Hairy cell leukemia (HCL) is a rare form of leukemia. Early symptoms include fatigue, infection, and bleeding. Treatment with 2-chlorodeoxyadenosine is used for initial pharmacologic management of HCL.

Signs and Symptoms

Early signs and symptoms of HCL are related to pancytopenias, including fatigue, infection, and, less commonly, bleeding. All HCL cases present with anemia; 75% of patients have thrombocytopenia (Schroeder, Tierney, McPhee, Papadakis, & Krupp, 1992). Splenomegaly can be massive in 90% of patients and hepatomegaly occurs in 40%, both causing abdominal discomfort (Goodman, Bethel, et al., 2003). HCL is progressive, with a median survival rate of 53 months, if left untreated (Saven & Piro, 1994).

Identification and Diagnosis

The hairy cell is mononuclear with prominent cytoplasmic projections, irregular cytoplasmic outlines, and villi of various lengths. They are relatively large cells with abundant pale blue cytoplasm and a low nuclear and cytoplasmic ratio. Hairy cells may be identified by Wright’s stained peripheral blood films in approximately 90% of patients. The cells appear as round, oval,