Images of Hematology

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Adult T-cell leukemia/lymphoma with CLL-like morphology

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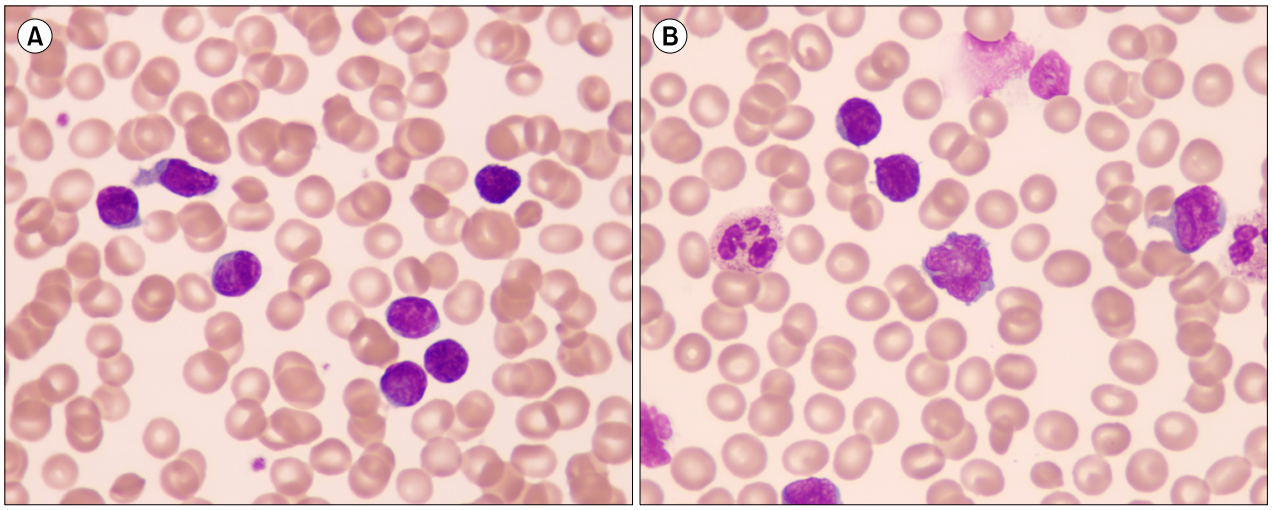

A 47-year-old woman visited our hospital because of sudden-onset headache. She had no history of and specific physical findings including skin lesions, organomegaly, or lymphadenopathy. Her blood cell counts were as follows: leukocytes, 21.87×10^9/L with lymphocytosis (62%; 13.56×10^9/L); Hb, 12.0 g/dL; and platelets, 79.0×10^9/L. Serum lactate dehydrogenase level was as high as 4,169 U/L, with hypercalcemia (15.4 mg/dL). A peripheral blood smear revealed that most of the lymphocytes were mature with small-sized, non-lobulated nuclei and high nuclear/cytoplasmic ratio **(A)**. Few cells had indented or convoluted nuclei, and typical "flower cells" were hardly observed **(B)**. Bone marrow biopsy revealed infiltration of CD3-expressing lymphoid cells. Peripheral lymphoid cells expressed CD3, CD4, and CD5, but not CD7 and CD8. PCR confirmed the presence of the human T-cell leukemia virus-1 proviral genome. The patient underwent intensive supportive therapies, but soon died of septic shock. Patients with adult T-cell leukemia/lymphoma (ATLL) with CLL-like morphology have longer transformation-free survival. Our findings in this case do not support this suggestion. However, we could not determine for how long she had been tolerant to ATLL. To establish an association between morphology and prognostic impact, more cases should be analyzed.