

obtained from the conjunctivas and eyelid margins of ninety – one eyes (Forty – three left eyes and forty – eight right eyes) of ninety – one patients immediately before experiencing cataract surgery and again one day following the surgery. Swabs were soon brought to the laboratory. Blood agar, chocolate agar and MacConky's agar media were used for culturing bacteria, while sabouraud dextrose agar medium was used for cultivating fungi. Conjunctival and eyelid margin swabs were cultured by streaking each of the above media. The inoculated blood agar and MacConky agar plates were incubated aerobically at 37C° for 24 – 48 hours. The inoculated chocolate agar plates were placed in a candle jar to offer 5 – 10 % CO<sub>2</sub> atmosphere with a candle flame and then incubated at 37C° for 24 – 48 hours. The inoculated sabouraud dextrose agar plates were incubated aerobically at 25C° for two weeks. For primary bacterial diagnosis the following morphological characteristics of colonies were recognized on blood and chocolate agar for their shape, size, color, odor<sup>(1)</sup>. Gram stain test was performed as mentioned in Jawetz<sup>(2)</sup>. Cells' shape, gram reaction and grouping were recognized. The following biochemical tests were performed: <sup>(1)</sup> catalase test<sup>(2)</sup>, oxidase test<sup>(3)</sup>, coagulase test which involved slide coagulase test and tubal coagulase test<sup>(4)</sup>, Optochin susceptibility test to differentiate between *Streptococcus pneumoniae* and *Streptococcus* spp.<sup>(5)</sup> and Api system; Colonies of catalase – positive Gram – positive cocci were subjected to the identification in the Api Staph system; Colonies of catalase – negative Gram – positive cocci were identified in the Api 20 Strep system; Colonies of catalase – positive Gram – positive rods were subjected to the identification in the Api Coryne

system; and colonies of catalase – positive Gram – negative rods were identified in the Api 20 E system. To determine antibiotic susceptibility, the disk diffusion test method was employed<sup>(6)</sup>. Mueller – Hinton agar was used [for *Strep.* spp. Blood (5%) was added to the medium].

### Results

Specimens were collected from 91 patients immediately before and one day after cataract extraction surgery. These specimens were subjected to vigorous microbiological identification and diagnosis. No fungal growth was recorded in this study. Thirteen (14.28%) out of ninety one patients showed mixed growth immediately prior to operation. Of these thirteen patients, nine patients (69.23%) exerted no growth one day after performing the surgery, one patient (7.69%) exhibited mixed growth one day following surgery, and three patients (23.07%) showed single bacterial growth one day postoperatively. Eleven out of 91 patients (12%) showed negative cultures immediately before and one day after the operation. Forty-one out of 91 patients (51.25%) revealed pre and one-day postoperative positive cultures. Thirty-six out of 91 patients (45%) exerted growth prior to surgery and no growth one-day post operation. Only 3 out of 91 patients (3.75%) showed negative cultures immediately prior to operation and positive cultures one day after surgery. This evidence suggested that these 3 patients were exposed to contamination either during the operation or after performing the surgery

Table 1 shows numbers and percentages of bacterial isolates detected immediately before experiencing cataract surgery.

Table 2 shows numbers and percentages of bacterial isolates