

A rare presentation of hairy cell leukemia

Shayan khorami

Kermanshah University of Medical Sciences, Iran

Hairy cell leukemia (HCL) is an uncommon but distinct indolent neoplasm of small mature lymphoid cells with hairy projections that affect the bone marrow, splenic red pulp, and peripheral blood. HCL mostly affects middle-aged to older people, with an average age of 58 years, and represents a male-dominated population. (About 4:1 male/female ratio). The clonal expansion of B-cells with the bright expression of CD19, CD20, CD22, and CD200 characterizes the HCL immunophenotypic profile. Hairy cells are usually negative or dim for CD5, CD23, CD10, and CD27 but positive for CD11c, CD103, CD123, and CD25. While HCL is traditionally assumed to be negative for CD10+ expression, various studies have shown cd10+ HCL instances. The frequency of cd10+ hcl cases reported in large studies has been quite variable, ranging from 5% to 26%. We report a case of a 43-year-old man with a CD10+ expression who presents with jaundice, upper gingiva hemorrhage, ecchymotic lesions, and periodic fever. A complete blood count (CBC) upon presentation revealed

pancytopenia with a white blood cell count (WBC) of $4/75 \times 10^3 /\mu\text{L}$. According to immunophenotyping, the population expressed CD19, CD20, CD25, CD11c, and CD10. It is vital to note that CD10 positive in HCL is a rare occurrence that is critical in this case. The results of the bone marrow aspiration, biopsy, and immunophenotyping all pointed to HCL. As an inpatient, the patient received cladribine 0.1 mg/kg intravenous continuous infusion. After one month, the total blood count was normal, and all symptoms of the disease had vanished. At the most recent 3-month follow-up, the patient was disease-free.

Speaker Biography

Shayan khorami, a fourth-year medical student interested in blood and cancer research, has only recently begun his study on hematology and oncology without having published an article.

shayankh999@gmail.com

Received date: March 28, 2022; **Accepted date:** March 30, 2022; **Published date:** May 10, 2022.