

Effect of Scaling and Root Planing on Improvement of Glycemic Control in Periodontitis Patients with Type-2 Diabetes Mellitus

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Abstract : Background: The aim of this study was to evaluate the clinical and laboratory changes three months after full-mouth scaling and root planing (SRP) in periodontitis patients with type 2 diabetes mellitus (DM). Methods: Forty-seven type 2 DM subjects with moderate to severe periodontitis were randomly divided into two groups. Treatment group (TG), 25 subjects, received full-mouth scaling and root planning; control group (CG), 22 subjects, received no treatment. At baseline and at the end of three months, glycated hemoglobin (HbA1c) values, fasting glucose, and clinical parameters like plaque index (PI), gingival index (GI), probing pocket depth (PPD), and clinical attachment level (CAL) were recorded in all the patients. Following SRP, the patients were enrolled in a monthly interval maintenance program for 3 months. Results: A statistically significant effect could be demonstrated for PI, GI, PPD, and CAL for the treatment group. HbA1c levels in the treatment group decreased significantly whereas the control group showed a slight but insignificant increase for these parameters. Conclusions: The results of this study showed that non-surgical periodontal treatment (SRP) is associated with improved glycemic control in type 2 DM patients and could be undertaken along with the standard measures for the diabetic patient care.

Keywords : periodontitis, type 2 diabetes mellitus, non-surgical periodontal therapy, SRP

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