Fighting Hepatotoxicity in CML Patient Journeys

Charity fund of patients "DROP OF BLOOD"

Kharkiv.

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INTRODUCTION & AIMS

Tyrosine kinase inhibitors (TKIs) have revolutionized CML treatment, but hepatotoxicity remains a major cause of therapy modification. It can arise from various pathophysiological mechanisms and lead to reduced adherence and treatment interruptions. To improve safety, CML patients need access to practical information about liver toxicity risks and prevention strategies.



Objectives: Raise awareness about TKI-induced hepatotoxicity, Empower patients to take preventive steps, Improve clinical decision-making among doctors, Promote the use of validated diagnostic tools.



CML Patients' School





RUCAM scale online calculato

CONCLUSIONS

This initiative demonstrates that patient education, clinical collaboration, and digital tools can significantly improve the safety and continuity of TKI therapy in CML care.



CML ADVOCACY - LEARN, SHARE, GROW 23RD INTERNATIONAL CONFERENCE FOR ORGANISATIONS REPRESENTING PATIENTS WITH CML



METHODOLOGY

We used a multi-level approach targeting CML patients and healthcare providers. Patients received education on hepatotoxicity risks, symptoms, and prevention, including hepatitis B vaccination. Doctors were trained on diagnostic strategies and use of tools like the RUCAM score. These tools were automated in Ukrainian and English on a digital platform. A consultation center in Kharkiv supported regional collaboration. Real-world outcomes and platform analytics guided ongoing improvements.

RESULTS

- The initiative strengthened collaboration between doctors from different regions through a dedicated consultation center in Kharkiv. In cases of severe immune-mediated TKI hepatotoxicity, diagnostic pathways became more efficient: time to diagnosis was reduced, the duration of TKI withdrawal shortened, and therapy was restarted earlier. In some cases, patients were able to return to the same TKI after recovery.
- Patients began implementing preventive strategies, including lifestyle changes, monitoring drug interactions, and voluntarily receiving hepatitis B vaccination. Educational efforts for hematologists and family physicians improved awareness and management of hepatotoxicity.
- The RUCAM score was introduced into routine clinical practice to assess the likelihood of drug-induced liver injury, along with additional tools for liver safety management. These tools were automated in both Ukrainian and English on a digital education platform for healthcare professionals (used by over 5,000 professionals in 50+ countries.). Two peer-reviewed articles were published to support knowledge dissemination. Overall, the initiative enhanced clinical decision-making, promoted continuity of care, and empowered patients to participate actively in their treatment journey.