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Authors:
Yong Li, Jianfeng Pan, Xiaowei Liu

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Unexplained ascites caused by myeloid sarcoma with omentum involvement

Yong Li, MD, Jianfeng Pan, MD, Xiaowei Liu, MD, PhD

¹Department of Gastroenterology, Xiangya Hospital, Central South University, Changsha, China

Correspondence: Xiaowei Liu, Department of Gastroenterology, Xiangya Hospital, Central South University, Changsha, Hunan, China. E-mail: liuxw@csu.edu.cn

Keywords

Unexplained ascites, Myeloid sarcoma, Omentum

Dear Editor,

A previously healthy 40-year-old male was admitted with a 10-day history of abdominal distension. Physical examinations revealed bulging flanks with a fluid wave and positive shifting dullness signs. Ultrasound revealed a thickening of the omentum with a thickness of 22mm (Figure 1A), of which ultrasound-guided biopsies (Figure 1B) and immunohistochemistry revealing MPO (+), CD43 (+) were indicated myeloid sarcoma (MS). Surprisingly, both bone marrow biopsies and peripheral blood were normal in this patient. Finally, he was diagnosed as isolated MS and underwent induction chemotherapy [daunorubicin 90 mg/m² (D1–D3) and cytosine arabinoside 100 mg/m² twice daily (D1–D7)]. Unfortunately, he died of pneumonia due to immunodeficiency after chemotherapy 2 months later.

Discussion

MS patients without bone marrow involvement is a rare condition, accounting only for 1%². MS can be involved in the lymph nodes, testes, skin, and soft tissues, but less frequently in the peritoneum or omentum³. Therefore, the diagnosis of MS is challenging due to the fact that cellular infiltrates are nonspecific, and the clinical manifestations are atypical. It should be differentiated from malignant

lymphoproliferative neoplasms, mesothelioma, or other solid tumor⁴. MS patients with ascites as the first symptom are extremely rare and reminds us it is always important to perform a pathological examination when encountering unexplained ascites.

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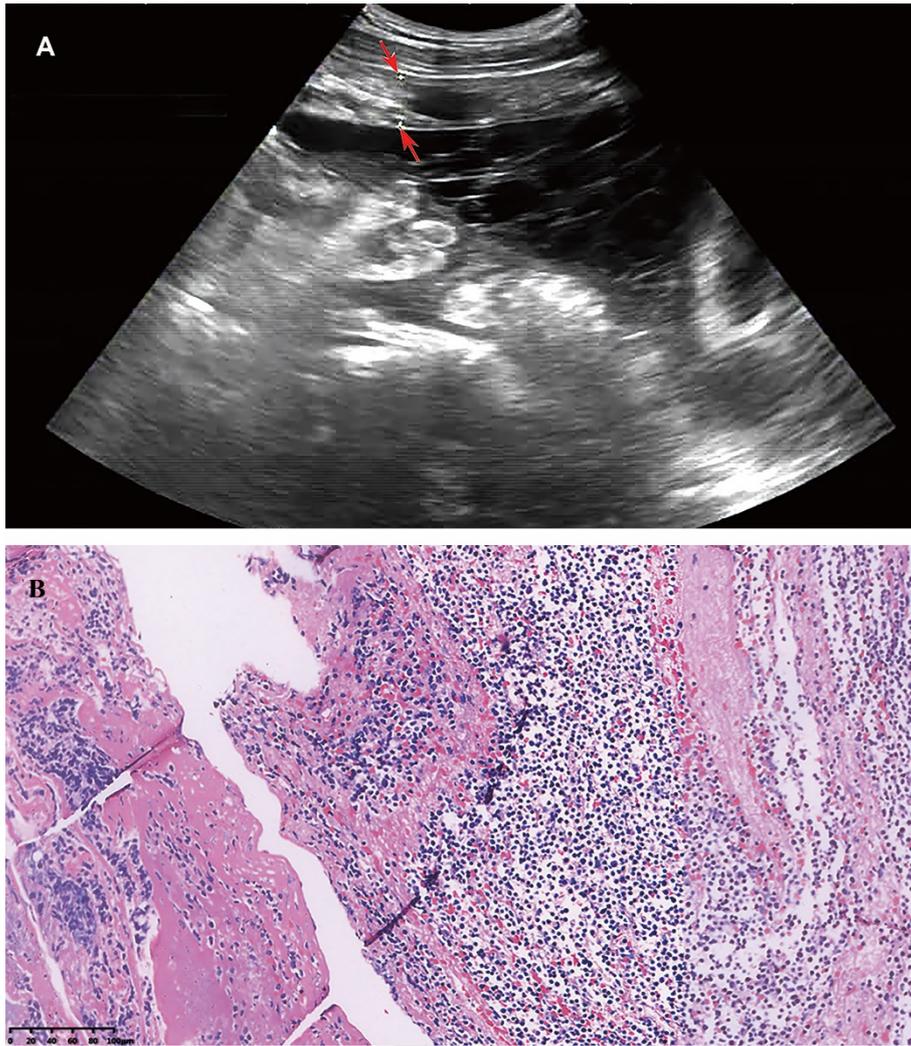


Figure 1. (A). Ultrasound showed an uneven thickening of the omentum with thickness of 22mm (red arrow). (B) Ultrasound-guided biopsies revealed lots of granulocytic cells infiltration, which was suggestive of hematopoiesis disease, (hematoxylin and eosin×400).