

Baptist Health South Florida

Scholarly Commons @ Baptist Health South Florida

All Publications

2020

Assessing Physical Function and Fatigue in Patients Selected to Undergo Bone Marrow Transplant

Adrian Cristian

Baptist Health Medical Group; Miami Cancer Institute, acristian@northwell.edu

Marco Ruiz Andia

Baptist Health Medical Group; Miami Cancer Institute, marcoar@baptisthealth.net

Follow this and additional works at: <https://scholarlycommons.baptisthealth.net/se-all-publications>

Citation

Biology of Blood and Marrow Transplantation (2020) 26(3 Suppl):S364

This Conference Poster -- Open Access is brought to you for free and open access by Scholarly Commons @ Baptist Health South Florida. It has been accepted for inclusion in All Publications by an authorized administrator of Scholarly Commons @ Baptist Health South Florida. For more information, please contact Carrief@baptisthealth.net.

560

Assessing Physical Function and Fatigue in Patients Selected to Undergo Bone Marrow Transplant.

Adrian Cristian MD, MHCM^{1,2}, ¹ Cancer Patient Support Services, Miami Cancer Institute, Miami, FL; ² Marco Ruiz, Miami Cancer Institute, Miami, FL

Introduction: The assessment of baseline physical function should be an important and integral component in the selection of patients to undergo a bone marrow transplant. This assessment can establish a baseline level of function that can be tracked as the person undergoes cancer treatment as well as during the survivorship period. It can also be used to identify physical impairments early that can subsequently be treated rehabilitative interventions to minimize activity limitations and participation restrictions. Simple tests are available and can be useful in clinical settings.

Objectives: The aim of this work is to share one center's experience in the collection and analysis of data pertinent to physical function in patients referred for pre-bone marrow transplant evaluation.

Methods: Retrospective chart review of patients referred for an initial consultation in a cancer rehabilitation clinic in a cancer institute. The medical charts of 29 patients selected to undergo bone marrow transplant (AML/ALL-4, Lymphoma-11 and myeloma 14) were reviewed. Mean age was 55. Gender: 12 female and 17 male. The following information was reviewed: a) Patient Reported Outcome Measure Information System (PROMIS) Physical Function Short form and Fatigue short form b) Timed up and Go (TUG) test c) Sit to stand in 30 seconds test (STS-30) d) Grip Strength (in Kg) using a hand held dynamometer and e) 4 stage balance test. Values obtained during clinic visits were compared to available normative data for factors such as age and gender. These tools were selected because they are validated instruments that are easily collected in a physician's clinic.

Results: Based on the PROMIS Physical Function score results, 9/28 pre-BMT (32%) had an impaired physical function. Based on the PROMIS-Fatigue score results, 6/28 pre-BMT patients (21%) complained of significant fatigue. STS-30 results: 13/28 (46.4%) patients had normal scores for age and gender; 15/28 (53.6%) participants had abnormal scores for age and gender. Score for 1 participant was not available. Grip strength results: 17/27 (63%) patients had normal values for age and gender, 10/27 (37%) patients had normal values for age and gender. Scores for 2 participants were not available. 4 stage balance test: 28/29 (96.6%) participants had a normal balance and 1/29 (3.4%) participants had an impaired balance.

Conclusion: Assessment of physical function should be an integral part of the evaluation of patients prior to bone marrow transplant. Several instruments can be easily incorporated into a clinical setting and the information gathered can be very useful in directing need for additional interventions and can also serve as a baseline. Grip strength and sit to stand tests are easy to perform and can be very useful in assessment of physical function.

561

Metabolic Alterations in Adult Long-Term Survivors after Hematopoietic Stem Cell Transplantation

Manuel Ardila-Baez¹, **Edwin Wandurraga^{1,2}**, **Sergio Serrano¹**, **Maria Luna-Gonzalez¹**, **Luis A. Salazar^{1,2}**, **Sara I. Jimenez^{1,2}**, **Manuel Rosales²**, **Angela M. Peña^{1,2}**, **Xueyi Chen¹**, **Maria A. Chacon³**, **Juan J. Rey¹**, **Claudia Sossa^{1,2}**. ¹ Universidad

Autónoma de Bucaramanga, Bucaramanga, Colombia; ² *Clínica FOSCAL, Bucaramanga, Colombia;* ³ *Universidad Industrial de Santander, Bucaramanga, Colombia*

Introduction: Hematopoietic stem cell transplantation (HSCT) is an option treatment for many types of hematologic diseases. However, HSCT leads to short- and long-term complications. Endocrinology complications are one those and even if is not the most common group of complications, their diagnoses and treatment can improve the quality of life in the patients.

Objective: To determine the cumulative incidence of metabolic alterations after 1st, 3rd and 5th year of HSCT in patients treated in a Colombian population.

Methods: We conducted an analytical and observational retrospective cohort of adult patients treated with autologous and allogeneic HSCT at a fourth level referral center in Colombia from 2009 to 2018. The evaluated metabolic complications were metabolic syndrome, hypertriglyceridemia, low HDL cholesterol, hypercholesterolemia, atherogenic dyslipidemia, overweight, obesity, prediabetes, diabetes mellitus, hypertension and hyperuricemia.

Results: A total of 217 patients were included, 53% were men and mean age was 46 years. 155 (71.4%) patients had autologous HSCT and 62 (28.6%) patients had allogeneic HSCT. Results for the 1st year were obtained from 171 patients, for 3rd year from 68 patients and 5th year from 20 patients. By type of transplant, the highest cumulative incidence in the group of patients treated with autologous HSCT was overweight (43%, 60.5% and 69%) followed by obesity (9.2%, 17.6% and 69%), while hypercholesterolemia presented the highest cumulative incidence (38.4%, 52% and 53.8%) followed by low HDL cholesterol (44%, 46% and 46%) in the group of patients treated with allogeneic HSCT. The results of the evaluated alterations are shown in the attached figures.

Conclusion: Metabolic alterations are an important group of complications that needs to be taken into account even before and after the HSCT so an adequate prevention and treatment can be established, leading to decrease the risk of mortality in this group of patients. This study also suggests differences between the cumulative incidence of metabolic disease by type of transplant.

POSTER SESSION II: NPS/PAS- ADVANCED PRACTICE PROFESSIONALS (FOR CLINICAL EDUCATION CONFERENCE)

562

Cardiovascular Disease Risk Assessment and Management in Survivors of Allogeneic Hematopoietic Cell Transplantation

Christina S Ferraro MSN, APRN-CNP, BMTCN¹, **Theresa A. Urban PharmD²**, **Mariana Lucena PharmD²**, **Kelly Gaffney PharmD²**, **Navneet S. Majhail MD, MS³**, **Betty K. Hamilton MD³**. ¹ *Blood & Marrow Transplant Program, Cleveland Clinic, Cleveland, OH;* ² *Pharmacy, Cleveland Clinic, Cleveland, OH;* ³ *Blood and Marrow Transplantation, Department of Hematology and Medical Oncology, Taussig Cancer Institute, Cleveland Clinic, Cleveland, OH*

Long-term survivors of allogeneic hematopoietic cell transplantation (HCT) are at greater risk for developing late effects, with increased risk of mortality compared to the general population. This includes a 2-3 fold increased risk of metabolic syndrome and cardiovascular disease. While screening and appropriate treatment for metabolic syndrome and CVD is recommended for long-term HCT survivors, specific guidelines in this high risk population is limited.