

Title:

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Authors:

Yuehua Tang, Rencheng Cai, Zhenguo Qiao

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POEMS syndrome: an uncommon cause of peritoneal effusion

Yuehua Tang¹, Rencheng Cai¹, and Zhenguo Qiao²

¹Department of Gastroenterology. Gaochun People's Hospital. Nanjing, China.

²Department of Gastroenterology. Suzhou Ninth People's Hospital. Suzhou Ninth Hospital Affiliated to Soochow University. Suzhou, China

Correspondence: Zhenguo Qiao

e-mail: qzg66666666@163.com

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Dear Editor,

A 46-year-old female was admitted to our hospital with abdominal distension and fatigue of 1 month duration. Physical examination revealed several palpable lymph nodes bilaterally in the axilla and groin, ranging from 0.5 cm to 2.0 cm in diameter, with tolerable mobility and no obvious tenderness. Computed tomography (CT) revealed splenomegaly (Fig. 1A, yellow arrow), abdominal effusions (Fig. 1A, blue arrow), and multiple enlarged lymph nodes (Fig. 1B-C, red arrow). To further confirm the diagnosis, the patient underwent a transjugular liver biopsy, and the pathology study ruled out cirrhosis (Fig. 1D). With the progression of her disease, the patient presented with facial erythema, generalized hyperpigmentation, and numbness in both lower limbs. Subsequently, the patient underwent a cervical lymph node biopsy, and the pathology report was consistent with Castleman's disease (Fig. 1E, red arrow). In addition, immunofixation electrophoresis suggested an IgA- λ monoclonal protein. Electromyography testing confirmed the presence of impaired nerve conduction velocity in the peroneal, tibial, and sural nerves. Both the clinical presentation and

testing results suggested POEMS syndrome.

POEMS syndrome is characterized by polyneuropathy (P), organomegaly (O), endocrinopathy (E), monoclonal protein (M), and skin changes (S). The etiology and pathogenesis are still unclear (1). The prevalence rate of POEMS syndrome is about 3 cases per million (2). The patient presented with ascites and splenomegaly, which could easily be misdiagnosed as cirrhosis. However, lymphadenectasis, progressive polyneuropathy, and skin pigmentation provided diagnostic clues for POEMS syndrome. Treatments mainly target the plasma-cell disorder or local lesions (3). Early detection and treatment can significantly improve prognosis in this disease.

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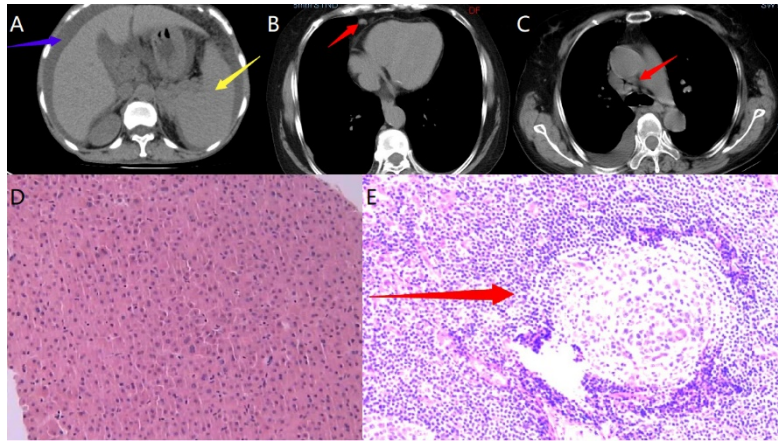


Fig. 1. Computed tomography revealed splenomegaly (A, yellow arrow), abdominal effusions (A, blue arrow), and multiple enlarged lymph nodes (B-C, red arrows). The pathology study of the liver biopsy revealed blood vessels and bile ducts, with no obvious dilatation of the portal area and no obvious infiltration by inflammatory cells. Formation of fibrous partitions was observed in hepatic lobules and the portal area (D). Lymphatic follicles were proliferating and some had an "onion skin" appearance (red arrow), indicating Castleman's disease (E).