangioma. In our case, it was caused by an isolated focus of splenosis that did not show the most frequently described behavior at CEUS, since it presented a faint washout in the venous phase, making it necessary to rule out malignancy.

References

1. Prieto García B, González Santiago JM, Gómez-Caminero López F. Splenosis as an incidental finding in a patient with multifactorial anemia. *Rev Esp Enferm Dig* 2022. DOI: 10.17235/reed.2022.8733/2022
2. Sansone V, Falsetti L, Tovoli F, et al. An uncommon focal liver lesion: intrahepatic splenosis. *J Gastrointest Liver Dis* 2020;29(2):257-62. DOI: 10.15403/jgld-617. PMID: 32530993
3. Dölle M, Ringe KI, Hartleben B, et al. Ein vermeintliches hepatozelluläres Adenom stellt sich als intrahepatische Splenose heraus – Ein Fallbericht [A supposed hepatocellular adenoma turns out to be intrahepatic splenosis - A case report]. *Z Gastroenterol* 2021;59(2):149-52. DOI: 10.1055/a-1340-0498
4. Makino Y, Imai Y, Fukuda K, et al. Sonazoid-enhanced ultrasonography for the diagnosis of an intrapancreatic accessory spleen: a case report. *J Clin Ultrasound* 2011;39(6):344-7. DOI: 10.1002/jcu.20798

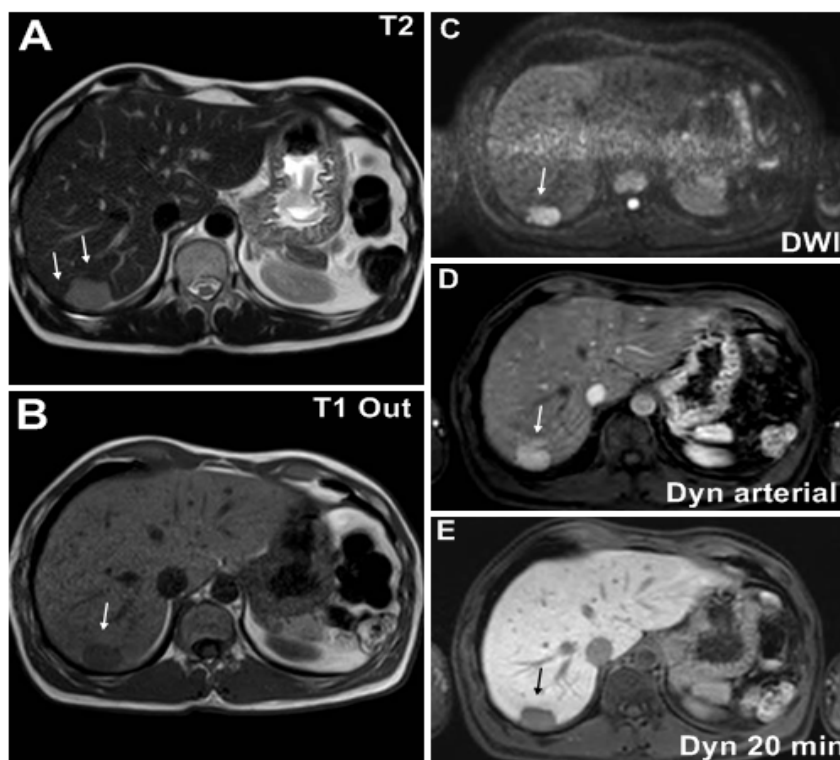


Fig. 1. Hepatic magnetic resonance imaging (MRI) with morphological sequences in T2 (A), T1 out-of-phase (B), diffusion-weighted imaging (C) and arterial phase sequence post-gadolinium (D). Hepatobiliary phase 20 minutes after administration of hepatospecific contrast (E). Isolated well-defined nodular lesion in segment VII, homogeneous, hyperintense on T2 (A), hypointense on T1 (B), with diffusion restriction (C) and presenting hypervascular behavior in the arterial phase and hypointense in the hepatospecific phase (D and E).

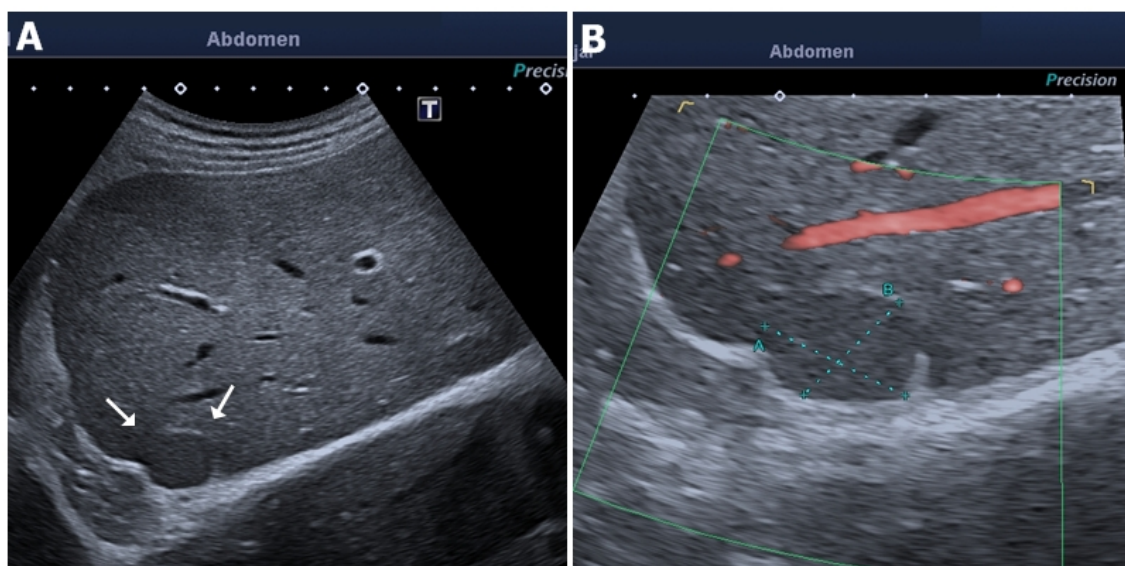


Fig. 2. A. Isolated peripheral solid lesion of the liver, slightly hypoechoic respect to the liver parenchyma. In its most anterior portion, a thin hyperechogenic capsule can be seen that delimits it from the rest of the liver parenchyma. B. Higher magnification image, lesion of 21 x 18 mm in size. No internal vascularity was detected on Doppler ultrasonography.

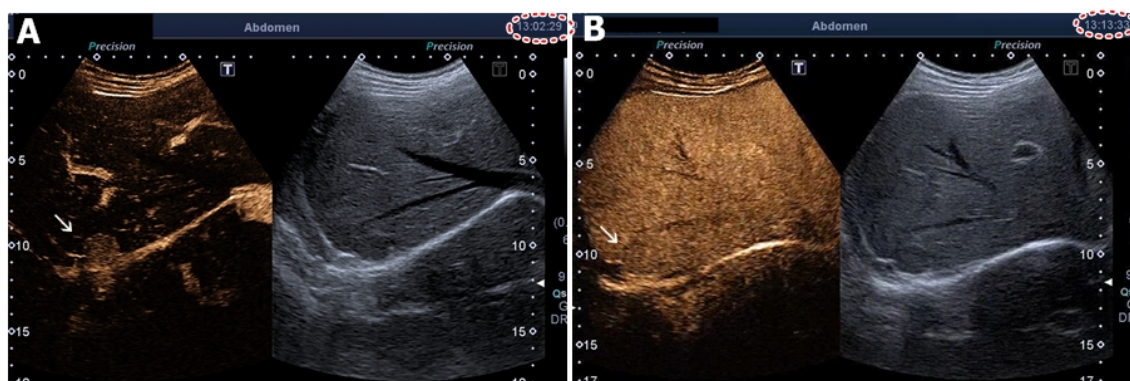


Fig. 3. A. Gray-scale B-mode and contrast-enhanced ultrasound (CEUS) in arterial phase (00:17 s of exploration). Image shows premature hyperenhancement with respect to the liver parenchyma. B. Gray-scale B-mode and CEUS in late venous phase (03:32 s of exploration). The lesion presented faint washout with respect to the bud parenchyma.