OUTCOME OF T-LYMPHOBLASTIC LEUKEMIA/LYMPHOMA ON HYPER-CVAD CHEMOTHERAPY IN ADOLESCENTS, YOUNG ADULTS AND ADULTS IN RESOURCE LIMITED SETTINGS.

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Introduction

Acute T-cell lymphoblastic leukemias and lymphomas are a heterogenous group of clonal disorders with variable manifestations. Management usually revolves around intensive chemotherapy with or without allogenic haematopoietic stem cell transplantation, with poorer outcomes in the AYA age group versus the paediatric age group.

Aims & Objectives

1. To determine the outcome of acute T-cell lymphoblastic leukaemias and lymphomas when managed with Hyper-CVAD in terms of overall survival and progression-free survival in the AYA age group.

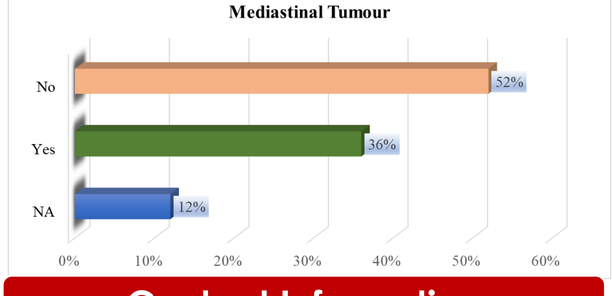
2. To determine the outcome of acute T-cell lymphoblastic leukaemias and lymphomas in relation to high risk factors in terms of overall survival and progression-free survival in the AYA age group.

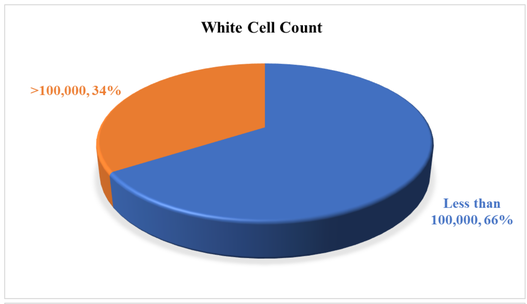
Methods

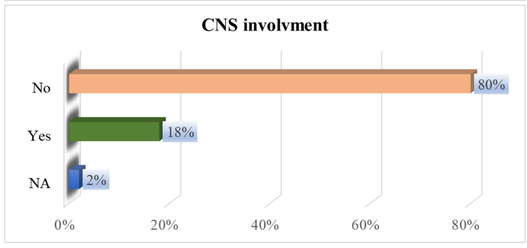
A total of 50 patients, of the AYA age group, diagnosed with acute T-cell lymphoblastic leukaemias and lymphomas were included for review in this retrospective study, which included records/follow-up between Jan 2013 and Jul 2024. Patients were documented for demographics, clinical findings, laboratory and imaging results at the time of diagnosis. Clinical course, details of therapy given, response to management as well current status at last follow-up were also recorded. Data was analyzed using SPSS 26.0.

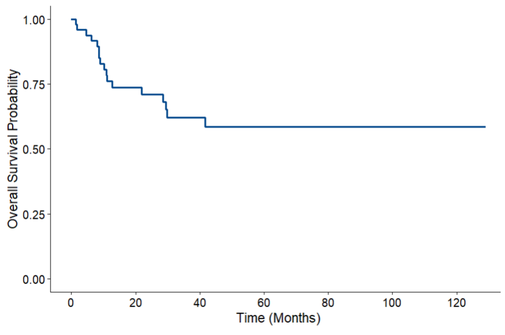
Results

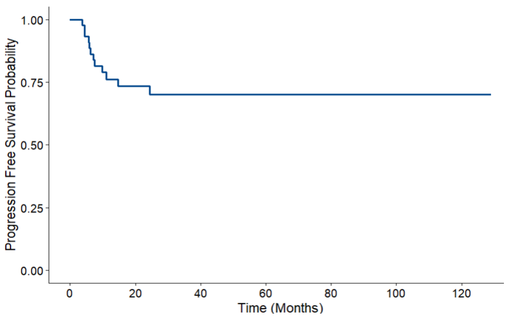
- Overall survival of 71% at two years, which fell to 58.6% at five-years
- Progression-free survival was 73.5% and 70.1%, respectively, for the same time periods.
- Presentation of the patient in the leukaemic phase, with a white cell count greater than 100,000/µL, with central nervous system involvement at the time of presentation, having an early T-cell Precursor phenotype or a positive bone marrow for minimal residual disease post-cycle 1B of Hyper-CVAD were all associated with a poor prognosis.











Summary

T-cell acute lymphoblastic leukaemias/lymphomas are a rare entity which can be effectively managed with simpler regimens like Hyper-CVAD without resorting to hematopoietic stem cell transplant in first remission.

Discussion

The study demonstrates that effective disease control is achievable using the Hyper-CVAD regimen, without the immediate need for hematopoietic stem cell transplantation in first remission. This is particularly relevant in resource-limited settings or when transplant is not feasible.

References

1. Patterns of care and outcomes in adolescent and young adult acute lymphoblastic leukemia: a population-based study. Blood Advances.

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3. Outcome of adult T-lymphoblastic lymphoma depends on ALL-type chemotherapy, prognostic factors, and performance of allogeneic hematopoietic stem cell transplantation. Medicine.

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