EUS-FNA of portal venous tumoral thrombosis for diagnosis of hepatocellular carcinoma without primary hepatic mass (with video)

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Malignant portal venous thrombosis (PVT) is associated with a poor prognosis in patients with hepatocellular carcinoma (HCC), and its presence contraindicates both surgical resection and liver transplantation. Studies have shown that when technically feasible, confirming the malignancy of PVT associated with an intrahepatic mass suggestive of HCC enables more accurate staging and has an impact on subsequent treatments.[1,2] Few cases of HCC presenting as isolated malignant PVT have been described.[3]

To obtain histological proof, EUS-FNA on the tumoral PVT is a safe and effective procedure[4,5] as the echoendoscope is closer to the PVT, and the high frequency provides an excellent resolution and reliable visualization of the portal vein, its content, and the surrounding tissue and organs. Moreover, the FNA needle only travels a short distance, making the procedure quick and precise.[4]

We present a video of EUS-FNA of an isolated tumoral PVT revealed by a variceal bleeding in a 68-year-old man with known postalcoholic cirrhosis Child-Pugh A6. Computed tomography scan and magnetic resonance imaging showed PVT extending from the upper mesenteric vein to the left branch of the portal vein, measuring 37 mm in diameter, with malignant features including arterial enhancement and rapid wash-out of the thrombus. There was no evidence of a primary intrahepatic mass [Figure 1 and Video 1].

The intervention was performed under general anaesthesia. EUS showed hyperechoic PVT extending to the left portal branch, with pathognomonic intrathrombus pulsatile flow. EUS-FNA was obtained after two passes with a 22G needle and continuous suction with a syringe. No adverse events were reported. The diagnosis of HCC was confirmed after pathological examination (liquid-based cytology and immunocytochemistry on cell block preparation).

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form

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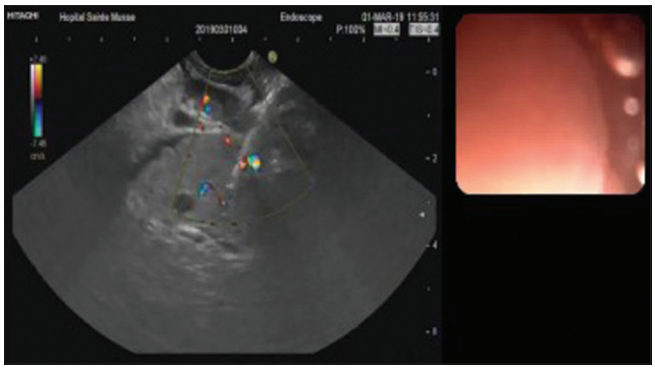

Figure 1. 22G FNA of portal venous tumoral thrombosis

the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his names and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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