Debut of an unusual liver cirrhosis

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BACKGROUND

Metastatic cardiac tumors are much more common than primary benign or malignant cardiac tumors. Transthoracic echocardiography (TTE) is the primary diagnostic procedure, followed by computed tomography (CT) and cardiac magnetic resonance imaging (MRI) to analyze other structures (1).

CASE REPORT

We report the case of an 83-year-old man with chronic hepatitis B with dyspnea and edema in the lower extremities. TTE showed a right dyskinetic ventricle (RV) and a mass in the right atrium (RA). This mass did not prolapse to the RV and the edges were irregular (Fig. 1A and B). The cardiac MRI showed a heterogeneous mass of 60 x 30 mm in the RA from the inferior vena cava (IVC) without collapsed or compromised RV filling, with thrombi attached (Fig. 1C). The CT showed a solid nodule of 13 mm in the lower lobe of the right lung with enhancement after contrast that suggested a metastatic origin and a cirrhotic liver with an undefined heterogeneous mass (37 x 45 x 42 mm) in segment VII. It had a loss of planes with the intrahepatic vena cava and an extension into the right cardiophrenic space. It was echodense compared with the rest of the liver parenchyma, and had peripheral areas of low attenuation values, suggesting a hepatocellular carcinoma. The CT (Fig. 2) also showed a multi-lobulated and heterogeneous mass of 48 x 24 mm in the RA that was extended to the intrahepatic IVC. The alpha-fetoprotein was greater than 2,000 mcg/ml.

DISCUSSION

The most frequent sites of extra hepatic metastasis of hepatocellular carcinoma are the lungs, lymph nodes, adrenal glands and bones. They tend to spread through intrahepatic blood vessels and lymphatics, or by direct infiltration (2). However, intra-cardiac involvement rarely develops (3).

Fig. 1. A. Parasternal short axis plane: heterogeneous mass in the RA (arrowhead). B. Apical four chamber: mass (arrowhead) that does not prolapse to the RV. C. Cardiac MRI: axial T2 cardiac section with a mass in the RA (arrowhead) coming from IVC (arrow).

Fig. 2. CT. A. Axial section at abdominal level with a focal liver lesion (lower arrow) and IVC (upper arrow). B. Coronal section showing that the mass extends to the right cardiophrenic space (arrowhead). C. Heterogeneous and multi-lobulated mass inside the RA (upper arrow) extending to the IVC in its intrahepatic path (lower arrow).
REFERENCES

