

EFFECTS OF THREE NON-SURGICAL TREATMENT MODALITIES ON PROBING POCKET DEPTH IN PATIENTS WITH CHRONIC PERIODONTITIS

S. KANDEGEDARA*¹, P.S. RAJAPAKSE¹, S.L. EKANAYAKE²

Dept of Oral Medicine and Periodontology¹, Dept of Community Dentistry²

Faculty of Dental Science, University of Peradeniya, Peradeniya

This study evaluated the effects of three treatment modalities of non-surgical periodontal therapy on probing pocket depth (PD) in 24 subjects with chronic periodontitis. The sample was selected from the patients attending the Periodontal Screening clinic at the Faculty of Dental Sciences. Each subject was assigned to a severity category (S1 = > 3mm - ≤ 5mm, S2 = >5mm- ≤7mm, or S3 = >7mm) depending on the maximum PD in any site at baseline. The subjects in each severity category were then randomly assigned into three treatment groups; T1=oral health instruction (OHI)+ scaling and root planing (SRP), T2= OHI+SRP+0.2% Chlorhexidine mouthwash (CHX) for two weeks, or T3= OHI+SRP+antibiotic therapy (Amoxycillin +Metranidazole combination for one week). PD was recorded for all teeth at six sites at baseline and 6 weeks after treatment using Florida Probe - FP32. The difference in PD before and after treatment was assessed. One-way ANOVA was used to compare the differences in PD between the three treatment categories in each severity group. If ANOVA revealed a significant difference ($p < 0.05$), Sheffe's test was used to ascertain where the difference occurred. In all severity categories, ANOVA revealed significant differences in the mean PD in the three treatment groups. The mean reduction in PD in the S1 category after T1, T2 and T3 treatments were 1.47mm, 1.45mm and 1.69mm respectively. In S2 category they were 2.50mm, 3.10mm and 3.21mm whereas in S3 category the figures were 3.92mm, 4.32 mm and 7.02mm respectively. In the S1 category there was a significant difference between T2 and T3 groups ($p < 0.05$). However the actual differences in reduction of PD was marginal (.22mm). In S2 category there was a significant differences between T1 and T2 and also between T1 and T3 ($p < 0.005$ and $p < 0.001$ respectively). The use of antibiotics has proven to be significantly beneficial over OHI+SRP and OHI+SRP+ CHX in the treatment of sites with PD exceeding 7mm.

Peradeniya University Research Grant No. RG/2002/D/44