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A Rare Chromosomal Abnormality in Chronic Lymphocytic Leukemia: t(13;13)

Kronik Lenfositik Lösemide Nadir Bir Kromozomal Anomali: t(13;13)

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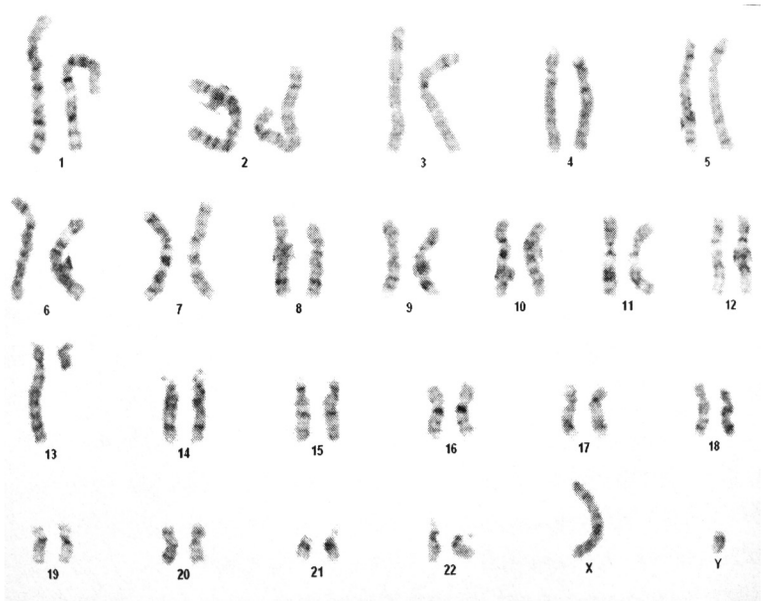

Figure 1. Peripheral blood culture with TPA revealed t(13;13) (q14;q32).

The patient was a 67-year-old man with peripheral blood lymphocytosis. The patient's complete blood count revealed hemoglobin of 12.2 g/dL, white blood cell count of 22,000/µL, and platelet count of 124,000/µL. The differential count for white blood cells was as follows: neutrophils, 10%; lymphocytes, 86%; and monocytes, 4%. Absolute lymphocyte count was 18,920/µL. Flow cytometry of peripheral blood revealed 86% lymphocytes, which were positive for CD19, CD79b, CD20 (dim), CD5, CD23, and CD45, but they were negative for FMC7 and CD38. Blood culture with phorbol 12-myristate 13-acetate (TPA) and subsequent Giemsa banding revealed t(13;13)(q14;q32)[8]/46,XY[12] (Figure 1).

Structural aberrations of the long arm of chromosome 13,t/del(13q) account for 20% of all chromosomal abnormalities in chronic lymphocytic leukemia [1]. This rate is even higher when

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more precise methods like fluorescence in situ hybridization are used for deletion of band 13q14, reaching 50% of all cases. Although translocations of chromosome 13 could have different counterparts, t(13;13) has been reported very rarely. According to the Mitelman database, only six cases have been registered so far [2].

Keywords: Chronic lymphocytic leukemia, Cytogenetics, Chromosome 13

Anahtar Sözcükler: Kronik lenfositik lösemi, Sitogenetik, Kromozom 13

Informed Consent: Informed consent was obtained from the individual participant included in the study.

Authorship Contributions

Concept: A.S., A.M.; Design: M.S.; Data Collection or Processing: M.S.; Interpretation: A.S., A.M., M.S.; Literature Search: M.S.; Writing: M.S.

Conflict of Interest: The authors declare no conflict of interest.

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