**TITLE:** EPIDEMIOLOGICAL CHARACTERIZATION OF PATIENTS SUBMITTED TO CORNEAL TRANSPLANTATION FOR INFECTIOUS KERATITIS.

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## ABSTRACT:

Infectious keratitis is a serious eye disease, which affects vision, has a high incidence, which makes it a Public Health problem. It is of utmost importance to identify the etiological agents in order to be able to apply strategies regarding diagnosis, treatment and prevention, as the evolution of the condition can result in ocular damage, requiring corneal transplantation. This retrospective and descriptive study aimed to investigate in the medical records of patients of a school hospital in the city of Goiânia-GO, the causes that resulted in corneal transplantation for infectious keratitis, from January 2005 to December 2007. For this purpose, Histopathology laboratory tests, such as Hematoxylin - Eosin and PAS fungi stained biopsy, Gram - positive bacterioscopy and bacterial / fungal culture, as well as anamnesis and medical reports. Of the 124 corneal transplants due to infectious keratitis, 23% of the patients presented fungal infection, 6% fungal / bacterial, 6% bacterial, and 1% herpetic. Tests were negative in 52% patients, and in 12% there were no information in the medical records. Among the identified fungi were those of the genus Candida spp. And Fusarium spp. With respect to the bacteria, gram positive were the most prevalent. Most of the patients were male (78%), older than 40 years old (70%), the profession that stood out the most was the farmer (42%) and ocular trauma was present in 47% of the cases. These data demonstrate that the man is more exposed to the risk of accidents at work, as well as the working age group. The fungal ulcer was the most prevalent, which demonstrates the importance of the work environment, rural area, in the etiology of the disease. Of the 124 patients, 77% used topical medications with antifungal and antibacterial effects, which may have contributed to the negative results found in the research. As a protocol for microbiological analysis, the ideal is that in patients in treatment the medication is suspended between 24 and 48 h before the collection of clinical specimen, to allow the isolation of the etiologic agent and direction of the treatment. However, due to the rapid evolution of infectious keratitis, this protocol is not always followed, which in most cases makes it difficult to identify the pathogen, and consequently, the treatment.

**KEYWORDS**: Candida, Fusarium, ulcer, eye disease