Results and 3 years and 5 years survival of chemotherapy by High risk pre B cell (COG) Protocol in children with acute lymphoblastic leukemia in ardebil's boali hospital between 1997 until 2004.

Abstract

Background : Acute lymphoblastic leukemia (ALL) represents a clonal expansion and arrest of normal lymphoid hematopoiesis in bone marrow. ALL remains the most common malignancy in children. The survival rate of the patients is significantly increased since the 1960s.

Aim: This study was under taken to evaluate the 3-year and 5- year overall survival (OS) rates of patients with ALL in a single center in IRAN.

Methods: A total of 80 children with ALL up to 15 years old who had been diagnosed at the Oncology Department in boali Hospital from March 1997 to October 2004 were evaluated for their age, gender, as well as FAB types, presenting features.and 55 patients who treated by High risk pre B cell (COG) evaluated for outcomes of therapy and relapse.

Results: The 85% of the patients were in 1 to 9 years old range. In this series, 43 patients (53.8%) were male. There were a complete remission induction rate of 92.7% during first induction course of therapy. Three-year overall survival was 85.5% and Five-year overall survival was 81% and. Relapse rate after first remission was 20% and death after relapse was 50% and 30% of total deaths was at induction period. Overall infections was major cause of deaths.

Conclusion: Three-year overall survival(OS) in children with new ALL who were undergoing chemotherapy by high risk pre B cell(COG) protocol in buali hospital was 85.5% and Five-year overall survival was 81%. Bone marrow relapse reduce by this protocol. High mortality rate was mainly due to infections which decreased overall survival in this study.

Keywords: Acute lymphoblastic leukemia, Survival, Chemotherapy