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Preview Notes



Corneal transplants and clinical and epidemiological profiles: a descriptive and analytical study

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ABSTRACT

Objective: To determine the distribution and clinical and epidemiological characterization of the patients on the waiting list for corneal transplants and of the patients transplanted with corneal tissue according to the time, place, and characteristics of the individuals. **Method:** This is a quantitative epidemiological, cross-sectional, descriptive, and analytical study of quantitative approach, which will include all the patients on the waiting list and the patients transplanted with corneal tissue in a reference service in the period from 2010 to 2014. The data were collected in its entirety and two databases generated, which will be compiled and submitted to a statistical analysis using association measures (χ^2) and significant difference (Student's *t*-test and ANOVA). **Guiding question:** How do the distribution and clinical and epidemiological characterization of the corneal transplants performed in a reference service and the patients on waiting list occur according to the time, place, and characteristics of the individuals in the state of Rio Grande do Norte?

Keywords: Corneal transplantation; Free tissue flaps; Corneal diseases; Epidemiology.

PROBLEM SITUATION AND ITS SIGNIFICANCE

The procedure for corneal transplants (CT) or keratoplasty, the most often performed transplantation in the world, consists of the total or partial thickness replacement of the cornea⁽¹⁾.

In Brazil, the main condition indicating the need for CT is the keratoconus. However, the prevalence of this disease varies according to the country owing to different public health conditions and the existing socioeconomic levels⁽²⁾.

By considering these facts, this study is justified given the need for determining the variance of CT according to certain characteristics, such as gender, age, place of residence, and sickness indication conditions. This allows the identification of risk groups for prevention, besides generating a hypothesis for further investigation.

It is expected that the results of this study may contribute for a better organization and planning of the care of patients on the waiting list and the patients transplanted with corneal tissue. It is also expected that this research fosters the training of health professionals into approaching the matter, especially in nursing (as it is a little discussed matter in the area), in a way of proposing postoperative care based on the detection, attention, and prevention of complications⁽³⁾.

GUIDING QUESTION

How do the distribution and clinical and epidemiological characterization of the CT performed in a reference service and the patients on waiting list occur according to the time, place, and characteristics of the individuals in the state of Rio Grande do Norte (RN)?

OVERALL GOALS

To determine the distribution and clinical and epidemiological characterization of the patients on the waiting list for CT in RN and the patients transplanted with corneal tissue in a reference service according to the time, place, and characteristics of the individuals.

SPECIFIC GOALS

- To describe the epidemiological profile of the patients on the waiting list for CT in RN;
- To clinically characterize the transplanted patients, describing the indicating and postoperative condition of the CT; and
- To estimate the average waiting time and its evolution until the actual CT.

METHOD

This is a quantitative, cross-sectional, descriptive and analytical, epidemiological study, which will include the patients on the waiting list for CT in RN and the patients transplanted with corneal tissue in the School Hospital Onofre Lopes (*Hospital Universitário Onofre Lopes – HUOL*), in the Federal University of Rio Grande do Norte (UFRN)—reference service for CT.

The research protocol was approved by the Research Ethics Committee of the UFRN, endorsement No. 876.177, according to the requirements established by the Resolution No. 466, December 12, 2012, of the *Conselho Nacional de Saúde do Ministério da Saúde*.

There will be two samples, sample A consisting of the data of patients registered in the *Centro de Notificação e Distribuição de Órgãos* (CNCDO) who were on the waiting list for CT at the moment of the data collection ($n = 62$).

Sample B will consist of all the medical records of patients who have already gone under a CT in the HUOL between 2010 and 2014 ($n = 258$ CT).

The inclusion criteria are, for both samples, the data from the medical records of patients of all ages, both the gender, and regardless of the indicative clinical condition for their registration in the National Transplant System. The medical records that did not have the necessary information for the study were excluded.

The data will be collected in its entirety, samples A and B, by two instruments built in order to systematize the collection of the necessary data. Two databases will be organized in spreadsheets using the Microsoft Office Excel® (version 2003) and will be submitted for a statistical analysis using the SPSS software (version 20.0). For the description of the variables and their distribution patterns, we will use frequency and measures of central tendency, while for the multivariate analysis, measures of effect magnitude will be employed (prevalence ratio): association measures (χ^2 -test), significant difference (Student's *t*-test and ANOVA), statistical significance, and confidence interval. The significance level to be considered will be 0.05.

The hypothesis tests will use the eye diagnosis as a dependent variable, which corresponds to the indicative condition for the CT. Moreover, independent variables will be employed: the region where the receptor lives, age, gender, race, purpose of the transplant, type of surgery, classification of the eye according to the presence or absence of the lens, vascularization, glaucoma, previous surgery, and retransplant when failure of the previous graft.

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6. Elaboration of the study, performing of critical review of the intellectual contents and approval of the submitted version: Giovanna Karinny Pereira Cruz, Diana Paula de Souza Rego Pinto Carvalho, Isabelle Campos de Azevedo, Allyne Fortes Vitor, Viviane Euzébia Pereira Santos and Marcos Antonio Ferreira Júnior.

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