

sults There was no significant difference between the 3 groups in the occurrence of FN or documented infection. However, hyperglycemia was significantly associated with organ dysfunction and aGVHD. OS was better and TRM was less in group1 compared with group2 and group3. **Conclusion** Degrees of hyperglycemia during neutropenia was associated with an increased risk of organ dysfunction and aGVHD, which further led to higher TRM and lower OS. These results support the possibility that intensive glucose control reduces morbidity and mortality after HSCT.

blood glucose level	normoglycemia (n=28)	mild hyperglycemia (n=49)	moderate and severe hyperglycemia (n=14)
FN	25 (89%)	43 (88%)	13 (93%)
Documented infection	9 (32%)	10 (20%)	6 (43%)
hypercreatininemia (serum creatinine \geq 2mg/dl or more than twice of baseline)	1 (4%)	4 (8%)	4 (29%)
hyperbilirubinemia (serum bilirubin \geq 2 mg/dl)	3 (11%)	11 (22%)	6 (43%)
CRP elevation (serum CRP \geq 15 mg/dl)	4 (14%)	15 (31%)	9 (64%)
aGVHD (II-IV)	4 (14%)	18 (38%)	7 (58%)
OS (1-year)	87%	70%	56%
TRM (1-year)	5%	17%	30%

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THROMBOTIC MICROANGIOPATHY AFTER HSCT: MUCOSITIS AS A RISK FACTOR FOR SURVIVAL AND HIGH PREVALENCE OF ACUTE GVHD, CMV AND GRAM POSITIVE INFECTIONS

Funke, V.A.M.¹, Oliveira, M.M.¹, Ruiz, J.¹, Bonfim, C.M.¹, Bitencourt, M.A.¹, Coutinho, E.N.¹, Setubal, D.C.¹, Zanis-Neto, J.¹, de Medeiros, C.P.¹, Pasquini, R.¹ ¹Hospital de Clinicas - Universidade Federal do Parana, Curitiba, PR, Brazil.

INTRODUCTION: Thrombotic microangiopathy is a rare complication after HSCT. Since the different pathophysiology of the disease and high mortality observed, our purpose is evaluating clinical characteristics of these patients and risk factors for survival.

PATIENTS AND METHODS: From 1991 to 2004, 1066 HSCT were performed at HC-UFPR (Curitiba, Brazil). We identified in our database 17 patients with the diagnosis of thrombotic microangiopathy (prevalence of 1.6%). M=4/F=13, Median age(y)=11; Diagnosis included: SAA: 2; Fanconi anemia: 4; Acute leukemias: 7; Others 2.

Conditioning regimen consisted of BUCY in 9/17 (52%); CI + TBI in 3/17 (18%) of the patients, NMA regimens in 18% and others in 12% of the patients. Immunophylaxis

consisted of CSA and MTX in 52% of the patients. Twelve patients received related and five received unrelated donor transplant.

Marrow was the stem cell source in all but one patient who received cord blood.

Twelve patients were HLA identical, three patients had a class one mismatch, one patients had a class II mismatch and one patient had more than one mismatch.

Median number of cells infused were $2,57 \times 10^8$ /KG.

RESULTS A-GVHD grade II-IV was present in 12 (70%) patients and extensive C-GVHD was present in only 18% of the patients. Median survival was 99 days and estimated overall survival in 25 years is only 15%, despite therapy. Infection was present in all but one patient (94%). Ten patients had serious bacterial infections (58%), eight of them by gram-positive bacteria. Fungal infection was identified in five patients (2 *Candida* sp and 3 *Aspergillus* sp). Viral infection was identified in 12 patients (eight of them with CMV positive antigenemia). Causes of death included: A-GVHD in four pt, C-GVHD in 2 patients, infection in 6 patients, bleeding in two patients and persistent disease in one patient. The only significant factor for survival was severe mucositis (more than grade II).

CONCLUSION: 1. OS was extremely low (15%) despite ther-

apy; 2. Infection (specially gram-positive bacterial infections and CMV positive antigenemia) was present at the majority of the patients and was the main cause of death; 3. A-GVHD was present in 52% of the patients; 4. Severe mucositis was associated to a lower survival rate (p=0,02).

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LONG TERM RESULTS OF ALLOGENEIC STEM CELL TRANSPLANT FOR CML IN PEDIATRIC PATIENTS: A STUDY OF 50 CASES TRANSPLANTED OVER 20 YEARS IN A SINGLE INSTITUTION

Funke, V.A.M.¹, Pettengill, C.¹, Bonfim, C.M.¹, Ruiz, J.¹, Azambuja, A.P.¹, Medeiros, L.¹, Setubal, D.C.¹, Bitencourt, M.A.¹, Oliveira, M.M.¹, Coutinho, E.N.¹, Zanis-neto, J.¹, de Medeiros, C.P.¹, Pasquini, R.¹ ¹Hospital de Clinicas - Universidade Federal do Parana, Curitiba, PR, Brazil.

Introduction: Chronic myeloid leukemia (CML) accounts for 2-3% of the leukemias in childhood. The only potential curative treatment is allogeneic hematopoietic stem cell transplantation (HSCT), although promising results achieved with imatinib mesylate in adults substantiate its use as a therapeutic alternative for children. The aim of this study is to analyze the outcomes of HSCT in pediatric patients regarding overall survival (OS) and main causes of death.

Materials and methods: Retrospective analysis of children aged 1-17 years, diagnosed with CML who underwent HSCT in a single institution in Brazil between jan/1984 and aug/2005. Survival was estimated by Kaplan-Meier curves. Log Rank test was used for comparison of continuous variables.

Results: Fifty patients were assessed, 31 male and 19 female. Median age of 13,5 years (1-17). Forty one patients (82%) were in first chronic phase (CP1) and 9 in advanced phases. The interval between diagnosis and HSCT had a median time of 17,5 months (5-84). The source of stem cells was bone marrow in 44 patients (88%), umbilical cord blood in 5 (10%) and peripheral blood stem cell in 1 (2%). Thirty nine patients (78%) underwent related HSCT and 11 (22%) unrelated donor HSCT. Conditioning regimens: busulfan and cyclophosphamide in 35 patients (70%) and TBI containing regimens in 15 (30%). Complete engraftment occurred in 82% of the transplants. Acute (a) graft-versus-host-disease (GVHD) grades II-IV occurred in 44% of the patients, with 20% grade IV. Extensive chronic (c) GVHD occurred in 15/40 patients (38%). Fifteen patients (32%) relapsed after HSCT. Mortality in the study population was 48% and the main causes of death were: relapse in 6 patients (25%), a-GVHD in 6 (25%) and c-GVHD in 4 (17%). Estimated OS in 20 years was 50%, with a median survival of 1926 days. When analyzed separately, patients in CP1 who received related HSCT and immunophylaxis with three drugs (steroids, cyclosporine and methotrexate) had an estimated OS in 20 years of 70%.

Conclusions: 1) Long term follow up of these children with CML who underwent allogeneic HSCT demonstrate an OS of 50%, reaching 70% in low risk patients. 2) Main causes of death were relapse, acute and chronic GVHD.

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RISK FACTOR ANALYSIS FOR SURVIVAL IN 125 UNRELATED TRANSPLANTS FOR MALIGNANT DISEASES PERFORMED OVER TEN YEARS IN A SINGLE CENTER IN BRAZIL

Funke, V.A.M.¹, Coutinho, E.N.¹, Setubal, D.C.¹, Ruiz, J.¹, Bonfim, C.M.¹, Bitencourt, M.A.¹, Oliveira, M.M.¹, Zanis-Neto, J.¹, de Medeiros, C.P.¹, Pasquini, R.¹ ¹Hospital de Clinicas - Universidade Federal do Parana, Curitiba, PR, Brazil.

INTRODUCTION: Unrelated transplants are increasingly used for therapy of malignant diseases. The objective of this study is evaluating risk factors for overall survival among 125 unrelated transplants performed at the BMT center of HC-UFPR in Curitiba, Brazil.

PATIENTS AND METHODS: we analyzed results of unrelated HSCT performed from 07/95 to 06/05. Kaplan Meier was used to estimate overall survival. Log rank test was used to compare survival curves and Fisher's exact test for comparison of categoric