

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 $\mu\text{mol/L}$). 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: monocytoïd cells mimicking plasma cell leukemia (Figure 1a),¹ cells with blue cytoplasm and hypersegmented nuclei with minimal chromatin clumping and visible nucleoli (Figure 1b),² 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.³

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

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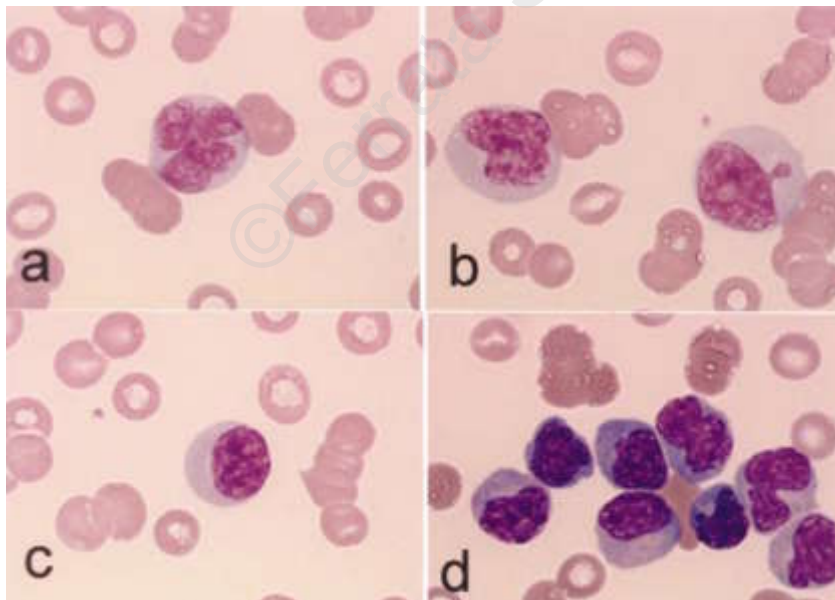


Figure 1. Peripheral blood smear (May-Grünwald-Giemsa, x1,000).

a. monocytoïd cell;
b. cells with hypersegmented nuclei;
c. lymphoplasma cell;
d. plasma cells.

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