

REVELATION OF POTENTIAL EFFECTS OF OMEGA-3-FATTY ACID EXTRACT FOR PERIODONTAL THERAPY

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The mouth harbors a rich, diverse and complex microbial community which causes a series of inflammatory consequences of periodontal tissue eventually resulting in alveolar bone loss and tooth-loss. There are various antimicrobial agents that have been used for targeting these microorganisms however with some limitations. Recently, nutrients rich in omega 3 polyunsaturated fatty acids have been utilized considering their health benefits and antimicrobial benefit. Hence, the aim of this study was focused to investigate the antimicrobial effect of omega 3 extract on the periodontal biofilm. A total of 15 extracted human teeth was used for the study. The teeth were decoronated and split longitudinally to form 30 radicular halves. Following which, biofilm was cultured onto the radicular halves. The radicular halves were then randomly divided into three groups. Group I: tooth specimens treated with test agent (omega 3 extract), group II: tooth specimens treated with 0.2% chlorhexidine (CHX) and group III: tooth specimens treated with deionized water. The reduction in antimicrobial load was checked by colony forming units (CFU). The results of the study demonstrated the antimicrobial effect of the omega-3 fatty acid extract to be like that of 0.2% chlorhexidine. Hence, omega-3 polyunsaturated fatty acid can be utilized as an adjunctive antimicrobial aid for periodontal therapy.

BIOGRAPHY

Jothi Varghese has completed her graduation in Dentistry and post-graduation in Periodontology from the renowned Manipal College of Dental Sciences, Manipal Academy of Higher Education, India. She has also completed a certificate course on Laser Dentistry and Bioethics and currently holds the post of an Associate Professor in the Department of Periodontology, MCODS, MAHE, India. She is a reviewer to national and international journals and has around 35 papers published in reputed journals.

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