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The aim of the *Journal of Clinical Periodontology* is to provide a platform for exchange of scientific and clinical progress in the field of periodontology and allied disciplines, and to do so at the highest possible level. The Journal also aims to facilitate the application of new scientific knowledge to the daily practice of the concerned disciplines and addresses both practicing clinicians and members of the academic community. The Journal is the official publication of the European Federation of Periodontology but serves an international audience by publishing contributions of high scientific merit in the fields of periodontology and implant dentistry. The journal accepts a broad spectrum of original work characterized as clinical or preclinical, basic or translational, as well as authoritative reviews, and proceedings of important scientific workshops. The journal's scope encompasses the physiology and pathology of the periodontal and peri-implant tissues, the biology and the modulation of periodontal and peri-implant tissue healing and regeneration, the diagnosis, etiology, epidemiology, prevention and therapy of periodontal and peri-implant diseases and conditions, the association of periodontal infection/inflammation and general health, and the clinical aspects of oral rehabilitation using dental implants, including hard and soft tissue reconstructive therapies.

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Supplement Article

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chronic periodontitis. And that they have the ability to repopulate commensal flora and reduce periodontal pathogens.
Conclusions: No one can deny that researchers around the world have conducted research at a frantic pace to understand the different probiotic treatment modalities, whether in terms of duration, the model used (human or animal), the population treated (chronic periodontitis, aggressive, gingivitis, healthy patients), the probiotic strain used, its method of administration and the dose of the probiotic. Despite this, further research needs to be conducted.

PR128 | Photodynamic Disruption of a Biofilm Composed of Two Species of Periodontalpathogens Using Indocyanine Green-Loaded Nanospheres

K. Ono[1], J.-i. Hayashi[1], Y. Suzuki[1], M. Yamashita[1], K. Nishikawa[2], G. Yamamoto[1], T. Kuroyanagi[1], T. Kikuchi[1], Y. Hasegawa[2], A. Mitani[1]
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Background & Aim: Antimicrobial photodynamic therapy (aPDT) is a promising treatment for biofilm infections, which have become a health hazard due to the increasing prevalence of antimicrobial-resistant bacteria. However, few studies have examined the photodynamic disruption effect on complex biofilms. The aim of this study was to evaluate the bactericidal effect of aPDT using indocyanine green-loaded nanospheres with chitosan coating (ICG-Nano/c) against polymicrobial periodontal biofilms.
Methods: Composite biofilms of *Porphyromonas gingivalis* and *Streptococcus gordonii* were constructed in 96-well plates, and aPDT with ICG-Nano/c and an 810 nm diode laser was performed either by direct irradiation or transmitting irradiation through a 3-mm-thick gingival model. The efficacy of aPDT with ICG-Nano/c was compared with minocycline and amoxicillin. Additionally, attenuated aPDT under sublethal conditions was used to investigate gene expression related to the antioxidant response (oxyR and sod of *P. gingivalis*) and biofilm formation via quorum sensing (luxS of both species) with qPCR.
Results: aPDT with ICG-Nano/c significantly reduced the number of bacteria in the biofilm, with at least a 2 $\log_{10}$ reduction in colony-forming units within 5 min for both irradiation methods. After 6 h of treatment, the bactericidal effects of aPDT and antibiotics were comparable, but after 32 h, antibiotics were more effective, particularly against *P. gingivalis*. Attenuated aPDT showed a slight increase in sod expression in *P. gingivalis*, while luxS expression decreased in both bacteria.
Conclusions: The ICG-Nano/c-based aPDT system showed a certain bactericidal activity against a composite biofilm of periodontal bacteria. These results suggest that the ICG-Nano/c-based aPDT system has potential as an alternative or adjunctive therapy to conventional antibiotics in the treatment of periodontal disease.

PR129 | Role of Doxycycline on the Finding of Fusobacterium Nucleatum in Periodontitis

S. Spasovski[1], L. Atanasovska[2], R. Petkovska[2], K. Ivanovski[3], V. Kokolanski[4], Z. Menceva[5], M. Markovska Arsovska[6], S. Mindova[3], M. Popovska[7]
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Background & Aim: To evaluate the efficiency of systemically applied Doxycycline in a daily dose of 1×100 mg. and 2×20 mg. on *Fusobacterium nucleatum* (*Fn*) in patients with periodontitis.
Methods: The examined group consisted of 60 patients with a moderate form of chronic periodontitis where the periodontal depth was 3–5 mm, aged 30–70 years old. The first group consisted of 30 patients who were treated with Doxycycline 2×20 mg. daily (morning and evening) for 75 days and a second group with the same number of subjects who received 1×100 mg. daily (morning), 30 days. The total dose received by each subject during the research was 3 g.
Gingival fluid samples from which *Fn* was determined were collected using 2×5 mm. methylcellulose strips (Whatmann 3 MM Chromatography paper). Paper absorbents with the sample are treated on nutrient media by rolling on the media (Maki's method). The material is incubated at 36°C ± 1°C in anaerobic conditions (Anaerocult A mini—MERCK). The final identification of the bacteria was done with an automatic system for the identification of bacterial species-VITEK 2 COMPAQ.
Results: In the first group of patients who received doxycycline 2×20 mg. daily for 2.5 months, after 2.5 months 13 (21.67%) positive and 17 (28.33%) negative findings of *Fn* were registered. In the second group of patients who received doxycycline 100 mg. daily for 30 days, 21 (35.00%) positive and 9 (15.00%) negative findings of *Fn* were registered. In the distribution shown for Pearson chi-square = 4.34 and $p < 0.05$ ($p = 0.04$) there is a significant difference in the findings of *Fusobacterium nucleatum* (*Fn*) between the two groups of patients.
Conclusions: The daily dose of 2×20 mg. doxycycline in patients with periodontitis more effectively reduces the anaerobe *Fusobacterium nucleatum* (*Fn*).

PR130 | Effect of *Salvadora persica* Gel on Clinical and Microbiological Parameters of Chronic Periodontitis: A Triple-Blind Randomized Controlled Clinical Trial

T. Hyder[1,2], Z. Akram[3], S. Quraeshi[4]
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Background & Aim: *Salvadora persica* (SP) is known to have anti-inflammatory, antioxidant, anti-coagulant and