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ASSOCIATION BETWEEN NON-HODGKIN'S LYMPHOMA AND ESSENTIAL THROMBOCYTHEMIA

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A 70-year-old man presented with dyspnea and thoracic pain. A chest X-ray was taken and a spontaneous pneumothorax was diagnosed; however, hematologic values were: Hb 9 g/dL; WBC 20×10^9/L with 18% neutrophils, 71% lymphocytes, and 1% monocytes; platelets $1,100\times 10^9$/L. Ultrasonography showed mild splenomegaly (16.7 cm). Circulating lymphocytes were analyzed by flow cytometry and were found to be CD19- and CD20 positive with λ chain restriction, and CD5, CD23-, CD25- and CD10 negative. At peripheral blood examination by light microscopy, small or medium-sized lymphocytes were observed without smudged cells. No abnormalities were detected at karyotype analysis. During hospitalization, lymphocytes ranged from $20\text{-}25\times10^9$/L, and platelets from $1,100\text{-}1,300\times10^9$/L.

Bone marrow biopsy revaled significant lymphocyte infiltration. The lymphocytes were organized in follicles composed mainly of centrocytes. A few diffuse areas were found. Interestingly, the follicles were surrounded by a great number of megakaryocytes, most of which showed atypical features (Figures 1 and 2). In some fields, interstitial infiltration of lymphocytes among megakaryocytes was observed (Figure 2), along with a mild degree of fibrosis. Immunohistochemical analysis demonstrated that lymphocytes were CD20 positive and CD43 negative. In addition, immunohistochemical staining for the bcl-2 protein (clone 124, Dako)[1] yielded a positive reaction. On the basis of these findings, and after exclusion of possible causes of secondary thrombocytosis,[2] the simultaneous occurrence of essential thrombocythemia and non-Hodgkin's lymphoma with the histologic and phenotypic features of a follicle center lymphoma[3] was diagnosed. Associations between lymphoproliferative and myeloproliferative diseases are not very frequent.[4-7] The evolution of such cases is generally characterized by the suppression of one of the two conditions, and the lymphoproliferative disease generally prevails. To date, after therapy with alternating courses of chlorambucil and busulfan, good control of both the myelo- and the lymphoproliferative disease has been obtained in our case.

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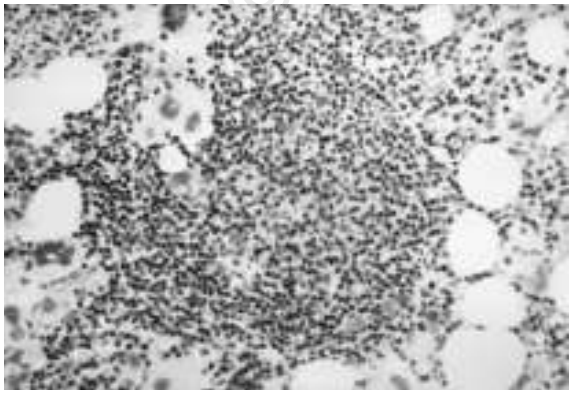

Figure 1. Bone marrow biopsy (Giemsa x 250). A lymphomatous follicle is surrounded by atypical megakaryocytes.

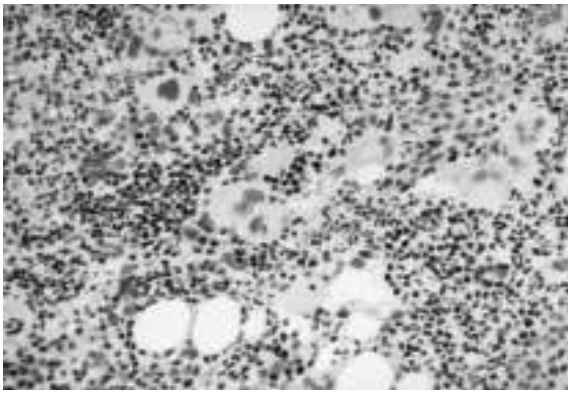

Figure 2. Bone marrow biopsy (Giemsa x 250). Atypical megakaryocytes, with interstitial infiltration of lymphocytes.

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