kappa-restricted band was noted by electrophoresis and immunofixation performed on serum, urine, and CSF. Bone marrow FISH analysis showed loss of one copy of 13q14 signal in 17 of 300 cells (5.7%) and loss of one copy of the 17p13.1 signal in 127 of 300 cells (42.3%). He was resistant to chemotherapy and developed dysphagia, aspiration pneumonia, and subsequent candidemia with ensuing multiorgan failure. The patient died shortly thereafter. In summary, this is the first case report for a lymphoplasmacytic lymphoma transformation to B-PLL, a rare condition resistant to chemotherapy and with a median survival of 30 to 50 months. Deletion in 17p13 is detected in 50% of cases and associated with TP53 mutation.

Epstein-Barr Virus–Positive Diffuse Large B-Cell Lymphoma in Human Immunodeficiency Virus–Infected Patient: Presentation of a Case and Review of the Literature

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Diffuse large B-cell lymphoma is a heterogenous disease with many morphological variants and subtypes. Epstein-Barr virus–positive diffuse large B-cell lymphoma, not otherwise specified (EBV-positive DLBCL, NOS) is a distinct entity in the WHO classification. The association between EBV-positive DLBCL, NOS and immunodeficiencies is poorly defined in the literature. This condition was described in some immunosuppressing illnesses, including SLE and idiopathic CD4 lymphocytopenia. However, in these settings, the association with MYC gene rearrangement was not explored. To our knowledge, this type of lymphoma has never been reported in the context of HIV. We report a case of a 44-year-old male with longstanding untreated HIV infection and profound lymphocytopenia (CD4 65 cell/mL). FISH analysis was positive for a MYC gene rearrangement, it is difficult to know if this represents a biologically different entity from that of conventional EBV-positive, DLBCL, NOS.

Flow Cytometric, Morphologic, and Laboratory Comparative Study in Patients With Leukocytosis

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Objectives: Flow cytometry immunophenotypic study is an important diagnostic tool for hematopoietic malignancies. However, flow cytometry study may not be cost-effective as a first-line screening tool for patients with leukocytosis, including absolute neutrophilia. Our objective was to compare flow cytometric, morphologic, and laboratory findings in patients with leukocytosis.

Methods: We identified 282 patients via keyword search in our electronic record system during August 2016 to December 2016. The most common indications for flow cytometry analysis performed on peripheral blood specimens included history of hematologic malignancy (n = 77), leukocytosis (n = 64), and anemia/cytopenia (n = 60). We evaluated and compared flow cytometric, morphologic, and laboratory findings in patients with leukocytosis.

Results: This group included patients with a history of hematologic malignancy, status post chemotherapy and/or stem cell transplant (n = 11), circulating blasts (n = 12), absolute neutrophilia (n = 35) and/or absolute lymphocytosis (n = 8), and normal counts of white blood cells, lymphocytes, and neutrophils (n = 7). Peripheral smear evaluation was performed in 31 cases, including 19 positive and 12 negative cases. Flow cytometry analysis showed positive findings in 20 cases and negative findings in 44 cases. All 19 cases with positive morphologic findings assessed by blood smear also showed positive immunophenotypic findings. We identified one case with morphologic findings suggestive of chronic myelogenous leukemia, while flow cytometry analysis revealed a negative result. One patient revealed significantly increased circulating blasts by flow cytometry; however, peripheral blood smear was not performed. All patients with absolute neutrophilia without concurrent circulating blasts, absolute lymphocytosis, or absolute monocytecytosis yielded negative flow cytometry immunophenotypic findings. Morphologic findings by peripheral blood smear evaluation were significantly correlated with flow cytometry analysis (P = .001).

Conclusion: Morphologic evaluation by peripheral blood smear is an accurate and cost-effective screening test for patients with leukocytosis. Flow cytometry study for patients only with absolute neutrophilia is low yield.