Short Communication

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Pseudo-Pelger-Huët Anomaly in Chronic Lymphocytic Leukemia

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Key Words

Abstract

Anomalous cells of the Pelger-Huët type appear mainly in diseases affecting granulopoiesis such as myeloproliferative disorders, aplastic anemia and agranulocytosis [1]. The association of this anomaly with disorders of the lymphatic system is rare and had been described only in 1 patient with chronic lymphocytic leukemia [2]. Recently we have encountered another patient with chronic lymphocytic leukemia and acquired Pelger-Huët anomaly.

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Case Report

A 50-year-old man was hospitalized in 1975 because of generalized lymphadenopathy and hepatosplenomegaly. A diagnosis of chronic lymphocytic leukemia was done on the basis of the following criteria: leukocyte count of 30,000/ μ l with 90% mature lymphocytes, infiltration of the bone marrow with small lymphocytes and hypogammaglobulinaemia of 20 g/l. Pelger-Huët cells were not seen. The patient was treated with 10–20 mg prednisone and 2–4 mg chlorambucil per day and entered partial remission. In 1979 he developed recurrent upper respiratory infections and was readmitted because of bronchopneumonia. The leukocyte count was 17,000/ μ l with 70% mature B lymphocytes, and 30% neutrophils, the majority of them being Pelger-Huët cells. There was hypo-gammaglobulinaemia with total globulin of 0.6 g/dl. He improved after a short course of antibiotics. During 1980 the patient was hospitalized twice for recurrent bronchopneumonia. On each admission the granulocytes were still of Pelger-Huët type. Blood samples from his brother and two sons were studied. None of them displayed the Pelger-Huët anomaly.

Discussion

The patient described had Pseudo-Pelger-Huët anomaly since the anomalous cells appeared in his blood in a late phase of his disease and were not found in his family. The occurrence of Pelger-Huët cells in chronic lymphocytic leukemia is obscure. It may be attributed to impaired myelopoiesis due to infiltration of the bone marrow with small lymphocytes [3] or to chemotherapy [1]. The appearance of the anomalous cells might be important in association with the increased susceptibility of the patient to severe in-

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fections, because decreased chemotactic migration was observed in neutrophils from individuals with Pelger-Huët anomaly [4, 5].

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