HEMATOLOGY, TRANSFUSION AND CELL THERAPY

www.htct.com.br

ORAL PRESENTATIONS

ADULT HEMATOLOGY ABSTRACT CATEGORIES

ACUTE LEUKEMIA

OP 01

THE ACUTE LYMPHOBLASTIC LEUKEMIA OF DOWN SYNDROME

Cemile SELIMOGLU [1], Sezgin PEPELER [1], Gulsah EFECIK [1], Funda CERAN [1], Simten DAGDAS [1], Gulsum OZET [1]

[1] *Ankara City Hospital Hematology Department*

Objective: Down syndrome (DS) is a genetic disorder caused by the presence of a third copy of chromosome 21.It is usually associated with physical growth delays, mild to moderate intellectual disability, and characteristic facial features .Children with DS are at an elevated risk of leukemia, especially myeloid leukemia. On the other hand, children with DS are at a 20-fold increased risk for acute lymphoblastic leukemia (ALL).In our case, we presented a patient with DS who was diagnosed with ALL. **Case report:** 19-year-old male was admitted to the emergency department due to abdominal pain.On his physical examination,splenomegaly was detected.In laboratory examinations; kidney and liver function tests were normal,lactate dehydrogenase:372 U/L,uric acid: 5.4 mg/dl, white blood cell:25000 × 106/L,lymphocyte: 15780 × 106/L, neutrophil:1140 × 106/L,hemoglobin:10 gr/dl, thrombocyte:12000 × 106/L,coagulation tests were normal and in peripheral blood smear evaluation,90% blast cells were detected. **Methodology:** Peripheral blood flow cytometry evaluation was compatible with B-ALL(TdT,CD19,CD10,CD34, cCD79a,CD58,CD9,CD38,CD123,CD20,CD81,CD22 positivity in atypical cells).Bone marrow biopsy was hypercellular.There was diffuse blastic cell infiltration,which stained extensively with TDT,CD79a.Chromosomal analysis is 47XY,+21 and t (12,21) (p13.2;q22.12) (ETV6/RUNX1) (FISH) and 14q32.33 (IGH) FISH were positive,t(9;22) P190 -p210,t(4;11), t(1;19),11q23 were negative.The risk classification was standard risk. **Results:** AUGMENTED BFM induction chemotherapy protocol was started.Pancreatitis was developed after peg-asparaginase and chemotherapy-related hepatotoxicity(grade 1) was developed.Central nervous system prophylaxis(intrathecal methotrexate) was applied.The control bone marrow biopsy performed after induction was normocellular,the blast rate was <5%.BFM standard risk first consolidation chemotherapy protocol was started.He died of septic shock on the eighteenth day of the first consolidation treatment. **Conclusion:** Cases of DS-ALL cases are at greater risk for serious side effects from chemotherapeutics,mortality and recurrence than non DS-ALL.Because children with DS have a higher incidence of treatment-related toxicity,survival rates are lower than non-DS children.During ALL induction chemotherapy life-threatening side effects are tumor lysis syndrome,thrombosis, bleeding and infection.In the UKALL 2003 study,DS associated with a significantly increased risk of death from sepsis during chemotherapy.

https://doi.org/10.1016/j.htct.2022.09.1208

LYMPHOMA

OP 02

LOW INCIDENCE OF CENTRAL NERVOUS SYSTEM (CNS) RELAPSE OF DIFFUSE LARGE B-CELL LYMPHOMA DESPITE LIMITED USE OF INTRATHECAL PROPHYLAXIS

Aamer Aleem [1], Farjah Algahtani [1], Omar Aloraini [1], Ahmed Jamal [1], Musa Alzahrani [1], Ghazi Alotaibi [1], Omar Alayed [1], Khalid Alsaleh [1]

[1] *Department of Medicine, Division of Hematology/ Oncology, College of Medicine and King Khalid University Hospital, King Saud University*

Objective: Diffuse large B cell lymphoma (DLBCL) is the commonest sub type of non-Hodgkin's lymphoma (NHL) accounting for 30–50 % of NHL cases. Around 2% to 10% of patients with diffuse large B-cell lymphoma (DLBCL) experience central nervous system (CNS) relapse after initial therapy which

is associated with a poor prognosis and most often a fatal outcome. The incidence of CNS relapse can vary from <1% in younger, good-risk patients, to around 30% in patients with multiple risk factors, however, the relapse risk was reported to be lower in the rituximab era in some studies. Moreover, optimal modality of CNS prophylaxis remains to be defined, with both systemic and intrathecal (IT) chemotherapy being widely used. As the incidence of CNS relapse and type of prophylaxis used varies in different reports, it is important to study this risk in different populations to implement optimal prophylaxis strategies. The Objectives of this study was to evaluate the incidence of CNS relapse in DLBCL patients at our institution and to study risk factors and the type and role of CNS prophylaxis. **Methodology:** We retrospectively analyzed patients diagnosed with DLBCL at King Khalid University Hospital, Riyadh, from January 2011 to June 2019. Data were collected from computerized hospital information system and from the files of the patients. Variables studied included age at diagnosis, stage at diagnosis, international prognostic index (IPI) and CNS-IPI score, site(s) of extra-nodal involvement, type of chemotherapy received, CNS prophylaxis and CNS relapse. CNS prophylaxis was administered on the basis of presence of high-risk features like presence of ≥2 extranodal sites, involvement of bone marrow, bone, testes, nasopharynx and paranasal sinuses. Patients with presence of CNS involvement at diagnosis and primary CNS lymphoma were excluded. **Results:** A total of 101 patients were diagnosed with DLBCL during the study period. There were 58 males and 43 females with a median age of 56 (range: 16-87) years. Ann Arbor stage of I-IV was assigned in 9, 21, 17 and 50 patients, respectively. The lung was the most common extranodal site involved in 27 (26.7%) patients, and liver and bone marrow involved in 20 (19.8%) patients each. Gastrointestinal tract was involved in 9 (8.9%) patients, kidneys in 5 (4.95%), breast in 4 (4%), and testis and adrenal in 2 (2%) patients each. Twenty-five (24.75%) patients had high risk CNS-IPI score, 44 (43.5%) had intermediate risk score and 32 (31.7%) had low risk score. Ninety-four (93%) patients received R-CHOP chemotherapy while rest of the patients received other types of chemotherapy, mostly a milder regimen (R-CVP), because of comorbidities and poor performance status. Sixteen patients received CNS prophylaxis, which was IT methotrexate (MTX) ± cytarabine/hydrocortisone in all patients. Nine of 25 (36%) patients with high-risk CNS-IPI score did not receive CNS prophylaxis. After a median follow up of 36 months (range 4-114), 2 (2%) patients developed CNS relapse and died shortly after this diagnosis. Both the patients with CNS relapse had high risk CNS-IPI score and did not receive CNS prophylaxis. **Conclusion:** CNS relapse of DLBCL was uncommon in this patient population despite limited use of IT CNS prophylaxis in high-risk patients. Low incidence of CNS relapse in many high-risk patients despite limited use of IT prophylaxis may be related to rituximab use and/or other factors. Our data indicate that IT CNS prophylaxis may be adequate for DLBCL patients at high risk of CNS relapse.

https://doi.org/10.1016/j.htct.2022.09.1209

OP 03

AN UPDATED OF PIONEER PROJECT TO COLLECT DATA OF T-CELL NHL PATIENTS AMONG FIVE REGIONS OF BRAZIL. T-CELL BRAZIL PROJECT

Carmino A De SOUZA [1], Carlos S CHIATTONE [2], Eliana MIRANDA [1], Juliana PEREIRA [3], Karyn Z CECYN [4], Nelson S CASTRO [5], Sergio A B BRAZIL [6], Danielle F C FARIAS [7], Marcelo BELLESSO [8], Guilherme DUFFLES [1], Davimar BORDUCCHI [9], Yung GONZAGA [10], Renata L R BAPTISTA [11], Carolina C VILARIM [12], Massimo FEDERICO [13]

[1] *University of Campinas – UNICAMP, Hematology and Hemotherapy Center, SP*
[2] *Samaritano Hospital – Higienopolis & Santa Casa Medical School of Sao Paulo*
[3] *Medicine School of University of São Paulo, USP*
[4] *Federal University of Sao Paulo - UNIFESP*
[5] *Cancer Hospital Barretos, Hospital de Amor, SP*
[6] *Santa Casa Medical School of Sao Paulo*
[7] *Hospital Beneficencia Portuguesa, SP*
[8] *HemoMed, Instituto de Ensino e Pesquisa – IEP, São Lucas, SP*
[9] *Medical School of ABC, Santo Andre, SP*
[10] *Cancer National Institute – INCA, RJ*
[11] *State University of Rio de Janeiro – UERJ & Instituto D'Or de Pesquisa e Ensino IDOR, RJ*
[12] *Instituto de Ensino, Pesquisa e Inovação, Liga Contra o Câncer, CECAN, RN*
[13] *University of Modena and Reggio Emília*

Objective: T-cell Brazil project started in April 2017 an ambispective study focusing to collecting epidemiological and clinical data from the most frequent subtypes of PTCL. Our goals are to obtain the frequency of subtypes by the five Brazilian macro regions; to investigate the clinical and biology characteristic; to create a routine pathological revision and to evaluate the OS, EFS in 5 years of follow-up. **Methodology:** Thirteen nine centers had approved by their Ethical Committee and using REDcap Platform by Vanderbilt are registering their cases. Descriptive and bivariate analyses, then it was applied Kaplan-Meier method and log-rank test to obtain survival estimates, using IBM-SPSS v.24 **Results:** The median age was 55 years (19-95); 56% male; Almost 72% had advanced stages, 28% ECOG ≥ 2; the distribution of main subtypes was: 31% PTCL-NOS; 18% ALCL, ALK-; 16% ATL; 13% ENKTL nasal and nasal type; 11% AITL; 7% ALCL, ALK+; 6% others (Table 1). 50% of patients were alive and the 24-month PFS and OS was 36% and 50%, respectively. OS by main subtypes was 48% PTCL-NOS; 61% ALCL, ALK-; 33% ATL; 46% ENKTL nasal/nasal type; 48% AITL; 80% ALCL, ALK+. **Conclusion:** This is the first experience cover all over the country, focusing also an educational and of interchanging experience network among the multidisciplinary health team in Brazil. The target of 500 was exceeded; however, the registry will go on until December as planned. All cases have been reviewed both in the registry and by pathologist Committee, and we esteem some cases