

Portal Cavernoma

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Abstract

Case Report

Portal cavernoma corresponds to the abnormal development of a venous network whose caliber is initially microscopic, with hepatopetal portal blood flow. It is a consequence of chronic portal thrombosis in a healthy or slightly fibrous liver. The causes are essentially those of portal thrombosis. However, portal thrombosis remains an undetermined cause in 50% of the cases. The clinical manifestations of cavernoma reflect extrahepatic portal hypertension and are exceptionally biliary. The diagnosis of portal cavernoma is radiological. Ultrasound Doppler and CT confirmed the diagnosis. MRI offers a better analysis of biliary impact. The treatment is essentially medically based on anticoagulants. Recording to surgery was reserved for complications.

Keywords: Portal Cavernoma, Portal Thrombosis, Hepatopetal Portal Blood Flow, Venous Network, Congenital Malformations.

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COMMENTARY

Portal cavernoma is the abnormal development of a venous network whose caliber is initially microscopic, within which hepatopetic portal blood travels. It is a portopetal derivation of chronic subhepatic portal thrombosis in a healthy or slightly fibrous liver [1]. In addition to congenital malformations of the portal veins (atresia, agenesis, or stenosis), portal cavernomas are caused by portal thrombosis. They can be local (extrinsic compression by a tumoral or inflammatory process; iatrogenic), general (pro-thrombotic diseases, whether acquired or congenital), or infectious diseases responsible for pylephlebitis. However, portal thrombosis remains an undetermined cause in 50% of the cases [2].

The clinical presentation of a cavernoma reflects extrahepatic portal hypertension, sometimes

specific to the cause, and exceptionally, the manifestations are biliary. In children, hematemesis due to rupture of esophageal or gastric varices, growth retardation, abdominal pain, and splenomegaly are the most commonly described signs. Hemorrhagic manifestations and/or the occurrence of venous mesenteric infarction are common in adults [3, 4].

A positive diagnosis of portal cavernoma is based on imaging findings. Ultrasound coupled with Doppler and CT confirmed the diagnosis by demonstrating peripedicular varicose vein structures, at the level of the hepatic hilum, or even perivesicular (depending on the extent and location of the portal thrombosis), and hepatopetic flow. They also make it possible to assess other signs of portal hypertension and detect complications Figure 1 (A and B).

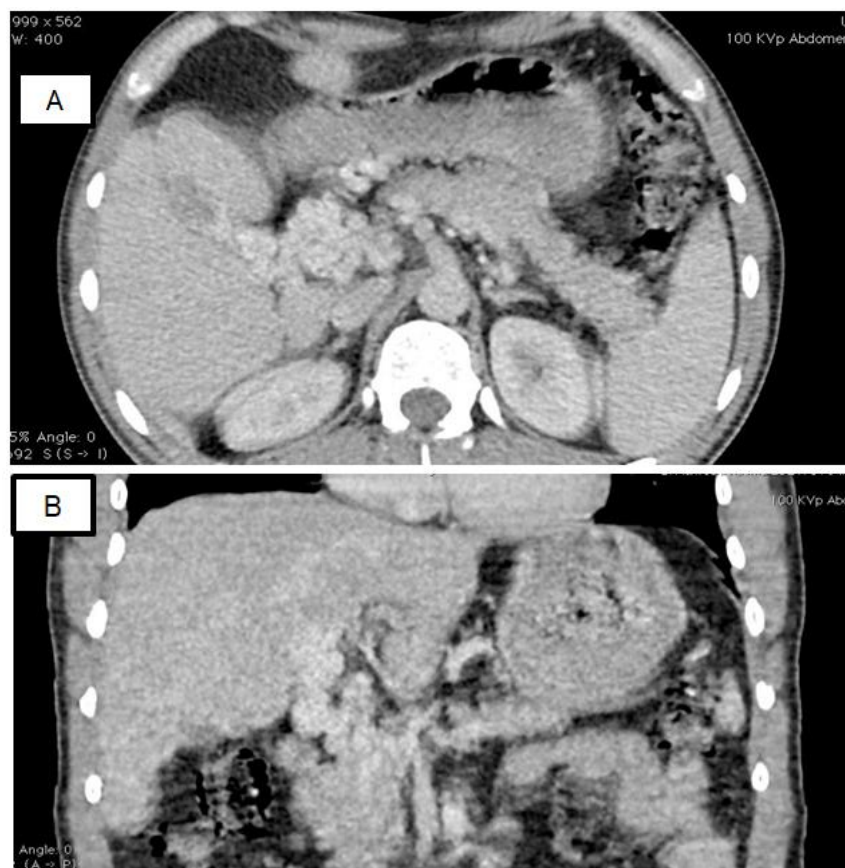


Figure 1 (A and B): Axial and coronal sections of an injected abdominal CT scan (in portal time) objectifying peripedicle varicose venous formations and hepatic hilum in a healthy liver

Cholangiopancreato-MRI (CP-MRI), owing to its high resolution, non-irradiating, and non-invasive characteristics, offers a better analysis of the biliary impact, looking for parietal irregularities, pseudotumoral stenosis of the main bile duct, and dilation of the intrahepatic bile ducts. It also makes it possible to rule out any associated primary cholangiocarcinoma [5].

Treatment is essentially medical and based on anticoagulants. Surgery is reserved for complications (portosystemic shunt; +/- biliodigestive diversion or end-biliary treatment if biliary obstruction is present) [1].

CONCLUSION

Portal cavernoma is a consequence of chronic portal thrombosis. The causes are essentially those of portal thrombosis. The clinical manifestations of cavernoma reflect extrahepatic portal hypertension and are exceptionally biliary. Ultrasound Doppler and CT confirmed the diagnosis. MRI offers a better analysis of biliary impact. The treatment is essentially medically based on anticoagulants. Surgery was reserved for complications.

Conflicts of Interest: The authors declare no conflict with this manuscript.

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