TRANSPANTATION OF HEMATOPOTIC SKIN CELULOSES IN A REFERENCE SERVICE: CLINICAL AND EPIDEMIOLOGICAL ASPECTS

ABSTRACT

Objective: to characterize the epidemiological and clinical profile of patients who underwent hematopoietic stem cell transplantation at a referral service in the state of Rio Grande do Norte and to estimate the overall survival of transplanted patients. Method: The data will be collected from the charts of the patients served by the study service and will be analyzed with descriptive and inferential statistics to analyze the overall survival through the use of a statistical package. For the calculation of the probability of association between the characteristics analyzed and the gender, the chi-square test of trend and others will be used, according to each variable. Survival estimates will be calculated using the Kaplan-Meier method. The research protocol was approved under opinion number 1,132,720 and CAAE 46202715.7.0000.5537. Descriptors: Nursing; Hematopoietic Stem Cell Transplantation; Bone Marrow Transplantation; Delivery Of Health Care; Health.

RESUMO

Objetivo: caracterizar o perfil epidemiológico e clínico dos pacientes que realizaram transplante de células-tronco hematopoieticas em um serviço de referência no estado do Rio Grande do Norte e estimar a sobrevida global dos pacientes transplantados. Método: os dados serão coletados a partir dos prontuários dos pacientes atendidos pelo serviço em estudo e serão analisados com estatística descritiva e inferencial, de forma a analisar a sobrevida global por meio do uso de um pacote estatístico. Para cálculo da probabilidade de associação entre as características analisadas e o sexo, serão utilizados o teste do qui-quadrado de tendência e outros, de acordo com cada variável. Os cálculos de sobrevida serão calculados pelo Método de Kaplan-Meier. O protocolo de pesquisa foi aprovado sob Parecer número 1.132.720 e CAAE 46202715.7.0000.5537. Descriptores: Enfermagem; Transplante de Células-Tronco Hematopoéticas; Transplante de Medula Óssea; Assistência à Saúde; Saúde.
INTRODUCTION

Organ transplantation is a treatment option that aims to improve the quality of life of people of any age group, who present a chronic, irreversible, end-stage disease.\(^1\) Transplants are classified into solid organ transplantation, tissue transplantation and transplantation of hematopoietic stem cells or bone marrow transplantation.

Bone Marrow Transplantation (BMT) or Hematopoietic Stem Cell Transplantation (HSCT) is used as a treatment strategy for some inherited or acquired malignant and nonmalignant diseases. Some types of Leukemias, Lymphomas, Myelofibrosis, Myelodysplastic Syndromes (SMD) and Myelomas are among the malignant disorders. Among the non-malignant ones, there are aplastic anemia (AA), sickle-cell anemia (SCA) and major thalassemia.\(^2,3,4\) The HSCT consists of the intravenous infusion of healthy hematopoietic progenitor cells extracted from the bone marrow, peripheral blood, umbilical and placental cord, aimed at restoring the medullary and immunological function of patients, with the possibility of cure or increase of disease-free survival.\(^5\)

Approximately 50,000 people undergo HSCT worldwide each year.\(^6\) In Brazil, 1,753 HSCTs were recorded in 2012, according to data from the Brazilian Registry of Transplantation (RBT). In 2013, there was a slight increase, when 1,813 HSCT occurred in the country, 287 of them occurred in the Northeast region, and of them, 43 transplants were performed in the state of Rio Grande do Norte (RN).\(^7\)

In this context, this study proposes to estimate the overall survival and characterize the epidemiological and clinical profiles of the patients submitted to HSCT in a referral service in the State of the RN, as well as their contribution to the construction of knowledge that provides elements for the best planning. And promotion of the actions offered in the care service to patients submitted to HSCT.

This study may provide a scientific contribution on the thematic in the creation, implementation and evaluation of methodologies that allow the production of other studies, with significant repercussion in the promotion of teaching in nursing and health, as well as update of health professionals, since it may assist in the process of evaluating the service provided to those who have undergone the HSCT.

OBJECTIVES

- To characterize the epidemiological and clinical profile of the patients who performed HSCT at a referral service in the state of Rio Grande do Norte and to estimate the overall survival of the transplanted patients.
- To determine the epidemiological and clinical profile of the patients who performed HSCT in the state of RN.
- To establish the most common disease for indication of HSCT in the referenced service.
- To estimate the overall survival of transplanted patients.

METHOD

♦ Type of study

The study will be a quantitative, retrospective, descriptive and analytical quantitative approach that will address the patients who underwent HSCT at a referral service in the state of Rio Grande do Norte.

♦ Place

The study will be performed at the Natal Hospital Center (NHC), a reference hospital for high complexity care, located in the capital of the state of Rio Grande do Norte (RN), authorized, accredited and qualified to perform HSCT with the Unified Health System (SUS). It is a private institution that has been in charge of the HSTC in the state of the RN since 2004. The choice of the NHC is justified by being the only health service accredited in the RN that performs this type of procedure to meet the needs of the patients with an indication for HSCT.

♦ Period of data collection, population, and sample

The data will be collected in the first half of 2016, between January and April, and will include all patient records that performed HSCT in the service from 2004 to December 2015. A data collection instrument will be used that addresses the sociodemographic and clinical data, created specifically for this study.

Data from patients’ records of all ages and both genders will be included, who performed the autologous, allogeneic, syngeneic, umbilical cord and placental cell transplantation procedures in the period and service described. Medical records that do not present complete information capable of providing the data necessary for the study are inconclusive or illegible will be excluded.

♦ Data analysis

Data entry will be from spreadsheet built using Microsoft Excel - Windows® 2007 program for descriptive and inferential analysis procedures. A statistical package will be used to analyze the data. The Chi-square
test, the Fisher test and the Mann-Whitney test and others, according to each case, will be used to calculate the probability of association between the characteristics analyzed and the gender. Survival estimates will be calculated using the Kaplan-Meier method when the patient’s initial entry point in the study will be considered the date of the HSCT and the last event: death, abandonment or follow-up at the time of data collection. The Log Rank Statistical Method will be used to compare the survivors by variables to be listed. The level of significance to be adopted will be 0.05.

Ethical aspects
The research project was approved by the Research Ethics Committee (CEP) of the Federal University of Rio Grande do Norte (UFRN), in its ethical and methodological aspects, by Resolution Nº. 466/12 of the National Health Council (CNS) of the Ministry of Health, which deals with research with human beings, to evaluate its ethical and methodological aspects, under opinion number 1,132,720 and CAAE 46202715.7.0000.5537.