

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo PIBIC

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Service (sector)

Cornea and External Disease

Nº CEP

Contact Lens Cultures: The Role in Contact Lens-Related Keratitis diagnosis

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Purpose: To study the efficacy of the contact lens cultures in identifying the causative organisms of infectious keratitis..

Methods: Charts of the Ocular Microbiology Laboratory of the Department of Ophthalmology - Paulista School of Medicine, from 1976 to 2000, were reviewed and data of patients with contact lens-related keratitis in which the contact lens had been cultured were collected.

Results: One hundred and thirteen patients were included. Only soft lenses were cultured and 29.2% of them were therapeutic contact lenses. There was an overall agreement between corneal scrapings and contact lens culture of 84%, with a higher rate in fungal (100%) when compared to amebic (80.0%) and bacterial (74.5%) keratitis. In cases with concomitant scrapings and contact lens growth, the same organism was detected in 97.37%. The majority of bacterial cases were due to *Pseudomonas* sp. Among the discordant cases (16%), a microorganism was more likely to be isolated by contact lens culture (94.4%).

Conclusion: The contact lens cultures may identify the causative organisms in the majority of contact lens-related keratitis. The clinical relevance of the positive contact lens cultures in negative corneal cultures keratitis needs further investigation.