Materials and Methods: This study is a clinical trial with two groups and twostages.48 children with ALL, age between 5 to 18, was selected by longitudinal case registry and randomly divided to experimental (n = 24) and control (n = 24) groups. Pediatric QOL Inventory general scale and cancer Modula was used for measuring children QOL. Validity and reliability of inventory was determined from Content validity and Cronbach's alpha coefficient. Educational program was similar in two groups. The experimental group given self care checklists after educational sessions and followed for 3 months. QOL inventory was completed before and after self care in both groups. In order to access the result SPS Software, t student test, $\alpha 2$ test and paired t test were used.
Results: The finding showed that two group were same concerning the effective factors on the QOL, such as age, sex, etc ($p > 0.05$). There was no significant difference between QOL mean score of both groups before the intervention (self care). There was a significant difference in totalinventory ($p = 0.05$) and cancer Modula inventory ($p = 0.046$) in experimental group before and after the self care but there was no significant difference in control group. Mean changes of QOL of both groups before and after self care was significantly difference.
Conclusion: QOL after self care was improved in experimental group while QOL decreased in control group. The result of present study confirm the positive effect of self care on children QOL.

4123 POSTER

Result of paediatric Non Hodgkin's Lymphoma with aggressive chemotherapy

K. Mukherjee[1], L. Konar[2], J. Basak[3], S. Ganguli[1], R. Bhandari[4], S. Mukhopadhyay[5], A. Mukhopadhyay[6]. *[1]Netaji Subhas Chandra Bose Cancer Research Institute, Department of Epidemeology, Calcutta, India; [2]Netaji Subhas Chandra Bose Cancer Research Institute, OPD and Department of Epidemeology, Calcutta, India; [3]Netaji Subhas Chandra Bose Cancer Research Institute, Molecular Biology, Calcutta, India; [4]Netaji Subhas Chandra Bose Cancer Research Institute, Surgical Oncology, Calcutta, India; [5]Netaji Subhas Chandra Bose Cancer Research Institute, Biochemistry, Calcutta, India; [6]Netaji Subhas Chandra Bose Cancer Research Institute, Medical Oncology, Calcutta, India*

Background: The Non-Hodgkin's Lymphomas (NHL) in childhood are usually high grade and diffuse histology. They require intensified short duration chemotherapy in contrast to adult NHL. The aim of our study was to observe the result of aggressive short duration chemotherapy in paediatric NHL.
Materials & Methods: We included consecutive 120 paediatric NHL patients in paediatric haemato-oncology department of Netaji Subhash Chandra Bose Cancer Research Institute during period from June 1996 to December 2008. The inclusion criteria were patients less than 25 yrs of age with a diagnosis of NHL and Patients are clinically staged according to the St. Jude's (Murphy's) classification. Patients with >25% blasts in the bone marrow were treated as leukemia and excluded from the study. Each patient received 3cycles A and 3 cycles B of MCP 842 protocol of INCTR. Response was assessed at the completion of 2 cycles of chemotherapy (1 each of A and B).
Result: A total of 120 previously untreated patients were entered in the study. The age range was 1 to 25 yrs (median 12.6). 35 (29.17%) patients had Lymphoblastic Lymphoma (LL), 49 (40.83%) patients had Burkitt Lymphoma. 30 (25%) had diffuse Large B Cell Lymphoma (DLCL) and 6 (5%) had Anaplastic Large Cell. The abdomen was the most common site in 40 cases (33.3%) of involvement followed by the mediastinum in 19 cases (15.83%). One hundred one (84.17%) patients achieved complete response after 2 cycles of therapy. 10 (8.33%) patients achieved partial response and 5 (4.17%) had no response, 5 (4.17%) were not evaluable. With median follow up of 4 years (range 6 months – 10 years) a total of 32 (26.67%) patients (14 LL, 12 Burkitt Lymphoma, 4 DLCL and 2 ALCL) had died. The causes of death were progressive disease in 24, infection in 6, and hepatitis in 1, and unknown 1. Eighty eight (73.33%) patients are alive and in complete remission. The patients tolerated chemotherapy well. Grade IV febrile Neutropenia was seen in 26 patients.
Conclusion: Result of MCP842 is promising.

4124 POSTER

Cardio toxic effects of anthracycline therapy in children with acute lymphoblastic leukemia

B. Coneska Jovanova[1], O. Muratovska[1], S. Glamocanin[1], K. Martinova[1], Z. Trajkova-Antevska[1], S. Koceva[1], R. Kacarska[2], K. Kuzevska-Maneva[2]. *[1]University Childrens Hospital, Pediatric Hematology and Oncology, Skopje, Macedonia; [2]University Childrens Hospital, Pediatric Cardiology, Skopje, Macedonia*

Background: Over the last 25 years of clinical trials, a significant rise in the rate of complete remissions as well as an increase in long-term survival of children with acute lymphoblastic leukemia has been achieved. Therefore, growing attention is now focused on the toxic effects of chemotherapy. Cardio toxicity is well known side effect of chemotherapy with antracyclines.
Material and Methods: This is retrospective study of 60 children with ALL, which were treated after ALL BFM 95 protocol. The study is a part of a bigger study that involves all toxic effects of the ALL-BFM-95 protocol. We evaluated the ECG and cardioechosonography made before starting the protocol and further ECG (made weekly) and echo sonograms made after indication of cardiologist. Values of the EF (Ejection fraction), FS (Shortening fraction) and changes in the rhythm were evaluated.
Results: From the total number of 60 patients, 21 manifested acute cardio toxic effects. Fifteen of them were female and 6 male (2.5:1), and the average age was 7 years, (1.5−12 years). The changes that were registrated were: sinus tachycardia in 19 cases (90%), frontal pericardial separation in 2 cases, problems with repolarization in 5 patients, 3 cases of initial secondary cardiomyopathy and 1 case of cardiac hypertrophy. All of the changes disappeared after the end of the chemotherapy, except the tachycardia. Tachycardia manifested 10 patients in protocol I, after the cumulative dosage of 120 mg/m^2 of anthracyclines, in protocol M tachycardia manifested 4 patients, and 5 patients manifested tachycardia in protocol II after the cumulative dosage of 240 mg/m^2. The EF was in the referent values of 65−83 in all of the patients. Also, there were no significant changes in the values for FS.
Conclusion: The major cardiac problem in our patients was sinus tachycardia, a disorder of the rhythm in 90% of the children. Several children manifested reversible changes in echocardiogram. None of the children had significant changes in EF and FS. Further follow-up of these patients is necessary to detect eventual late cardio toxic effects of chemotherapy.

4125 POSTER

Childhood osteosarcoma relapse – treatment results and prognostic factors

Z. Bekic[1], D. Mandaric[2], V. Ilic[1], N. Lujic[3], Z. Vucinic[3], I. Tufegdzic[1], J. Sopta[4]. *[1]Institute for Oncology & Radiology of Serbia, Pediatric Oncology Department, Belgrade, Serbia; [2]Institute for Pulmonary Diseases Clinical Centre of Serbia, Pulmonary Surgery, Belgrade, Serbia; [3]Institute for Orthopedic Surgery, Tumor Department, Belgrade, Serbia; [4]Institute for Pathology, Tumor Department, Belgrade, Serbia*

Background: Relapse of osteosarcoma is always a challenge in pediatric oncology. The aim of our study was to evaluate results of chemotherapy regimens and analyze prognostics factors in children with relapse of osteosarcoma.
Materials and Methods: From 2000–2007, we treated 57 patients (pts) with non metastatic osteosarcoma, median age 15.5 years (range 3−18). 29 pts relapsed. 26 pts with osteosarcoma relapse were treated, and 3 pts with OS relapse refused the treatment. In 24 pts pulmonary metastases were detected (7 solitary), while 2 pts had local relapse of disease. Disease free interval (DFI) was more than 1 year in 12 patients. Surgery was performed in 20 pts (17 thoracotomy, 3 amputation). Chemotherapy regimens administered were: HD IFO-VP16 (11 pts), HDMth/IFO-VP16 (6 pts), HDMth/Carbo-VP16 (9 pts).
Results: During 8–116 months follow up period (Me = 32 pts), disease free survival rate was 33.12%. There was no significant difference in survival in relation to the type of chemotherapy regimen applied. Prognostic factors that influenced survival were: presence of a solitary metastasis ($p = 0.026$), local relapse of disease ($p = 0.002$), completeness of resection ($p = 0.043$) and DFI longer than 1 year ($p = 0.039$).
Conclusions: The use of aggressive combined therapy (surgery and chemotherapy) and evaluation of prognostic factors are necessary for successful treatment in patients with osteosarcoma relapse. Chemotherapy regimen HD IFO-VP16 had better initial tumor response, but in longer follow up the survival rate was similar to other chemotherapy groups.