EXPERIENCE OF DISCONTINUATION TYROSINE KINASE INHIBITORS THERAPY IN PATIENTS WITH CHRONIC MYELOID LEUKEMIA IN CLINICAL PRACTICE

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BACKGROUND AND IMPORTANCE
The treatment of chronic myeloid leukemia (CML) with tyrosine kinase inhibitors (TKI) results in optimal cytogenetic and molecular responses, improving life expectancy. Nevertheless as a lifelong pharmacological treatment, can lead to adverse events (AEs) that can substantially impact the quality of life, adherence and therefore the success of treatment. Nowadays, discontinuing treatment in patients who achieved a sustained deep molecular response (DMR) is the main goal in CML therapy, in order to achieve a Treatment-Free Remission (TFR), leading to lower occurrence of drug-related AEs, cost reduction and feeling of cure.

AIM AND OBJECTIVES
Our aim is to describe the clinical experience of discontinuing the therapy with TKI in patients diagnosed with CML.

MATERIAL AND METHODS

Study design: Retrospective descriptive study of patients with Philadelphia chromosome (Ph) positive CML in chronic phase, treated with TKI till August 2022.

Criteria for discontinuing the treatment: ≥5 years with TKI treatment and DMR achieved (molecular response (MR) ≥4.0 during ≥36 months).

Variables included: sex, age, TKI treatment, follow-up time, candidates to discontinuation, time elapsed to reach MR, time between treatment start and discontinuation, TFR duration, percentage of patients who lost response and were reintroduced to therapy, time to lost of response, withdrawal symptoms and disease progression.

RESULTS
- 48 patients, 70.83% women.
- Median age: 61 (25-81) years
- First-line: all received imatinib, except one patient who received dasatinib.
- Follow-up time median: 60 (3-243) months.
- 25% were candidates to discontinuation.
- Median time to reach MR: 15 (3-50) months.
- Median time between treatment start and discontinuation: 9 (3-16) years.
- TFR median: 10 (3-108) months.

Percentage of patients who lost response and were reintroduced to therapy: 25%.
- Median time to lost of response: 3 months since discontinuation.
- 1 patient shows a withdrawal symptom: severe anemia.
- None of them shows a progression to advanced disease stages.

CONCLUSION AND RELEVANCE
High percentage of candidates were safely discontinued and currently remain untreated. Reduction of toxicities associated with TKI therapy could drive to a clinical benefit for CML patients, improving living conditions.