

Evaluation of Systemic Administration of Doxycycline as an Adjunct to Mechanical Debridement in Non Insulin Dependent Diabetic Patients

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Abstract

The present study was designed to test the value of systemic administration of Vibramycin (Doxycycline) in conjunction with other therapeutic measures in the treatment of marginal periodontitis in diabetics. Twenty diabetic patients (NIDDM) were divided into two groups. In the first group the patients mechanical debridement was only performed while in the second group they were instructed to use 100 mg of doxycycline together with professional mechanical debridement. Clinical parameters: Plaque Index, Gingival Index, Periodontal pocket depth and Attachment level assessment were recorded at the time of initial examination and two weeks after administration of doxycycline and/or after mechanical debridement. Histological examination was also performed at the beginning of the study, after control of diabetes, two weeks after both types of treatment modalities and two weeks after stoppage of the drug. The results of the present study revealed that adjunctive treatment by doxycycline gave better Gingival Index $p < 0.001$ and Plaque Index? < 0.001 , than that of mechanical debridement alone in diabetics. Histological results showed a picture of almost healthy gingiva after adjunctive administration of doxycycline.