



Book Supplement

Differential Diagnosis of CLL

Disease	Notes
Hairy cell leukemia	Pancytopenia, splenomegaly, recurrent infections, and autoimmune complications. CD23 result negative but CD11c, CD25, and CD103 are positive.
Prolymphocytic leukemia	Progressive splenomegaly, >55% prolymphocytes, and cytopenias Associated with a bright surface immunoglobulin and absence of CD5.
Hodgkin's disease	Lymphadenopathy with or without constitutional symptoms. Lymph node biopsy and the presence of Reed-Sternberg cells are diagnostic. Immunohistochemistry result positive for CD15, CD30 and CD45
Non-Hodgkin's lymphoma	Lymphadenopathy, organomegaly, and increased lymphoid cells in the circulation. Lymph node biopsy and immunohistochemistry are necessary to diagnose NHL. Circulating cells usually stain with bright surface immunoglobulin and are negative for CD5.
Autoimmune diseases (e.g., SLE, RA)	Constitutional symptoms, moderate lymphadenopathy, joint pains, skin rashes, dry mucosa, and symptoms of end-organ damage. Elevated lymphocytes.
Infectious diseases (e.g., infectious mononucleosis [EBV], CMV, HIV [generalized adenopathy], and TB)	Constitutional symptoms with adenopathy. May need a lymph node biopsy for diagnosis. Elevated lymphocytes, if present, are polyclonal.

CLL = chronic lymphocytic leukemia; CMV = cytomegalovirus; EBV = Epstein-Barr virus; HIV = human immunodeficiency virus; MALT = mucosa-associated lymphoid tissue; NHL = non-Hodgkin's lymphoma; RA = rheumatoid arthritis; SLE = systemic lupus erythematosus; TB = tuberculosis.

Table from *Physicians Information and Education Resource (PIER)*, Chronic Lymphocytic Leukemia module.