CLINICAL PROFILE OF ACUTE LYMPHOBLASTIC LEUKEMIA

ABSTRACT

Leukemia is one among the most commonly seen malignancy in children. Leukemia is characterized by neoplastic proliferation of hematopoietic stem cells and accumulation of blasts and immature cells in the bone marrow. Leukemia is classified as lymphoid or myeloid depending on the lineage of the progenitor cells involved. Acute lymphoblastic leukaemia is the most common leukemia in children. There are developing advancements in management of ALL, Still research is going on in order to improve further outcome. A prospective observational study was conducted in a tertiary care hospital- Institute of child health in egmore, Chennai from August 2017 to September 2018, enrolled 113 paediatric acute lymphoblastic leukaemia patients

AIM AND OBJECTIVES

To determine the clinical profile of acute lymphoblastic leukemia in children between 1 month -12years of age at a tertiary care centre - Institute of child health and hospital for children, Chennai, south India.

MATERIALS AND METHODS

It was an Observational study conducted in children who were in the study age group (1 month to 12 years) admitted in haematology and paediatric medical ward, satisfying the inclusion criteria. Place of study was Department of haematology and paediatric medical ward in Institute of Child Health &Hospital for Children, Chennai during August2017 to September 2018.
RESULTS AND CONCLUSION

A total of 113 children with ALL were included. In this study ALL was commonly seen in the age group of 1 - 4 years (48.67%). Most of the children (89%) belongs to good prognostic age group of 1-10 years. Male predominance (60.20%) was noted in this study. At the time of birth the majority of children with ALL weighed normally. B cell ALL (80.53%) was noted more commonly than T cell ALL (19.46%). Majority of the children (77%) with ALL expressed CD10 antigen. Mean interval for duration of diagnosis from the onset of symptoms was 13.13 ± 12.15 days between diagnosis and onset of symptoms. Most common presenting symptom was fever seen in 84.1% of children and sign was pallor and hepatosplenomegaly seen in 52.2% and 52.2% respectively. Most of the children with ALL were anaemic (90.26%). Severe anaemia was noted in 54.68%. Hyperleukocytosis was observed in 15%. Severe thrombocytopenia was observed in 36%. Hyperuricemia was observed in 28%. Maximum children with ALL (89.38%) had elevated LDH level at the time of diagnosis. Uncommon presentations were hepatitis (1.8%) and tumour lysis syndrome (0.9%).

KEY WORDS:

Acute lymphoblastic leukemia, hyper leukocytosis, tumor lysis syndrome, hyperuricemia, thrombocytopenia, hepatosplenomegaly