

# **Bacterial contamination of toothbrushes with comparison of healthy and dental patients**

## **Abstract**

Twenty four normal toothbrushes were tested for adult persons, 12 brushes used by healthy individual and 12 brushes used by patient of oral infection (gingivitis or periodontitis) each brush was used for at least 5 weeks period. Both brushes of two groups were colonized by large number of organisms ranged from  $0.2 \times 10^2$  to  $3.5 \times 10^2$  C.F.U/ml on healthy individual brushes and from  $2.8 \times 10^2$  to  $5 \times 10^2$  C.F.U/ml on patient brushes. Each brushes of healthy individual yielded Various types of organisms as Pseudomonas, Staphylococcus epidermidis, Staph .aureus, Gram positive rods and yeast but most brushes of patients yielded one type of organisms. T-test analysis appeared that there were high significant difference at ( $P < 0.05$ ) between brushes of two groups in the total mean of different organisms that isolated from them. Pseudomonas recorded highest proportion (57% of total organisms isolated on all brushes of two groups ; 83% of brushes) followed by Staphylococcus (36% of total isolated organisms ; 58% of brushes) Gr +ve recorded lowest proportion (3% of total isolated Organisms ; 33% of brushes) .Staph .epidermidis, Staph. Aureus could isolate from brushes of patient in 6 days after Brushing while Pseudomonas isolated after 3 days. This study demonstrated Staphylococcus and Pseudomonas as pathogen agent that cause oral infections and conclude that toothbrushes may be as a source of opportunistic pathogen such these microorganisms by wrong storing ways or by the same infected person.