Alelí Julieta Izquierdo Vega

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Biography

Alelí Julieta Izquierdo Vega, graduate of the National Autonomous University of Mexico with a degree in Dental Surgery, a specialist in Orthodontics from UNAM, and a Master's degree in Biomedical and Health Sciences from the Autonomous University of the State of Hidalgo, she has been a professor at the Institute of Health Sciences of the UAEH since 2016. A research professor and member of the Public Health Academic Body, she has 15 years of clinical dental experience. She is a member of the Mexican Academy of Orthodontics A.C., the Mexican Association of Orthodontics A.C., and the Mexican Academy of Dental Surgeons. Her lines of research include inflammatory periodontal diseases and primary care to prevent oral diseases. She has published in JCR and indexed journals, book chapters, and collaborated on clinical research using animal and population models.

Anti-inflammatory Effect Of Hibiscus Acid On Periodontitis Induced In A Wistar Rat Model

Abstract:

Periodontal disease is a chronic, multicausal, and highly prevalent inflammatory condition worldwide, making it a public health problem. It is characterized by the progressive destruction of tooth-supporting tissues: the gingiva, periodontal ligament, root cementum, and alveolar bone. In nonsurgical treatment, chlorhexidine gluconate is one of the most widely used agents due to its antimicrobial effectiveness; however, prolonged use can produce cytotoxic effects. This has prompted the search for natural alternatives for the treatment of periodontitis. Animal models have been widely used to study the pathogenesis of periodontal diseases, in this context, in this work the therapeutic effects of hibiscus acid, a bioactive compound from the hibiscus flower (Hibiscus sabdariffa L.), were investigated in a model of induced periodontitis in Wistar rats. A ligature was placed in the interdental area of lower incisors and LPS from (Porphyromona gingivalis) was inoculated for 15 days until grade II periodontitis developed, subsequently a topical gel with 2% hibiscus acid was applied for 15 days on the gingiva of rats with periodontal disease, observing a significant decrease in gingival inflammation and a clinical improvement similar to those obtained with chlorhexidine. The results were confirmed by histological analysis of the gingiva. This evidence suggests that hibiscus acid may represent an effective natural alternative for the therapeutic management of periodontitis, promoting adherence and long-term prognosis.