CLINICAL AND MICROBIOLOGICAL COMPARISON OF THE EFFECT OF SCALING AND ROOT PLANING WITH AND WITHOUT ANTIBIOTICS IN THE TREATMENT OF CHRONIC PERIODONTITIS

A Thesis Submitted to the College of Dentistry University of Baghdad In Partial fulfillment of the Requirements For The Degree of Master of Science in Periodontics

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> 2005 Baghdad-Iraq

Abstract

The purpose of this study was to compare the response of chronic periodontitis to scaling and root planing with and without antibiotics (*Doxycycline & Ciprofoxacin*) as indicated by clinical and microbial monitoring.

Twenty-seven patients have been selected for this study (14 females & 13 males)with age range 30-55 years old, each patient has at least a pair of teeth on both jaws ,upper and lower with pocket depth range 4-6mm which bleed on probing.

A total of *108* sites included in the study, prior to that all patients were motivated and instructed in oral hygiene measures by using of tooth brush, stimudent and dental floss. Plaque control was reinforced depending on the individual need and a series of visits.

The samples classified as following:-

- A. Control group, 9 patients with 36 sites receiving scaling & root planing (SRP) only.
- B. Test1 group, 9 patients with 36 sites received scaling &root planing (SRP) & Doxycycline.
- C. Test2 group, 9 patients with 36 sites received scaling & root planing (SRP) & Ciprofloxacin.

Plaque index(PLI), probing pocket depth(PPD), clinical attachment level(CAL) and bleeding on probing(BOP) were recorded at baseline and repeated after one week and twelve

weeks .Microbiological samples were taken at the baseline visit, after one week and twelve weeks.

Clinical and microbiological parameters showed improvement in the three methods of treatment with no statistical significant differences between all parameters with relative improvement of those in group using *Doxycycline*, although *SRP* alone showed also satisfactory improvement.

Gram negative anaerobic and facultative anaerobic rods show decrease with limited extent in all groups.

With in the limit of the study, no statistical differences could be found between the three ways of treatment.

Anaerobic Grams negative and facultative anaerobic rods as well as aerobic Gram positive cocci isolation were decreased to some extent in all groups which indicate that effective antibiotic therapy does not appear to be of extreme importance in treating chronic periodontitis which might be of help in other forms of periodontitis like aggressive one.