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CASE IMAGE

Incidental diagnosis of silent extrahepatic portosystemic shunt

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Key Clinical Message

Extrahepatic portosystemic shunts are a very rare disease. Early diagnosis and appropriate treatment are needed to prevent serious complications. In asymptomatic patients, conservative treatment is an option.

KEYWORDS

cirrhosis, congenital malformation, portal hypertension, portosystemic shunts

A 63-year-old woman presented with a history of chronic constipation, diffuse abdominal pain, and bloating for more than 6 months. She did not have any significant medical, surgical, or traumatic history. The clinical examination showed a soft non distended abdomen without clinical signs of portal hypertension, hepatic encephalopathy, or cirrhosis. Blood tests were within normal limits. A contrast-enhanced abdominopelvic CT scan (Figure 1) showed a dilated right gonadal vein communicating, via a tortuous venous network, with the ileocolic branch of the superior mesenteric vein. No parenchymal or vascular abnormalities were detected in the liver. No signs of portal hypertension were noted (green arrow). The diagnosis of a Type II congenital extrahepatic portosystemic venous shunt was made. Ammonia levels were within normal limits. The patient was treated conservatively with lifestyle modifications such as protein and lactulose restrictions.

Extrahepatic portosystemic shunts are a very rare type of vascular malformations, in which the blood by-passes the liver through a complete (Type I) or a partial (Type II) extrahepatic shunt.[1] This may lead to serious complications such as portal hypertension, cirrhosis, hepatic encephalopathy, and pulmonary complications. In Type I, liver transplantation is an effective approach for preventing complications whereas in symptomatic Type II, treatment includes radiological or surgical closure of the shunt.[2] Management of an asymptomatic Type II extrahepatic portosystemic shunts includes conservative measures but may also include radiological or surgical interventions. Early diagnosis and appropriate treatment are necessary for a good prognosis.[3]

AUTHOR CONTRIBUTIONS

Rhea Akel: Conceptualization; project administration; supervision; validation; writing – original draft; writing – review and editing. **Rany Aoun:** Project administration; supervision; validation; writing – original draft; writing – review and editing.

FUNDING INFORMATION

This study was financed with internal funds. No competing financial interests exist.

CONFLICT OF INTEREST STATEMENT

The authors declare that they have no conflicts of interest.

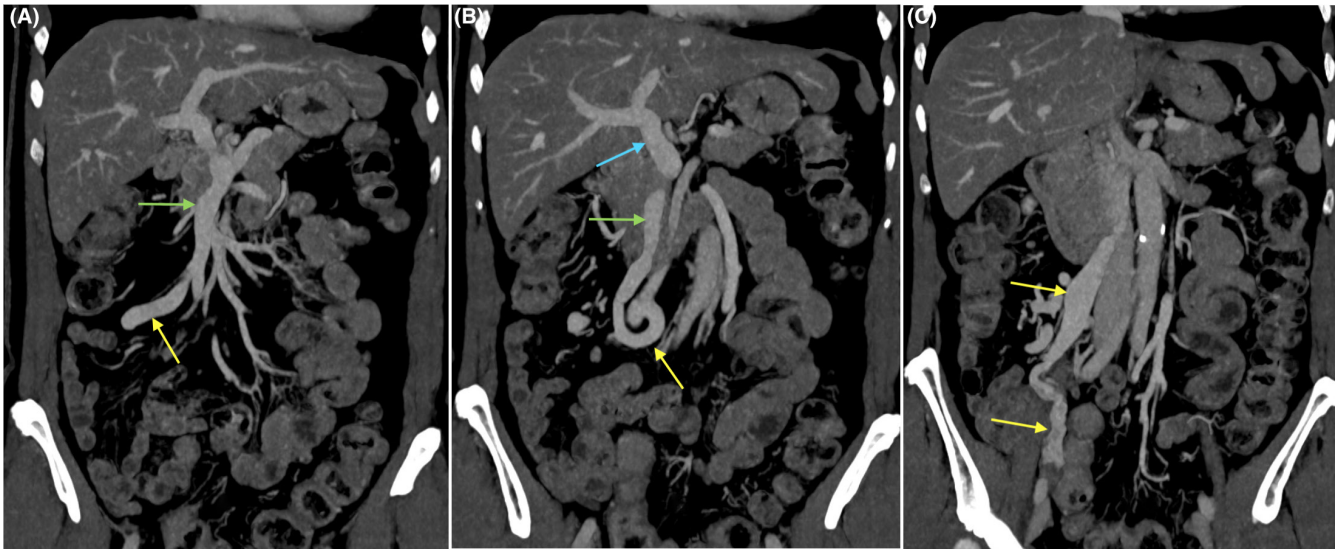

FIGURE 1 (A) CT multiplanar reconstruction (coronal plane) using maximal intensity projections. Dilated venous branch (yellow arrow) of the right ovarian vein connecting with the superior mesenteric vein (green arrow). (B) CT multiplanar reconstruction (coronal plane) using maximal intensity projections. Tortuous venous network (yellow arrow) arising from the right ovarian vein connecting with the superior mesenteric vein (green arrow), with a portal vein (blue arrow) of normal size. (C) CT multiplanar reconstruction (coronal plane) using maximal intensity projections. Dilated right ovarian vein (yellow arrow).

DATA AVAILABILITY STATEMENT

The data supporting this study's findings are available from the corresponding author upon reasonable request.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

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