REVISTA ESPAÑOLA DE
ENFERMEDADES DIGESTIVAS
The Spanish Journal of Gastroenterology

Title:
Hepatosplenic schistosomiasis: a rare cause of chronic liver disease with portal hypertension diagnosed by abdominal ultrasound

Authors:
Alejandro Jesús Borrella Gras, Mariano Gómez Rubio, Inés María Olazarán Narváez, Marina Castellanos González

DOI: 10.17235/reed.2021.8086/2021
Link: PubMed (Epub ahead of print)

Please cite this article as:
Borrella Gras Alejandro Jesús, Gómez Rubio Mariano, Olazarán Narváez Inés María, Castellanos González Marina . Hepatosplenic schistosomiasis: a rare cause of chronic liver disease with portal hypertension diagnosed by abdominal ultrasound. Rev Esp Enferm Dig 2021. doi: 10.17235/reed.2021.8086/2021.

REVISTA ESPAÑOLA DE
ENFERMEDADES DIGESTIVAS
The Spanish Journal of Gastroenterology

Hepatosplenic schistosomiasis: a rare cause of chronic liver disease with portal hypertension diagnosed by abdominal ultrasound

Alejandro Jesús Borrella Gras, Mariano Gómez Rubio, Inés Olazarán Narváez, Marina Castellanos González.

Department of Digestive Diseases. Hospital Universitario de Getafe (Madrid). Universidad Europea de Madrid.

Author: Alejandro Jesús Borrella Gras; mail: ajesus_94@hotmail.com

Summary

Hepatosplenic schistosomiasis (HSS) is a major cause of chronic liver disease with portal hypertension (pHTN) in Africa, Asia and America (1). Abdominal ultrasound is essential in its diagnosis.

Clinical case

We present the case of a 22-year-old male born in Guinea previously diagnosed with chronic liver disease of unknown etiology. On our first approach, we did not find any underlying cause for his liver disease. In the abdominal ultrasound, pHTN typical signs (portal vein dilation, slow portal venous flow, portosystemic collateral pathways and splenomegaly) were found. Apart from this, other findings stood out: echogenic bands around portal vein branches (the so-called “bull´s eye” appearance) with hyperechoic patches expanding from the portal vessels into the hepatic parenchyma (Fig. 1) as well as echogenic thickening of the gallbladder wall (Fig. 2). These findings are characteristic of HSS.

Magnetic resonance imaging described pHTN data and upper digestive endoscopy found large esophageal varices. Furthermore, anti-Schistosoma antibody test (ELISA) was positive and *Schistosoma mansoni* eggs were detected in feces. Treatment with praziquantel negativized the parasite in feces. To conclude, primary prophylaxis of

esophageal variceal hemorrhage with propranolol was initiated.

Discussion

Although in our environment HSS is a rare cause of chronic liver disease with pHTN, it is important to know its ultrasonographic features as they play a crucial role in its diagnosis (2,3). In addition to this, ultrasound study findings correlate with the severity of the disease and can be used to monitor the evolution of the process following anti-schistosomiasis therapy (3).

References

1. Barsoum, R., Esmat, G. and El-Baz, T., 2013. Human Schistosomiasis: Clinical Perspective: Review. J Adv Res, 4(5), pp.433-444.
2. Richter, J., Botelho, M., Holtfreter, M., et al., 2016. Ultrasound assessment of schistosomiasis. Z Gastroenterol, 54(07), pp.653-660.
3. Hashim A, Berzigotti A. Noninvasive assessment of *Schistosoma*-related Periportal Fibrosis. J Ultrasound Med 2021; 9999: 1–15

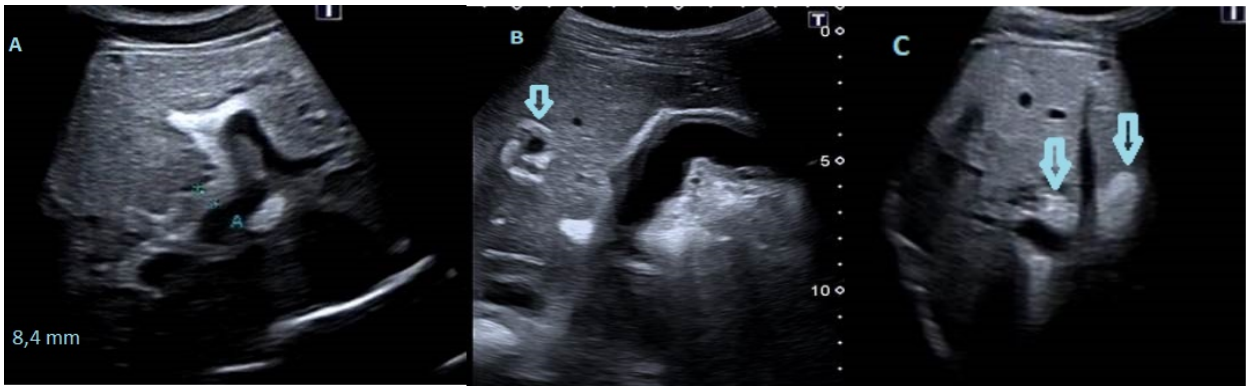

Fig. 1. *Typical HSS ultrasonographic findings. Echogenic ruffs around portal vein branches (A), the so-called "bull´s eye" image (B) and hyperechoic patches that expand into the hepatic parenchyma (C).*

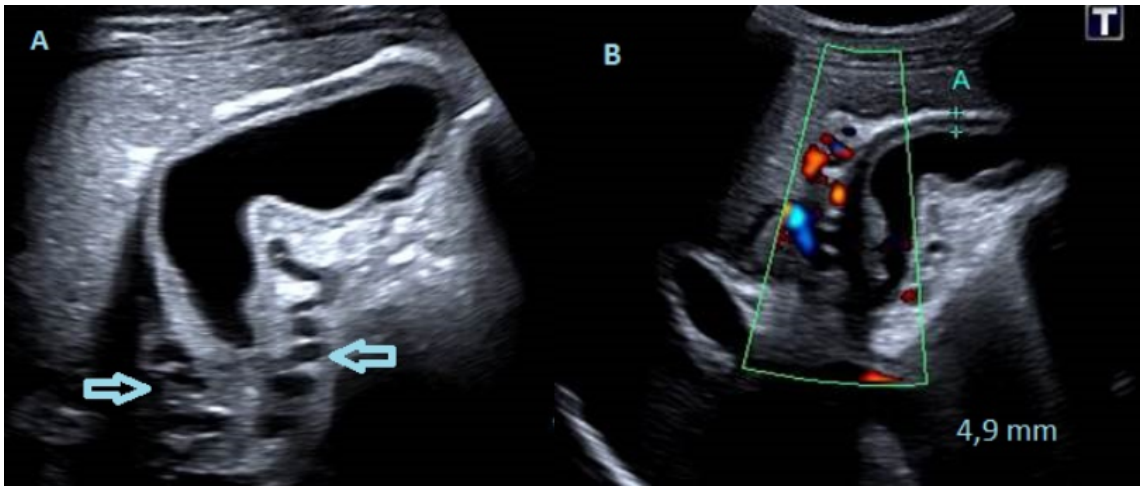

Fig. 2. *Ultrasound gallbladder appearance commonly found in HSS. Thickening of the gallbladder wall with collateral circulation on it.*