

Frequency of Infectious Mortality at the End of Induction Chemotherapy in Acute Lymphoblastic Leukemia and Lymphoma Patients: Findings From a Tertiary Care Cancer Center

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Background and objective: In low- and low-to-middle-income countries (LMICs), the incidence of treatment-related mortality (TRM) in patients with acute lymphoblastic leukemia (ALL) and lymphoblastic lymphoma (LBL) is up to 52%. This study aimed to determine the mortality rate at the end of the induction phase of the treatment among patients with ALL and lymphoma at a tertiary care cancer center.

Methods: This retrospective study analyzed outcomes after induction chemotherapy in pediatric patients with acute leukemia and lymphoma at a tertiary care cancer center from January 2015 to December 2016. Information regarding demographics, clinical characteristics, and laboratory investigations were extracted and reviewed.

Results: Of the total 160 patients, 110 were males, and the mean age of the sample was 4.6 +2.8 years. B-cell leukemia (pre-B-ALL) was diagnosed in 84% (n=134), while 10% (n=6) had acute T-cell leukemia (pre-T-ALL) and 6% (n=10) had lymphoma. Sixteen patients (10%) died within the defined induction period, with 14 deaths occurring due to infections and two deaths resulting from chemotherapy-related toxicity.

Conclusion: Based on our findings, there is a significant prospect of mortality from infections during induction chemotherapy in patients with pediatric hematological malignancies.