Hematology-2013
OMICS Group Conferences
Accelerating Scientific Discovery
International Conference on
Hematology & Blood Disorders
September 23-25, 2013 Raleigh, USA

Phase angle from bioelectric impedance: A new potential tool to assess nutritional status and mortality risk among children and adolescents undergoing hematopoietic stem cell transplantation

Regina Maria Vilela
Federal University of Paraná, Brazil

Abstract

During the course of hematopoietic stem cell transplantation (HSCT) treatment, the decrease in food intake and increased metabolic rates contribute to malnutrition. Considering that the nutritional status has been used as a prognostic factor for patients undergoing hematopoietic stem cell transplantation (HSCT), the nutritional assessment during the pre-transplant phase becomes important to identify patients at nutritional risk or with malnutrition in order to address nutritional therapy and improve the treatment results. Recently, by using Bioelectrical Impedance Analysis (BIA), malnutrition began to be detected in a variety of clinical conditions by changes in phase angle (PA) that seems to be related to cell death or a change in selective permeability of membranes, compromising cell integrity and fluid balance. These changes can be observed prior to changes in anthropometric and laboratory values. The use of standardized PA as an indicator of survival and nutritional status for patients undergoing HSCT will be presented and discussed.

Biography

Dr. Regina obtained her Master degree in Biochemistry from Federal University of Paraná (Brazil) and her PhD degree in Human Nutrition from McGill University- School of Dietetic and Human Nutrition (Canada). Received the Honor Award "Professional of the year" in 2001 from the Paraná/São Paulo/Sta. Catarina Dietetic Association and has been honored by the undergraduate students in more than twenty convocations since 1992 when started her carrier as a professor. Currently, Dr. Regina´s researches are focused on Nutritional Diagnosis and Intervention, especially on the following topics: clinical nutrition in hematopoietic stem cell transplantation; clinical nutrition in immunology and oxidative stress.