

Clinical Image

Concurrent Chronic Lymphocytic Leukaemia and Hairy Cell Leukaemia after Initial Treatment for Hairy Cell Leukaemia

Islam MS*

Department of Haematology, Guy's & St Thomas Hospital, Broomfield Hospital, UK

*Corresponding author: Islam MS, Department of Haematology, Broomfield Hospital, Chelmsford, UK

Received: May 15, 2018; Accepted: May 30, 2018;

Published: June 12, 2018

Keywords

CLL; HCL; Co-existence

Clinical Image

A 68 years old male was initially diagnosed with hairy cell leukaemia (HCL) in 1997 and he was treated with pentostatin with normalisation of blood count and repeat bone showed complete remission. In 2017 he presented with extreme fatigue and recurrent infections. His full blood count (FBC) showed haemoglobin (Hb)-82g/l, white blood cell (WBC) $4.7 \times 10^9/L$, Neutrophils $0.3 \times 10^9/L$, Lymphocytes $4.1 \times 10^9/L$, monocytes $0.0 \times 10^9/L$, and platelet count $43 \times 10^9/L$. Peripheral blood film showed smear cells and mature lymphocytes, no other abnormal morphology.

Physical examination showed splenomegaly and palpable lymph nodes in his both axillae. Lymph node biopsy confirmed concurrent CLL (CD5, CD20, and CD23 positive) and HCL (cyclin D1, DBA. 44 & TRAP positive) with mainly CLL infiltration (Figure 1A-1H).

CLL & HCL can rarely be synchronous occurrence [1]. Coexistence of two or more morphologically and immune-phenotypically distinct lymphoma clones in a single anatomic site is nowadays defined as composite lymphoma [2]. The incidence of composite lymphoma has been reported to vary between 1% and 4.7% [3].

The development of concurrent HCL and CLL may indicate a common origin and these two malignancies possibly represent clonal disorders at different stage of maturation of the same lymphocyte. Patients with HCL may subsequently develop CLL, thus mimicking a relapse of HCL. Therapy requires individualized approach including watchful waiting in asymptomatic cases. Rituximab may be useful to treat both disorders simultaneously.

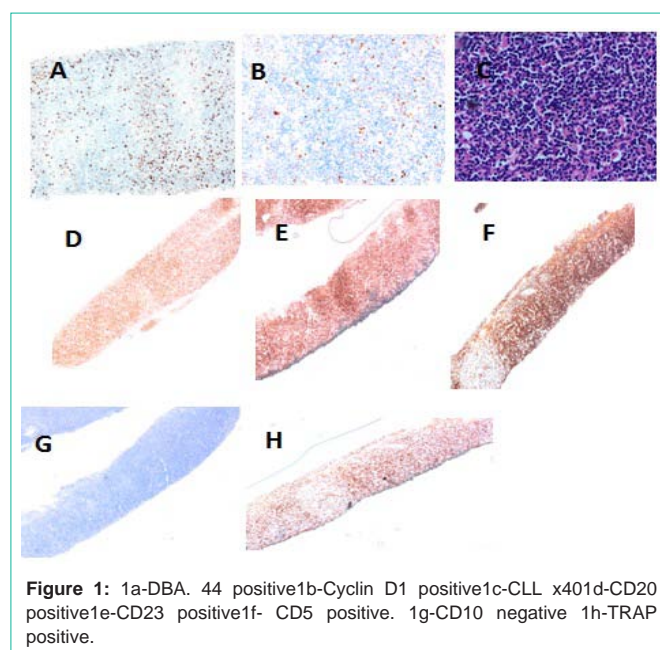


Figure 1: 1a-DBA. 44 positive 1b-Cyclin D1 positive 1c-CLL x401d-CD20 positive 1e-CD23 positive 1f- CD5 positive. 1g-CD10 negative 1h-TRAP positive.

References

1. Sokol L, Agosti SJ. Simultaneous manifestation of chronic lymphocytic leukemia (CLL) and hairy cell leukemia (HCL). *Am J Hematol.* 2004; 75: 107-109.
2. Mokhtar NM. Review article: composite lymphoma. *Natl Canc Inst.* 2007; 19: 171-175.
3. Kim H. Composite lymphoma and related disorders. *Am J Clin Pathol.* 1993; 99: 445-451.