AUTOIMMUNE MANIFESTATIONS IN PATIENTS WITH CHRONIC LYMPHOCYTIC LEUKEMIA: A RETROSPECTIVE SINGLE-CENTER STUDY

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Introduction

Autoimmune manifestations (AIM) can be a complication of chronic lymphocytic leukemia (CLL) due to immune dysregulation. These manifestations can arise at different stages of the disease and across multiple organ systems, but their clinical impact and relevance for CLL management remain poorly defined.

Aim

The aim is to characterize autoimmune manifestations in CLL:

- the organ systems involved,
- timing of onset,
- the impact on disease progression,
- the standard management and its impact on prognosis.

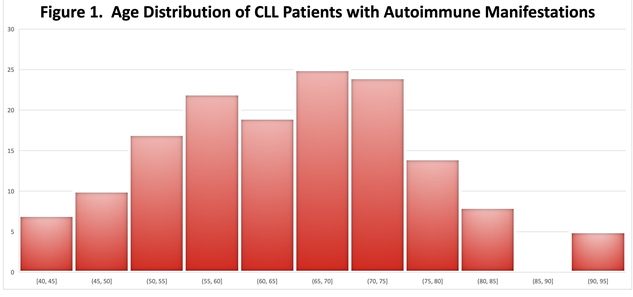
Methods

We analyzed data from 1153 CLL consecutives patients: of those 150 patients have also autoimmune manifestations. In these patients, we classified the involved organ systems and the timing of onset relative to CLL diagnosis. Treatment responses for autoimmune diseases were assessed and their correlation with clinical variables was explored statistically.

Results

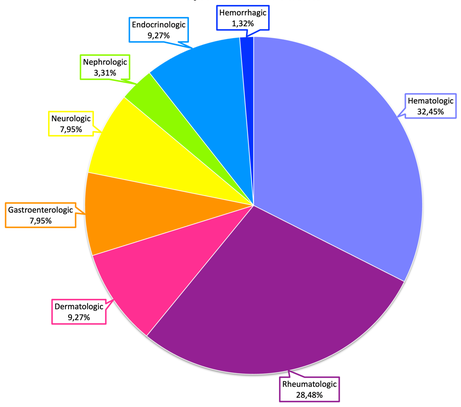
- Median age at CLL diagnosis was 65 years (range 40–92), with a slight male predominance (52.7%).
- Most patients (56.1%) were diagnosed at early disease stages (Rai 0 or Binet A).

Figure 1. Age Distribution of CLL Patients with Autoimmune Manifestations



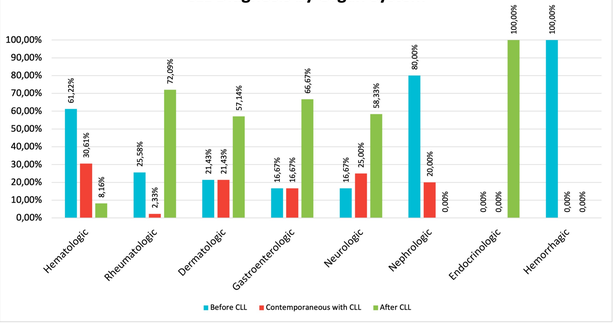
- AIM affected various organ systems: Hematological manifestations were the most frequent (see figure 2).

Figure 2. Distribution of Autoimmune Manifestations by Organ System in CLL Patients



- AIM were diagnosed before CLL in 72 patients (47,68%), concurrently with in 25 patients (16.55%), and after CLL in 54 patients (35,76%).
- No significant associations were found between the timing or the organ system involved and treatment response.

Figure 3. Timing of Autoimmune Manifestations Relative to CLL Diagnosis by Organ System



- A significant association was observed between FISH abnormalities and occurrence of autoimmune manifestations ($p < 0.05$). However, no clear correlation emerged between specific cytogenetic alterations and the involvement of distinct organ systems.
- 66 patients of 151 (43,71%) received a therapy for CLL similar to 40% of the entire cohort.
- We did not observe a significant impact of the CLL treatment on AIM except for hematological one ($p > 0.05$ for every interested system undergoing any CLL treatment)

Discussion

Autoimmune manifestations in CLL are frequent and involve multiple organ systems. Our findings suggest that neither the affected organ system nor the timing of onset influences treatment outcomes, emphasizing the importance of early detection and individualized management strategies.