Images

Primary Splenic Lymphoma: An Uncommon Cause of Persistent Fever Diagnosed by Examining the "Forgotten Organ"

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Key Words:

primary splenic lymphoma, forgotten organ, spleen, splenomegaly, multiple splenic hypodense foci, contrast-enhanced computed tomography, fever

An 88-year-old woman was hospitalized with a 1-day history of fever. Laboratory test results demonstrated a platelet count of $6.3 \times 10^{\circ}$ /L and a lactate dehydrogenase level of 314 U/L. Abdominal ultrasound showed gallstones. Although initially cholecystitis was suspected and cefmetazole was administered, the fever lasted for 1 week. Contrast-enhanced computed tomography (CECT) revealed enlarged spleen, multiple ill-defined splenic hypodense foci, and no lymphadenopathy (**Figure 1**). Considering the CECT findings (i.e., splenomegaly and multiple splenic hypodense foci with ill-defined margins), the differential diagnosis included primary splenic lymphoma (PSL) or sarcoidosis ⁽¹⁾. An ultrasound-guided splenic core needle biopsy was performed, which led to the diagnosis of diffuse large B-cell lymphoma (**Figure 2**). Subsequently, the patient was transferred to another hospital for treatment.

The spleen is frequently recognized as the "forgotten organ" among clinicians ⁽²⁾. However, splenic imaging studies may help establish the diagnosis. In particular, if a patient presents with persistent fever and splenomegaly, both of which are common symptoms in daily practice, clinicians should keep a high index of suspicion of PSL and perform CECT ⁽³⁾. To arrive at the correct histopathological diagnosis, although splenectomy has generally been performed, splenic biopsy can nowadays be used as an effective diagnostic method with low complication rates ⁽⁴⁾.

Article Information

Conflicts of Interest

None

Author Contributions

HF acquired data and drafted the manuscript. AK, KW, and MS reviewed and supervised the manuscript.

Informed Consent

We have obtained informed consent for this manuscript.

Approval by Institutional Review Board (IRB)

In this study, IRB approval was not required.

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Figure 1. a. Abdominal precontrast computed tomography showing splenomegaly. b-d. Abdominal contrast-enhanced computed tomography showing multiple splenic hypodense lesions and no enlarged lymph nodes.



Figure 2. a. Microscopic examination of the splenic biopsy specimen showing diffuse proliferation of atypical cells (hematoxylineosin stain; original magnification, 400×). b. Immunohistochemical analysis showing positive CD20 (original magnification, 400×).