

## Intrahepatic Portal Vein Aneurysm : An Unusual Entity

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### To the Editor,

A 48-year-old woman was referred for abdominal ultrasonography (US) examination as a part of diagnostic workup for abdominal pain. The patient was nondiabetic and nonhypertensive and reported no history of any other chronic disease. There was no history of hematemesis, jaundice or liver disease. Various blood tests, including routine hematologic and liver function tests, were within the reference range. There was no history of previous trauma or surgical intervention. Physical examination of the patient was unremarkable except for mild abdominal tenderness. Conventional gray scale and color doppler US examination revealed a well-defined fusiform dilatation of the right and left branches of the portal vein without thrombosis or calcification (Figure 1A). On spectral examination nonpulsatile, monophasic, turbulent venous flow was seen in the aneurysm (Figure 1A). The sizes of the lesions were 43x31 mm and 13x12 mm. Abdominal computed tomography (CT) was performed to rule out any other associated abnormality, and confirmed the US findings. Two intrahepatic portal vein aneurysm was also detected on CT imaging with no evidence of thrombosis (Figure 2). As the portal vein aneurysm was asymptomatic and discovered incidentally, routine follow-up was recommended for this condition.

Intrahepatic portal venous aneurysm is a rare entity, which can be congenital or acquired. The etiology of aneurysms of the portal venous system is still controversial (1). Underlying hepatocellular disease, portal hypertension, trauma, pancreatitis, and interventional procedures have been reported as possible etiologic factors. They represent only 3% of all aneurysms of the venous system with a prevalence of 0.43% (2). This presence has no gender preference and is usually seen in the fifth to sixth decades of life. Aneurysms have been reported elsewhere in the portal circulation; however, they are frequently extrahepatic. US is usually the single most useful diagnostic tool, and color doppler US can help differentiate from cyst, cyst-like lesions, arteriovenous fistulas and portosystemic shunts. CT and MRI scan can aid detect calcifications and thrombosis within the lesions, which have been reported in almost 30% of cases. Additionally, they can also rule out the above-mentioned conditions (3).

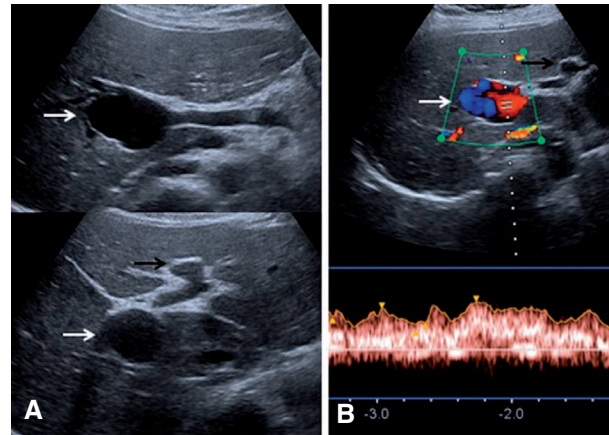


Fig. 1. — Grayscale US images show portal vein aneurysms of the right (white arrow) and left (black arrow) branches of the portal vein (A). Color and spectral doppler US images show monophasic, turbulent venous flow in the aneurysm (B).

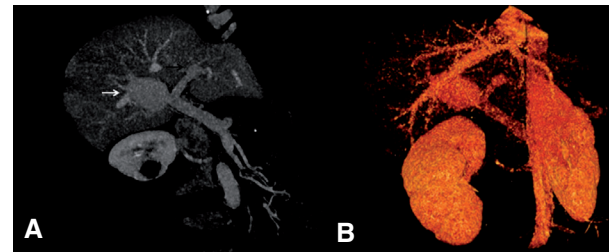


Fig. 2. — Coronal reformation MIP (A) and 3D volume rendering (B) CT images show portal vein aneurysms of the right (white arrow) and left (black arrow) branches of the portal vein.

### References

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