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Full mouth disinfection and antiseptics-- a state of the art -

In order to reduce the chance for an intra-oral transmission (cross-contamination), a new treatment strategy called "one-stage, **full-mouth disinfection**" has been introduced by the Leuven group in the nineties. This strategy attempts to eradicate, or at least suppress, periodontopathogens in a short time span, and this not only from the periodontal pockets but from all their intra-oral habitats (mucous membranes, tongue, and saliva). The one-stage full-mouth disinfection concept consists of a combination of following therapeutic efforts: a full mouth scaling and rootplaning within 24 h to reduce the number of subgingival pathogenic organisms, a subgingival irrigation of all pockets with a 1% chlorhexidine gel in order to kill remaining bacteria, tongue brushing with an antiseptic to suppress the bacteria in this niche, mouth rinsing with an antiseptic to reduce the bacteria in the saliva and on the tonsils. Several comparative studies between the one-stage, full-mouth approach and the standard therapy (root planing per quadrant with 2 week intervals), clearly illustrated the benefits of such a full-mouth approach in relation to gain in attachment, pocket depth reduction, microbiological shifts. A similar approach also resulted in significant additional improvements during guided tissue regeneration and/or the application of local antibiotics.

Probiotics in cause related periodontal therapy

Plaque related periodontal diseases are thought to develop when the host immune system is overruled by specific periodontopathogens. Therefore, historically, research has focused on these two entities disregarding the presence of a wide variety of commensal albeit beneficial bacteria. Since a complete eradication of pathogenic bacteria is impossible, and due to the increase of antibiotic resistance, new treatment approaches are currently explored. Optimistic results primarily coming from gastro-intestinal microbiology, have led to the

introduction of probiotics in oral healthcare. These new anti-/pro-microbial therapies seem to open new doors for treatment and prevention of periodontal diseases. Although there is data available which tend to show that probiotics might influence the oral microbiota and oral health, questions such as the general applicability of common probiotic dairy lactobacilli in the oral cavity and the necessity of biofilm removal become more important. This lecture will introduce the topic of probiotics in periodontal healthcare and will give an update on the present knowledge.