

Staphylococcus epidermidis and *Corynebacterium* spp. were the principal microbial flora of the conjunctiva. Fourteen isolates of *Staphylococcus aureus* and only one isolate of *proteus mirabilis* were detected prior to surgery, which represented 15.6% and 1.1%, respectively. The rates above were approximately accepted by those indicated by Bialasiewicz and Welt⁽⁹⁾, who stated that coagulase-positive staphylococci and *Proteus* spp. represented 13.5% and 3.0% out of the total preoperative conjunctival isolates; respectively the following one day postoperative species were isolated:

Staphylococcus aureus,
Staphylococcus epidermidis,
Staphylococcus haemolyticus,
Staphylococcus hominis,
Staphylococcus sciuri, and *proteus mirabilis*.

Ocular microbial infections following cataract surgery are related predominantly to the normal conjunctival flora and to a lesser degree from air borne microorganisms or certain endogenous sources such as the genitourinary tract⁽¹³⁾. Herde *et al.*⁽¹⁴⁾ pointed out "The conjunctival flora is of great interest for each case of intraocular operation preventing postoperative infections." In the present study, two patients suffered from postoperative endophthalmitis. Of these two patients, the conjunctival swabs showed heavy growth of *Staphylococcus epidermidis* or *Staphylococcus aureus*, which were detected from the preoperative and one day postoperative conjunctival smears. A plausible interpretation was that the conjunctival normal flora resulted in postoperative endophthalmitis in these two patients. This explanation agreed with that found by Binder *et al.*⁽¹⁵⁾ who stated "Most germs causing postoperative endophthalmitis derive from the conjunctival bacterial normal

flora." Bannerman *et al.*⁽¹⁶⁾ mentioned that patient's conjunctival normal flora was a major source of postoperative endophthalmitis following cataract extraction surgery. The authors Ormerod *et al.*⁽¹⁷⁾, Somani *et al.*⁽¹⁸⁾, and Versteegh *et al.*⁽¹⁹⁾ demonstrated that organisms mostly isolated in cases of postoperative endophthalmitis were coagulase-negative staphylococci. Han *et al.*⁽²⁰⁾ documented that coagulase-negative staphylococci followed by *Staphylococcus aureus* played a considerable role in the pathogenesis of bacterial endophthalmitis following cataract surgery. Mandle⁽²¹⁾ indicated that *Staphylococcus aureus* was a significant causative agent of acute infections following cataract extraction surgery. Oguz *et al.*⁽²²⁾ stated "The organisms most commonly recovered in cases of post-surgical endophthalmitis include primarily *Staphylococcus aureus* and *Staphylococcus epidermidis*, *Streptococcus* spp., *Proteus* spp., and less frequently *Pseudomonas* spp.". Lam *et al.*⁽²³⁾ documented that a diabetic patient, who underwent cataract surgery, developed endophthalmitis caused by *Proteus mirabilis*, while Joussen *et al.*⁽²⁴⁾ indicated that diphtheroid resident in the conjunctiva were recognized as potential causatives of serious ocular diseases. However, Watkins *et al.*⁽²⁵⁾ regarded that *Corynebacterium striatum* was a potent microbe causing conjunctivitis. Valenton⁽²⁶⁾ indicated that infections of the sclerocorneal incision following cataract surgery could be caused by *Staphylococcus aureus*, *Staphylococcus epidermidis*, and viridans streptococci group. These results predicate that the conjunctival normal flora is the principal causative of postoperative infections; therefore preoperative microbial diagnosis is of great importance in inhibiting postoperative