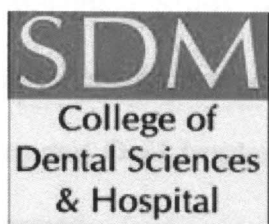


**DETECTION OF *Candida albicans* AND ITS ADHERENCE TO
EPITHELIAL CELLS IN PERIODONTAL HEALTH AND
DISEASE-A CLINICO MICROBIOLOGICAL STUDY.**



By

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ABSTRACT

Background and Objectives : In spite of the polymicrobial behaviour of periodontal disease, the role of yeasts in this disease has received little or no attention . Furthermore , it has been reported that the proportion of yeasts in the periodontal pockets is similar to some bacterial periodontopathogens, suggesting a possible role for *Candida* spp. in the pathogenesis of the disease. The objectives of this study were to : 1. To detect *Candida albicans* in Periodontal health . 2. To detect *Candida albicans* in Chronic periodontitis. 3. Check the effect of SRP on *Candida albicans* . 4. To detect the in vitro adherence of *Candida albicans* to epithelial cells isolated from periodontally healthy subjects and chronic periodontitis patients.

Materials & Method: This study involved 60 subjects between the age group of 25 to 55 years. The participants were categorized into the following two groups ,Group1: Periodontally healthy subjects (control group) and Group2: Chronic periodontitis subjects (n=30)(test group). The following clinical parameters were checked at baseline and after 15 days :Gingival index, Plaque index, Probing pocket depth and Relative attachment level. After obtaining the subgingival plaque samples and epithelial cells from both periodontally healthy and chronic periodontitis subjects at baseline ,a full mouth scaling was done for chronic periodontitis subjects only and these patients were recalled after 15 days and the subgingival plaque samples

were obtained from the same sites again to check for the effect of scaling and root planing on *Candida albicans*.

Results : Out of the 60 subjects evaluated *Candida albicans* was present in 4 of subjects belonging to the test group. Since *Candida albicans* was isolated only from the test group the adherence of *Candida albicans* to 25 epithelial cells was evaluated in those 4 samples only. The 4 test group in which the *Candida albicans* were present at baseline were designated as test group 1, test group 2, test group 3 and test group 4. Out of the 4 test group samples evaluated for the adherence of *Candida albicans* to epithelial cells, test group 1 showed the adherence of 42 *Candida albicans* to 25 epithelial cells, test group 2 showed the adherence of 44 *Candida albicans* to 25 epithelial cells, test group 3 showed the adherence of 36 *Candida albicans* to 25 epithelial cells and test group 4 showed the adherence of 55 *Candida Albicans* to 25 epithelial cells.

Conclusion : *Candida albicans* is present in the chronic periodontitis subjects when compared to periodontally healthy subjects. There is adherence of *Candida albicans* to epithelial cells in Chronic periodontitis patients.

Keywords : *Candida albicans* , Chronic periodontitis