A Rare Complication of Liver Hydatid Cyst Surgery: Budd-Chiari Syndrome

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A 28-year-old patient, who had underwent surgery 10 years before for a liver hydatid cyst, located in the segments VII, VIII and I (partial pericystectomy with total vascular exclusion) presented in our department for mild pain in the right upper quadrant, during moderate effort or quick walking. Physical examination and laboratory analysis were unremarkable. The first abdominal ultrasonography (US) and Doppler ultrasound revealed multiple calcifications and scars located anterior and lateral from the inferior vena cava (IVC). Liver vasculature presented significant alterations of the veins: absence of right hepatic vein, interruption of middle hepatic vein (Fig. 1) with multiple tortuous veins, and two important veno-venous collaterals transporting the blood from the right liver lobe to the left liver vein (Fig. 2). The diameter of the left hepatic vein was increased, as well as the velocity of the flow – above 110 cm/sec. Considering a Budd-Chiari syndrome (BCS), an abdominal CT-angiography with reconstruction of the liver veins was performed (Fig. 3). It confirmed the US findings. The development of BCS in this patient might be related to the surgical intervention and, possibly, to the previous liver hydatid disease.

This type of Budd-Chiari syndrome occurs rarely. It was diagnosed in a paucisymptomatic stage of the disease, due to an accurate US examination, and was confirmed thereafter by CT angiography. The patient is being followed-up by imaging and liver function evaluation.

The incidence of BCS is relatively rare, 0.13-0.36 cases annually per million population [1, 2]. Primary BCS has been recorded most often in the context of prothrombotic diseases or myeloproliferative neoplasms [3, 4]. Secondary BCS has been recorded in various conditions, including abdominal surgery and liver hidatid cysts [4]. The diagnostic work-up in a patient with BCS should aim to identify the predisposing factors, and to assess the liver function and the presence of portal hypertension.

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Conflicts of interest: None to declare.

REFERENCES