Volume 13 • Number 1 • March 2022 • em00787

JOURNAL OF CLINICAL AND EXPERIMENTAL INVESTIGATIONS

LETTER TO EDITOR

A Case of B-Cell Lymphoma Diagnosed by Bone Marrow Aspiration

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Keywords: B-cell lymphoma, bone marrow aspiration, FISH

Dear Editor,

A 90-year-old woman was admitted to our hospital for lower extremity weakness.

The lactate dehydrogenase level was 423 U/L (reference: 124–229 U/L). Magnetic resonance imaging revealed a slightly hyperintense paravertebral mass that spread into the intraspinal canal and suppressed the spinal cord on gadolinium-enhanced T1-weighted imaging (**Figure 1**). Enhanced computed tomography revealed abdominal lymphadenopathy (**Figure 2**). We could not perform a lymph node biopsy because there were no superficial lymph nodes. Bone marrow aspiration (BMA) findings indicated that total cell counts were 30,000 /μL (of which atypical cells accounted for 0.5%). BMA smear revealed atypical cells with irregular nuclei, several nucleoli, and basophilic cytoplasm containing vacuoles (1,000x, Wright-Giemsa stain) (**Figure 3**). Immunohistochemical staining revealed that atypical cells were positive for CD10/20, and BCL2. Three days after BMA, fluorescence in situ hybridization (FISH) of BMA specimens confirmed IgH/BCL2 gene fusion (**Figure 4**). The patient was diagnosed with B-cell lymphoma. Later, she went to another hospital to receive emergent radiotherapy and chemotherapy. Cytology is used in the diagnosis of lymphoma; however, morphological features alone are insufficient to diagnose lymphoma. The present case demonstrated that FISH of BMA specimens is beneficial to prompt diagnosis of lymphoma despite a small number of lymphoma cells in the bone marrow.

Figure 2. Abdominal CT

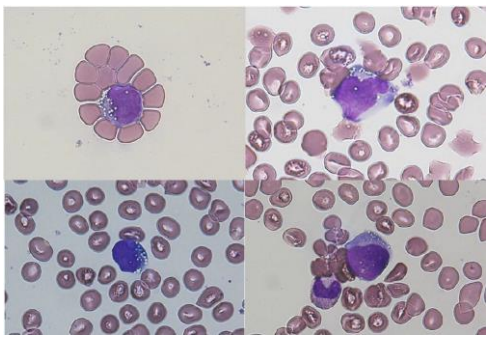

Figure 3. Bone marrow aspiration smear

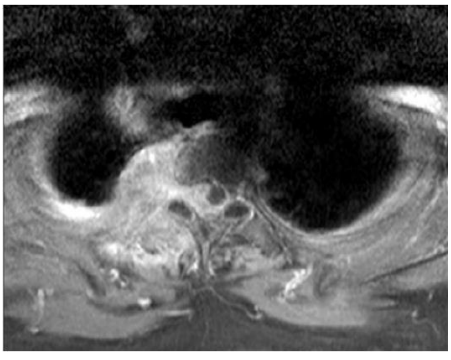

Figure 1. Chest MRI

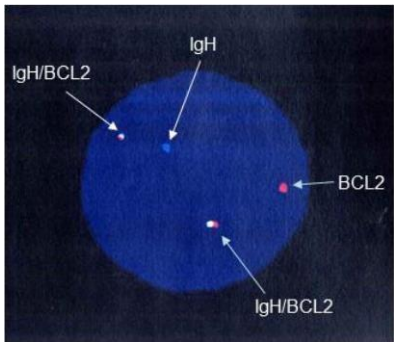

Figure 4. FISH of the bone marrow aspiration specimens

Received: 12.11.2021,
Accepted: 25.12.2021
https://doi.org/10.29333/jcei/11514

