Chronic Lymphocytic Leukemia following Treatment for Hodgkin’s Disease

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The present report describes a patient who, following successful treatment for Hodgkin’s lymphoma (HL), presented 4 years later with chronic lymphocytic leukemia (CLL).

A 62-year-old male, diagnosed 4 years earlier as being afflicted with HL, nodular sclerosis type, stage 3B was treated with mantle irradiation (total dose of 4,000 R) and six courses of MOPP and entered into clinical remission. At present he complains of severe abdominal pains and profuse diarrhea. A physical examination revealed a diffuse enlargement of the lymph nodes and a huge, centrally located abdominal mass. The pertinent laboratory data revealed a white blood cell count of 52,000/mm³ with 80% small lymphocytes and many Gumprecht cells. The abdominal computerized tomography confirmed the presence of huge retroperitoneal masses. An axillary lymph node biopsy demonstrated that the normal structure was replaced by small uniform lymphocytes. A trephine bone marrow biopsy demonstrated a massive infiltration with small round lymphocytes. 84% of the peripheral blood mononuclears and 60% of the lymph node cells were B lymphocytes, as determined by the presence of surface immunoglobulins. The above-mentioned findings were compatible with CLL. Following six courses of cyclophosphamide, vincristine and prednisone (COP) and irradiation to the abdominal masses, the patient’s condition improved and the peripheral white blood counts dropped to 42,000/mm³ with 82% lymphocytes.

The appearance of a second hematologic malignancy following successful therapy of HL is a well-known fact. The majority of these patients were afflicted by acute nonlymphocytic leukemia [1] and in several cases non-HL was observed [2]. It seems that the ‘epidemic’ of secondary leukemias and lymphomas in patients with HL is
related to the intensive therapeutic interventions used currently in the course of
treatment of these patients [3]. The increased incidence of certain types of neoplasms
remains an enigma. The presently reported patient had CLL with abdominal masses, a
picture that is indistinguishable on morphological grounds from diffuse well-
differentiated lymphocytic lymphoma, but it must be mentioned that in the last entity
the leukemic manifestations appear only late in the clinical course or do not appear at
all. To the best of our knowledge there are only two previous similar reports describing
the appearance of typical CLL during the course of HL [4, 5].

References
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