Oral *Candida* spp. In Patients With Diseased and Healthy Periodontium

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**Objectives:** The purpose of this study was to record the occurrence of *Candida* spp. at selected oral sites, namely on the tongue, palate, buccal mucosa and in the saliva of patients with periodontal disease, in comparison to subjects with healthy periodontium (control subjects). **Methods:** Samples from 15 subjects with healthy periodontium and 15 patients with adult-stage periodontal disease were taken using a cytobrush from the tongue, palate and buccal mucosa. A pea-sized sterile cotton ball was soaked at the floor of the mouth for 5 seconds to collect saliva samples. All samples then underwent serial dilution before being cultured on Brain-Heart Infusion (BHI) and Sabouraud Dextrose Agar (SDA) plates. After a 48 hour incubation period, the plates were scored for colony-forming units (CFU). CFU counts on the BHI plates were taken as total counts while the counts on SDA plates represented fungal growth. The frequency of bacterial colonies was then determined by calculating the difference between total counts and fungal counts. **Results:** Using subjects with healthy periodontium as the baseline, the occurrence of microorganisms and candida at the selected sites of patients with periodontal disease was as follows – Overall: 164%, 163%; Saliva: 54%, 373%; Tongue: 328%, 188%; Palate: 183%, 189%; Buccal mucosa: 56%, 61%. **Conclusion:** With the exception of the buccal mucosa and the saliva, both total microorganism and candida occurrences increased by 50% or more in patients with periodontal disease compared to subjects with healthy periodontium.

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