

chemotherapy for ALL according to the Modified BFM ALL 95 protocol at our institute, from January 1st 2015 to December 31st 2015. Hyperglycemia was diagnosed with a random blood sugar (RBS) level of ≥ 200 mg/dl or a fasting blood sugar (FBS) value of ≥ 126 mg/dl. Patients with pre-existing diabetes were excluded from analysis.

Results: 165 children with newly diagnosed ALL were analysed of which eight patients (4.8%) were detected to have hyperglycemia (Range 139 – 646mg/dl). Seven of the patients were females and 50% of them were ≥ 10 years of age. No patient had pre-existing diabetes. Five patients (62.5%) required insulin along with metformin to attain adequate glucose control while two patients were treated with metformin alone. One of the patients developed hyperglycemia with an RBS of 264 while on treatment for septic shock and expired shortly after. One child presented with ketoacidosis associated with blood sugar of 554mg/dl and also had pancreatitis. Two children had a family history of diabetes mellitus.

Conclusion: The occurrence of hyperglycemia in our study was lower than previously reported in literature. The incidence of hyperglycemia was significantly increased in female children ≥ 10 years of age ($p=0.002$).

LM-1_V1.6

PROFILE OF ACUTE LYMPHOBLASTIC LEUKEMIA IN CHILDREN UPTO 2 YEARS OF AGE – STUDY FROM A TERTIARY CANCER CENTRE FROM SOUTH INDIA, BANGALORE

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Introduction: Acute Lymphoblastic Leukemia is hallmarked by heterogeneous characteristics and treatment responsiveness in different subtypes. Although, the overall cure rate of ALL has improved significantly over the past few decades, cure rates for specific ALL subgroups vary significantly. Age at diagnosis is identified as an important prognostic marker of pediatric ALL. This study aims at analyzing clinical, hematological, biochemical, immunophenotypical parameters and treatment responsiveness in children upto two years of age, who are diagnosed with ALL.

Materials & methods: It is a retrospective data analysis conducted at a Tertiary Care Cancer Centre in South India. The study population includes all Pediatric ALL upto 2 years of age, registered at this institute during January 2009 to December 2013. The details included in the study were collected from case records, hospital cancer registry and during follow up and percentages were calculated for the variables using appropriate statistical tools.

Results: The total number of pediatric malignancies registered during the period were 2640, out of which 422 cases were under 2 years of age with ALL contributing 122 cases (29%). Among them, 48 children refused treatment due to various reasons and four were lost to follow up. Thus, 70 children are eligible for analysis.

Among 70 children, infants were 13 (18%) and the remaining 57 children (82%) were in the 1-2 years group. There were 39 males (56%) and 31 females (44%), the ratio being 1.25:1. Fever was present in 62 children (88%), and pallor in 57 (81%). Hepatosplenomegaly was observed in 59 children (84%) and isolated hepatomegaly in 9 (14%). Lymphadenopathy was noted in 52 (74%). Bleeding manifestations were present in 9 (11.5%) and parotidomegaly in 3 (4.25%).

Hemogram revealed hemoglobin <7 gm/dL in 25 children (35%), 7-11 gm/dL in 35 (50%) and >11 in 10 (15%). Initial WBC count was $< 10,000$ in 25 children (36%), another 36% had counts between 10,000- 49,000 and the remaining 20 (28%) had more than 50000. Platelet count was $<20,000$ in 14 children (20%), 20,000-99,000 in 51 (74%) and >1 lakh in 6%.

Serum LDH was elevated (>250 IU) in 45 children (64%) and Uric acid in 8 (11.5%). Renomegaly was detected by ultrasound in 12 (17%). Only one child had CNS 3 disease. L1 morphology was seen in 66 children (94%) and L2 in 4 (6%). Immunophenotype was done in 44 children, 41 (93%) were Precursor B ALL and 3 (7%) Precursor T ALL.

Event Free Survival was 63%. Among 26 children who succumbed (37%), three died before the commencement of chemotherapy (4.3%), 6 children

died during induction (8.5%) and 17 (24.2%) died after relapse. Four out of 11 infants (36%) and 40 among 1-2 years group (70%) survived.

Conclusion: Commonest clinical features were fever, hepatosplenomegaly and pallor. Predominant morphology was L1 and immunophenotype, Precursor B ALL. Treatment of infantile ALL is a challenge and is associated with significantly lower survival as compared to 1-2 years group.

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NODULAR LYMPHOCYTE PREDOMINANT HODGKIN'S LYMPHOMA (NLPHL): EARLY OUTCOMES

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Purpose: To evaluate treatment response, patterns of failure and prognostic factors for patients with NLPHL treated at the Tata Memorial Hospital (TMH).

Materials and Methods: Between January 2008 & July 2013, 62 patients with histologically proven NLPHL in the age group of 6-70yrs (Median 30.6Yrs) were treated at TMH. Forty five (73%) were males. Majority had Stage I (48%) & Stage II (24%) disease. Fifteen (24%) had bulky disease at presentation. Sixteen (26%) were treated with Involved Field Radiation Therapy (IFRT) alone, 18 (29%) received Chemotherapy (CTh) alone, while 23 (39%) received a combination of CTh followed by IFRT. Five patients underwent surgery as the local treatment. The IFRT doses were in the range of 20-36 Gy. Thirty-four (80%) patients received ABVD CTh. Five (8%) patients received Rituximab. Primary MINE CTh was used for 4 (6%) patients.

Results: After a median follow-up of 18 months, the 2 year disease free survival (DFS) and overall survival (OS) were 86% and 98% respectively. Complete response (CR) at completion of primary treatment was 94%. At last follow up 55 (89%) were alive without disease. Two (3%) patients each had in-field, out of field and disseminated relapse. Four (6%) had residual disease and one (2%) had transformation to DLBCL. Six (55%) patients received salvage treatment (3 IFRT, 3 CTh), of which 4 were disease free at last FU. On univariate analysis, early stage, absence of B symptoms and use of IFRT resulted in superior DFS. For patients with early stage disease (stage I and II), there was no difference in DFS (94%) between patients receiving IFRT alone and CTh + IFRT. The use of IFRT was associated with improved DFS (91% vs. 78%, $p=0.57$). All patients tolerated treatment well without any grade III or IV toxicities.

Conclusion: NLPHL is associated with excellent overall survival. For patients with early stage disease, IFRT alone results in similar outcomes compared to CTh+IFRT. Early Stage at presentation, absence of B symptoms and the use of IFRT confers superior outcome.

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CLINICAL PRESENTATION & OUTCOME OF PAEDIATRIC PHILADELPHIA-POSITIVE ACUTE LYMPHOBLASTIC LEUKAEMIA (PH +VE ALL) USING AGGRESSIVE CHEMOTHERAPY WITH IMATINIB IN INDIA

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Introduction: Ph +ve ALL is a very high-risk subset of childhood ALL with historically poor outcomes without stem cell transplantation (SCT) before the advent and use of Imatinib Mesylate. The incidence of Ph +ve ALL at our centre is higher at 7% as compared to 2-3% in the west. There is a paucity of data on the clinical presentation outcomes of Ph+ve ALL in India, where SCT is not affordable for most patients.

Aim: We conducted a retrospective analysis of paediatric Ph +ve ALL patients treated with intensive chemotherapy with or without Imatinib.