Waldenström’s macroglobulinemia revealed by atypical blood lymphoid cells

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A 69-year old man was hospitalized because of weakness and weightless. Physical examination revealed cachexia, hepatomegaly, voluminous splenomegaly and polyadenopathy. The patient was not jaundiced. Blood and biochemistry analysis showed: leukocytes $8.7 \times 10^9/L$, hemoglobin $96 \ g/L$, platelets $95 \times 10^9/L$, alkaline phosphatase: $6N$, γ-glutamyl transferase: $10N$), decreased prothrombin time (58%), hyperuricemia, increased serum creatinine (109 µmol/L). Serum protein immunoelectrophoresis revealed hypoalbuminemia (26 g/L) with a monoclonal immunoglobulin M κ component (52 g/L). LDH were normal. Examination of a smear of peripheral blood revealed 32% of abnormal lymphoid cells: monocytoid cells mimicking plasma cell leukemia (Figure 1a), cells with blue cytoplasm and hypersegmented nuclei with minimal chromatin clumping and visible nucleoli (Figure 1b), lymphoplasma cells (Figure 1c) and plasma cells (Figure 1d). Immunophenotyping of the lymphoid blood cells revealed a B cell proliferation CD19+, CD38+, CD56 –, CD11a +, CD11b + with a strong expression of IgM κ. Histologic examination of bone marrow was consistent with a diagnosis of Waldenström’s macroglobulinemia. This diagnosis was unexpected in the light of the clinical presentation with cachexia and anicteric cholestasis and the unusual cytological features of the peripheral lymphoid blood cells. Indeed a few cells resemble activated lymphoid cells but the patient had not had a recent viral infection and had not received any transfusion therapy. Therapy with chlorambucil rapidly improved the patient’s general status and six months later the IgM κ decreased from 52 g/L to 11.4 g/L and the abnormal lymphoid cells had disappeared.

References