()R1 ()R2 ()R3 ()PG0 (X)PG1 ()Estagiário ()Tecnólogo () PIBIC Last Name - Shiguematsu First Name - Alvio Middle -

Service (sector) Cornea and External Disease Nº CEP

**Purpose:** To evaluate the efficacy of the injection of 5% natamycin in 2% methylcellulose into intrastromal corneal tunnels in the treatment of experimental Fusarium solani keratitis in rabbits. Methods: Fusarium solani keratitis was induced on the right eye of 45 Norfolk rabbits. Seven days later, the animals were randomly divided into three treatment groups: GI: a single intrastromal corneal injection of 5% natamycin in 2% methylcellulose; GII: 5% natamycin drops applied hourly, with daily epithelium debridement, for seven days; and GIII: a single intrastromal 2% methylcellulose injection. Seven days later, the animals were sacrificed and their infected corneas were trephinated, excised, fragmented and immersed in 10 mL of brain-heart infusion. Ten µL samples were daily seeded on Sabouraud's agar plates for five days. The number of colony-forming units was counted and submitted to statistical analysis. **Results:** Significant differences were found on days 3 (GI<GII<GIII, P<0,005) and 4 (GI<GII=GIII, P<0,01). **Conclusion:** A single intrastromal corneal injection of 5% natamycin in 2% methylcellulose appeared to be more efficacious than 5% natamycin drops applied hourly, for seven days, with daily epithelial debridement, in the treatment of experimental Fusarium solani keratitis in rabbits.