Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

Title:
Rare hepatic metastasis of Merkel cell carcinoma masquerading as hepatocellular carcinoma

Authors:
Jiaju Liu, Zhiyong Fang

DOI: 10.17235/reed.2024.10837/2024
Link: PubMed (Epub ahead of print)

Please cite this article as:
Liu Jiaju, Fang Zhiyong. Rare hepatic metastasis of Merkel cell carcinoma masquerading as hepatocellular carcinoma. Rev Esp Enferm Dig 2024. doi: 10.17235/reed.2024.10837/2024.

Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

Rare hepatic metastasis of Merkel cell carcinoma masquerading as hepatocellular carcinoma

Jiaju Liu[1], Zhiyong Fang[1]

Author Affiliations

[1]From the Department of Interventional vascular surgery, The First Affiliated Hospital of Hunan Normal University: Hunan Provincial People's Hospital, Hunan, China.

*Address correspondence to Z.Y.F. (PhD, email:, Tel:, ORCID)

Contributor statement

J.J.L. and Z.Y.F. conceived and drafted the initial case report and reviewed and revised the manuscript. all authors approved the final manuscript as submitted and agreed to take responsibility for all aspects of the work.

Statement

Written informed consent was obtained from the patient for publication of this case report, including accompanying images and the study was approved by the Ethics Committee of Hunan Provincial People's Hospital.

Keywords: Merkel cell carcinoma. Tumor. Liver. Hepatic metastasis.

Dear Editor:

A 52-year-old male was diagnosed with primary liver cancer in June 2021 after experiencing abdominal pain and bloating. He had previously undergone resection for a Merkel cell tumor in March 2021, with no metastasis found. Three months later, imaging suggested a liver mass consistent with liver cancer. Lab tests showed elevated hepatitis B surface antigen (>130 IU/ml) and alpha-fetoprotein (24.54 IU/ml), and the imaging features resembled hepatocellular carcinoma (HCC)(Figure 1).

Merkel cell carcinoma (MCC) is an uncommon and highly aggressive neuroendocrine

skin tumor associated with a high rate of recurrence and metastasis. Its etiology is predominantly linked to Merkel cell polyomavirus (MCPyV) infection, ultraviolet exposure, and/or immunosuppression[1]. This case highlights an uncommon instance of hepatic metastasis from MCC, which can mimic Klatskin tumors[2], complicating diagnosis. The presence of liver cirrhosis and hepatitis B virus infection in this patient significantly obscured the diagnostic process, as the imaging characteristics closely resembled those of hepatocellular carcinoma (HCC). For MCC treatment, surgical resection is the preferred approach in the absence of distant metastases[1,3]; however, given the presence of distant metastasis in this case, more appropriate treatment options would include immunotherapy, early resection, or radiotherapy. Despite undergoing interventional surgery followed by pembrolizumab immunotherapy, the patient's prognosis did not improve.

References:

1. Lugowska I, Becker JC, Ascierto PA, et al. Merkel-cell carcinoma: ESMO-EURACAN Clinical Practice Guideline for diagnosis, treatment and follow-up. *ESMO Open*. 2024;9(5):102977.

2. Vennarecci G, Tudisco A, Cancellario d'Alena F, Ettorre GM. Single synchronous liver metastasis from Merkel cell carcinoma mimicking a klatskin tumor: A diagnostic challenge. *Digestive and Liver Disease*. 2017;49(9):1059.

3. Becker JC, Stang A, DeCaprio JA, et al. Merkel cell carcinoma. *Nat Rev Dis Primers*. 2017;3:17077.

Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

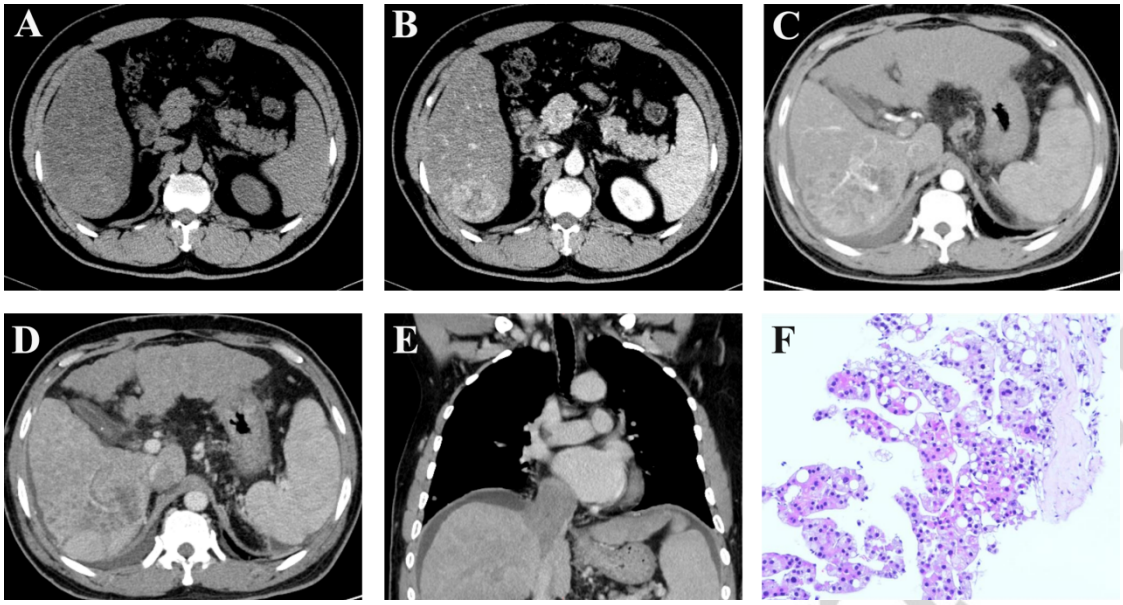

Fig 1: A,B: Pre-admission CT enhancement scan showed a round, slightly hyperdense mass on the plain scan (A), with peripheral high enhancement and central low enhancement on the enhancement scan (B), suggesting a possible pseudocapsule. Additionally, the background liver exhibited signs of cirrhosis, including a wavy liver capsule, disordered lobular proportions, and widened fissures. C-E: Two years after D-TACE,In the arterial phase (C), early enhancement of the right branch of the portal vein was observed, suggesting a possible arteriovenous fistula. In the portal phase (D) and delayed phase (E), extensive tumor thrombus was seen within the right branch of the portal vein, inferior vena cava, and right atrium. F: Liver tumor HE staining shows multiple small round cells.