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Service (sector) Cornea and External Disease N° CEP

SUPERFICIAL CORNEAL FOREIGN BODY - LABORATORIAL AND EPIDEMIOLOGIC ASPECTS. Ednajar Tavares Macedo Filho, Liang Shih Jung, Karine Duarte, Cecília Zorat Yu, Ana Luísa Hofling de Lima Farah, Denise de Freitas **PURPOSE:** To determine by bacterioscopy and culture the microorganisms carried by corneal foreign body and their sensitivity to antibiotics by antibiogram. **METHODS:** A prospective study was carried out and information was collected on 101 patients who presented with corneal foreign body from 20 July to 20 October 2001 in São Paulo Hospital Eye Emergency Service. Prior to any treatment, a sample of the ipsilateral inferior conjunctival fornix was collected and immersed in thioglicolate broth to determine the normal flora of the eye under study. The foreign body was removed and also immersed in another tube of thioglicolate. Both tubes were observed in room temperature until visible turbidity was obtained and so both tube samples were sowed over solid culture media including blood, chocolate and Sabouraud agar. After growth in those media bacterioscopic examination using Gram and Giemsa staining and sensitivity test were performed. Positive foreign body culture results were compared to ipsilateral conjunctival fornix culture to exclude possible normal flora growth. **RESULTS:** About 92% (93/101) of patients were male with the mean age of 35 years and 62,4% (63/101) had the right eye affected. Foreign body positive cultures were achieved in 32,7% (33/101) of cases. In about 19,8% (20/101) of cases there were no correspondence between the bacteria isolated in the foreign body and the conjunctival fornix culture. The microorganisms brought by the foreign body were identified as: Streptococcus alpha-haemolitic (n = 4), Staphylococcus aureus (n = 4), Staphylococcus coagulase-negative (n = 4), Corynebacterium xerosis (n = 3), unidentified Gram-positive bacillus (n = 2), Moraxella sp (n = 1), Serratia sp (n = 1), Acynetobacter sp (n = 1). The sensitivity test revealed that 95% of cases were sensitive to chloramphenicol and 90% were sensitive to ciprofloxacin, these being the antibiotics used in our routine service. **CONCLUSION:** Superficial corneal foreign body acts as important contaminant vector (19,8% of cases) and the great majority of isolated bacteria were sensitive to the antibiotic prophylaxis used in the treatment.