

Surgical experience in corneal transplantation

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Background. The most common and popular type of allograft in the world is represented by corneal transplantation. It is the most successful operation among human tissue transplants, as the cornea is avascular structure which minimize the risk of graft rejection. Aim of the research is to determine the most frequent indication of the corneal transplant and the clinical profile of patients undergoing penetrating keratoplasty at Republican Clinical Hospital *Timofei Mosneaga*.

Methods. It was evaluated the medical records of all the patients undergoing a keratoplasty at Republican Clinical Hospital, between the January 1, 2020 and February 1, 2023.

Results. It was available data from 31 grafts in the study period, including 21 penetrating keratoplasty (PKP) for optical indication, 10 tectonic PKP. 67.74% were performed in male patients with an average of age 40.45 years. The main indication for optical PKP were bullous keratopathy (28.57%), followed by inherited corneal dystrophies (19.04%) and ulcers (19.04%), leukoma (14.29%) and corneal opacifications (14.29%), keratoconus (4.77%). Tectonic corneal transplantation indication was represented by perforated corneal ulcer (100%) with an average of hospital admission of 8.11 days. Postoperative complications allografts rejection occurred in 6.45% being the most common.

Conclusions. The goals of corneal transplantation are to improve vision that has been harmed by trauma, chronic disorders, or infection that are the main causes of corneal blindness. The primary ocular diagnostics that point to the performance of corneal transplantation as a treatment option can be identified by recognizing the clinical profile of patients undergoing penetrating keratoplasties.

Keywords: corneal transplantation, penetrating keratoplasty, corneal pathologies