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Eighty-year-old man with rare chronic neutrophilic leukemia caused by CSF3R T618I mutation: A case report and review of literature

Ya-Ping Li, Na Chen, Xian-Mei Ye, Yong-Shou Xia

Abstract

BACKGROUND

Chronic neutrophilic leukemia (CNL) is a rare bone marrow proliferative tumor and a heterogeneous disorder. In 2016, World Health Organization included activating mutations in the gene for CSF3R as one of the diagnostic criteria with CSF3R T618I being the most common mutation. The disease is often accompanied by splenomegaly,

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<https://onlinelibrary.wiley.com/doi/full/10.1002/ajh.24983>

Yuichi Ikeda, Jun Yamanouchi, Katsuto Takenaka, Effects of ruxolitinib on secondary myelofibrosis following chronic neutrophilic leukemia with the CSF3R T618I mutation, Annals of Hematology, 10.1007/s00277-020-04185-1, (2020).

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Author: Michelle A. Elliott, Ayalew Tefferi

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have a diagnosis of chronic neutrophilic leukemia. At a follow-up at 7 months, in addition to the CSF3R c.2373G>A (p.W791*) truncated mutation, another CSF3R mutation appeared as c.1853C>T(p.T618I). Discussion and conclusion: We present the first patient with a diagnosis of chronic

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We herein report a case study of a patient with CNL with a **T618I** point mutation on the **CSF3R** gene who showed severe bleeding. Figure3.The direct sequencing of exon 14 of the **CSF3R** gene.

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Panel A shows the location and recurrence of **CSF3R** mutations found in samples from 16 of 27 patients with **chronic neutrophilic leukemia** (CNL) or atypical **chronic myeloid leukemia** (CML), along with ...

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Disease Overview and Diagnosis. **Chronic neutrophilic leukemia** (CNL) is a potentially aggressive myeloproliferative neoplasm, for which current WHO diagnostic criteria include leukocytosis of $\geq 25 \times 10^9$ /L of which $\geq 80\%$ are neutrophils, with $< 10\%$ circulating neutrophil precursors with blasts rarely observed. In addition, there is no dysplasia, nor clinical or molecular criteria for other ...

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Chronic neutrophilic leukemia

Rare Myeloproliferative Neoplasm

Chronic neutrophilic leukemia is a rare myeloproliferative neoplasm that features a persistent neutrophilia in peripheral blood, myeloid hyperplasia in bone marrow, hepatosplenomegaly, and the absence of the Philadelphia chromosome or a BCR/ABL fusion gene.

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