

Title:

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Hepatopathy secondary to infiltration by malignant melanoma: diagnostic value of liver biopsy

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Dear Editor,

Melanoma is a malignant neoplasm derived from melanocytes with a high metastatic potential as well as a high mortality. It usually originates in the skin (90%), and up to 20% of patients develop metastases. (1) Subcutaneous areas and regional lymph nodes are the most frequently affected sites, with abdominal viscera being the least affected structures and liver metastases developing in 10-20% of patients with malignant

melanoma. (2,3)

CLINICAL CASE

The patient was a 61-year-old male with no history of interest who was admitted to the hospital due to anorexia, asthenia, weight loss and discomfort in the right hypochondrium. On admission, an ultrasound of the abdomen showed a heterogeneous liver, hepatomegaly and innumerable well-defined hypoechogenic lesions of small size throughout the liver parenchyma (Figure – A and B). Subsequently, a further study was performed by computed axial tomography and nuclear magnetic resonance (Figure - C), identifying in addition to the ultrasound findings, lymphadenopathies in the hepatic hilum and free fluid. Therefore, due to doubts about the patient's diagnosis, another ultrasound of the abdomen with hepatic contrast (SonoVue®) was performed, without showing pathological contrast uptake at any level of the hepatic parenchyma suggesting hepatocarcinoma. After completing the examination, an ultrasound-guided liver biopsy was performed with pathological anatomy compatible with infiltration by malignant melanoma (Figure – D and E). In view of these findings, the patient was evaluated by Dermatology and a pigmented lesion was found on the right thigh, which was excised and confirmed the primary origin of the malignant melanoma. However, the patient subsequently developed severe liver failure and multiorgan failure and died in this context.

DISCUSSION

Signs and symptoms of melanoma liver infiltration are nonspecific and include nausea, asthenia and anorexia, although cases of hepatic rupture, severe hepatitis and rapidly progressive liver failure have been described. (1-4) However, liver dysfunction usually consists of mild-moderate elevation of liver enzymes and serum bilirubin. (1,3) On the other hand, in imaging tests the most frequent finding of hepatic infiltration by malignant melanoma is hepatomegaly without focal lesions (unlike in our case), although sometimes the liver may appear normal. Therefore, due to the difficulty and delay in diagnosis because of these nonspecific features, hepatic infiltration by

melanoma is frequently identified in post-mortem studies, since in vivo biopsy is difficult to perform due to the severe coagulopathy associated with these patients.
(2-4)

CONFLICTS OF INTEREST

There are no conflicts of interest to declare.

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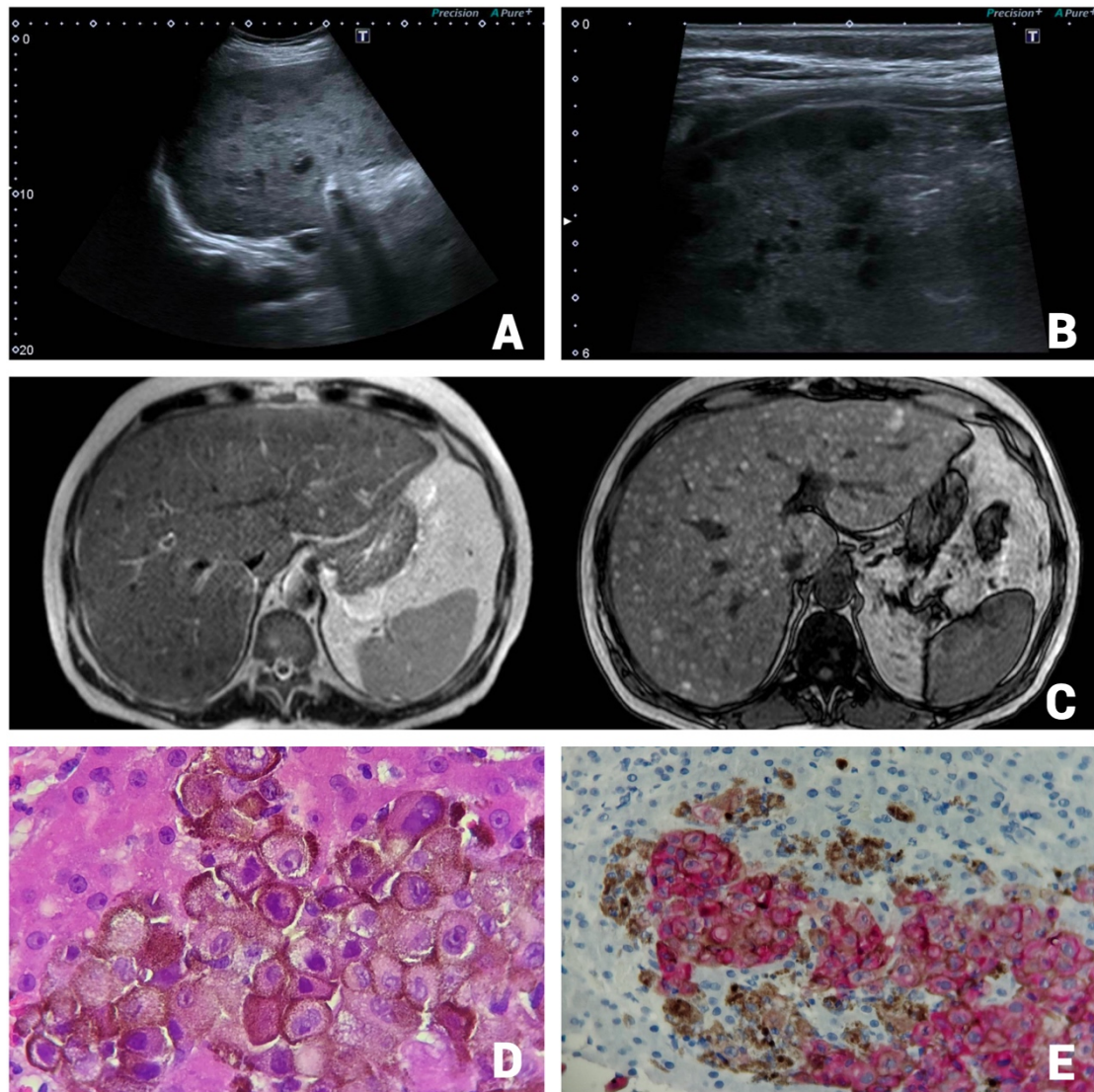


Figure. A) and B) Ultrasound showed a heterogeneous, enlarged liver with multiple hypoechoic nodular lesions. C) In the magnetic resonance imaging, the nodular lesions were hypointense in T2 and hyperintense in T1, without diffusion restriction or enhancement after gadolinium administration. D) and E) Histologic specimens showing large cells with melanin pigment in their interior (D) and Melan-A in red positive by immunohistochemistry (E).