

FDI Symposium Presentations

The Fundamentals of Breath Malodor

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Bad breath, defined as an offensive odor coming from the oral cavity, is a prevalent concern among the general population. Although common knowledge believes this problem is usually related to a systemic gastrointestinal condition, it has been clearly demonstrated that in the majority of cases (around 85%) the origin of bad breath lies in the oral cavity. The etiology lies in three main pillars: the presence of oral bacteria, the presence of an adequate substrate and the presence of adequate environmental conditions. Under these conditions, specific bacteria metabolize the substrate, producing volatile compounds that are responsible for malodor. The importance of this problem lies not only in its possible implications in oral health, but mostly to its psycho-social consequences for affected persons. In this presentation, the current knowledge on the nature of this problem will be reviewed, with special emphasis on breath malodor of oral origin.

Diagnostics and Therapy for Halitosis in Daily Practice

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Periodontitis is associated with subgingival microbiota that mainly consist of strict anaerobic bacterial species. These bacteria are often non-fermentative and display a potent proteolytic activity. By the degradation of sulfur-containing peptides and amino-acids, malodorous volatile sulfur compounds (VSC) are produced. Notorious periodontal bacterial species which produce VSC are Porphyromonas gingivalis and other dark-pigmented Gram negative rods, but also the strict anaerobic Gram positive Peptostreptococcus micros is known to produce VSC. There are conflicting data about the relationship between halitosis and periodontitis. Bacteria have been implicated in the etiology of halitosis and a number of putative risk factors have been identified. There are strong indications to implicate the microbiota of the dorsum tongue as the principal source of VSC production. Currently, treatment of halitosis is focused on suppressing VSC-producing bacteria in the mouth especially on the tongue. In this lecture the diagnosis and treatment of halitosis patients will be discussed.