



## Image Article

# A Rare Case of Diffuse Large B-Cell lymphoma with leukemic Presentation

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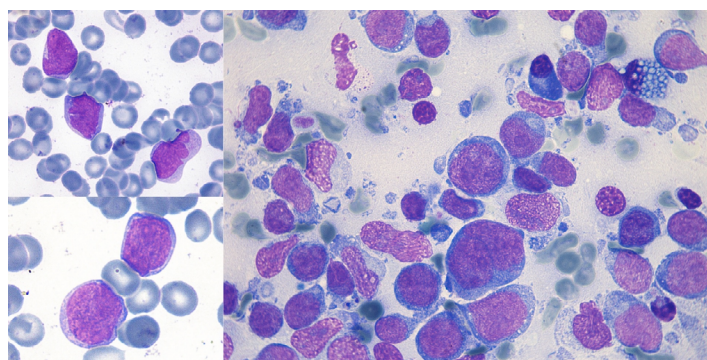
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An otherwise healthy 85-year-old male presented to our emergency department after a fall. Clinical examination was unremarkable for pathological findings, apart from a bruise on the right hip. Complete blood count yielded leukocytosis (10.730/ $\mu$ L), relative neutropenia (28%) with monocytosis (60%), anemia (Hb 7,8g/dl), and thrombocytopenia (12.000/ $\mu$ L). Further work-up revealed markedly increased LDH (1274 U/L) and moderately elevated liver enzymes. Full body computed tomography scan demonstrated multiple hypodense splenic lesions yet without lymphadenopathy. Peripheral blood smear (PBS) evaluation featured dominion by an atypical cellular population with a high nuclear to cytoplasmic ratio, irregularly folded polymorphic nuclei, open chromatin with variable abundance of densely basophilic cytoplasm highly suggestive of lymphoid origin (Left Panels, May-Gruenwald/Giemsa, x100). Bone marrow (BM) smear showed infiltration by a polymorphic cellular population with a densely basophilic cytoplasm, sometimes vacuolated, high nuclear/cytoplasmic ratio, open chromatin, and variable number of prominent nucleoli (Right Panel, May-Gruenwald/Giemsa, x100). BM biopsy demonstrated extensive diffuse infiltration (95%) by a neoplastic population of large lymphocytes monoclonal for  $\lambda$  light chain, positive for CD20, PAX-5, CD79a, CD5, MUM-1, bcl-2, IgM, and negative for CD34, TdT, c-kit, MPO, PGM-1, CD15, CD2, CD138, CD56, CD23, cyclinD1, CD1a, CD21, CD30, CD10, bcl-6 and IgD, with a high proliferation index (Ki67=90%), setting the diagnosis of CD5 positive diffuse large B cell lymphoma (DLBCL) of non-germinal center B-cell origin. We hereby present an atypical case of DLBCL presenting as acute leukemia [1,2]. We underline the necessity of combining PBS and BM aspirate evaluation with BM histology to diagnose lymphomas that present without lymphadenopathy or organomegaly.



## References

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