

Serum Fructosamine as A Monitor of Periodontal Therapy in Diabetics

HAKEM HUSSIEN EL-SA YED, M.D.;

SAMEH ABDEL-SHAKOUR, M.D. and ASHRAF IS MAIL AMIN, M.D.

The Dental, General Medicine and Clinical Pathwlogy Departments, The Diabetes Institute.

Abstract

The effect of non-surgical periodontal therapy on diabetics was investigated in the present study. Metabolic condition was monitored by measuring serum fructosamine (S.F). 48 adult (NIDDM) patients were selected, they were suffering from periodontal problems. After medical evaluation, diabetic patients were divided into two groups: moderate ,periodontitis group (periodontal disease index (p.D.I) between 3, 4 and advanced periodontitis group P.D.! > 4 gingival bleeding on probing, B()p'plaque index, P.L.I, serum fruct()samine and blood glucose level were re.corded to all diabetic patients before any periodontal therapy. The following periodontal treatment was then performed: Oral hygiene instruction, ultrasonic instrumentation, debridement of periodontal pockets and professional subgingival irrigation. All clinical and laboratory parameters were re-estimated after one month period. The results showed a significant reduction in BoP and P.L.! in both groups after periodontal therapy, while significant decrease of P.D.! was recorded in patients with moderate periodontitis only .. F.A showed a significant reduction in both groups $p < 0.01$ after periodontal therapy. The results showed a positive relation between improvement of periodontal condition and reduction of serum fructosamine as severe periodontitis exaggerates F.A values in diabetics. Therefore, periodontal status of diabetic patient must be considered when monitoring hyperglycemia.