



Evaluation of resistin levels in gingival crevicular fluid of patients with periodontitis and Type 2 Diabetes Mellitus after non-surgical periodontal therapy and subantimicrobial dosage of doxycycline

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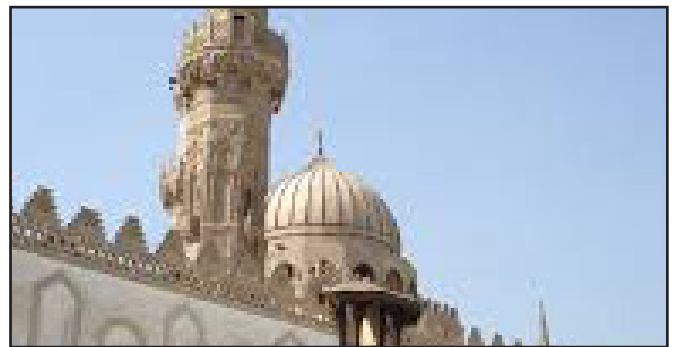
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Abstract:

Purpose: This study was designed to evaluate the resistin levels in GCF of patients suffering from periodontitis and type 2 diabetes mellitus (T2DM) after non-surgical periodontal therapy and subantimicrobial dosage of doxycycline (SDD).

Materials and methods: Thirty periodontal sites within 24 patients with age ranging between (24-51) years old were selected for this study. A total of 30 periodontal sites were randomly divided into three groups; each group included ten periodontal sites: (group I): systemically healthy periodontitis patients who had received scaling and root planning (SRP), (group II): periodontitis patients with T2DM who had received SRP, and (group III): periodontitis patients with T2DM who were received SRP and SDD 20mg twice/day. All patients were examined with the same clinical periodontal parameters which are plaque index (PI), gingival index (GI), probing depth (PD) and clinical attachment level (CAL). Patients in each group went through nonsurgical periodontal therapy as well as a maintenance program (which includes brushing with regular toothpaste). Collection of GCF samples was done in all patients at baseline, one month and 3 month following the periodontal therapy. Quantification of resistin in human samples was measured using resistin ELISA test.

Results: Non-surgical periodontal therapy was found to show relative improvement in all clinical parameters as well as a decline in resistin levels. In addition, GCF levels of resistin, PD, GI showed greater reduction after



non-surgical treatment in group III than group II.

Conclusion: Nonsurgical periodontal therapy is found to be effective in the management of periodontitis patients with and without diabetes mellitus and also GCF resistin can be a useful

biomarker to detect the periodontal disease condition. Also, adjunctive use of SDD showed more clinical benefit to patients with periodontitis by host response modulation.

Biography:

Reem S. Abdu Shehab is a Yemeni dentist. She was born in Saudi Arabia and lives there. She has graduated from Science and Technology University in Yemen. She has obtained her master's degree in Oral Medicine, Periodontology, Diagnosis and Oral Radiology from Al-Azhar University in Egypt. She has worked as a private dental practitioner in Saudi Arabia and Egypt. She is interested in medical researches and teaching.

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