Relation between Diabetic Retinopathy and Diabetic Periodontitis

Hakem H. El Sayed Assistant Professor of Oral Medicine & Periodontology. Chairman of the Dental Dept. Diabetes Institute, Teaching Hospitals & institutes .

Zeinab El Sanbary Assistant Professor. Ophthalmology Dept '. Faculty of Medicine, Cairo University.

On the basis of the pathological similarity between diabetic microvascular changes that may occur in the retinal and the gingival tissue, the present study was perfoITiled to investigate the possible relation between the two lesions, Periodontal conditions of adult diabetic patients (45 - 60 years old) with different grades of diabetic retinopathy (OR) were evaluated, Sixty four diabetics (NIDDM) were divided in to four groups. Thee groups with (DR) (Grade 1: Mild to moderate non - proliferative DR., Grade 2: Moderate to severe non - proliferative DR . and Grade 3: Proliferative DR .) and Control group with normal fundus examination All patient were suffering from periodontal diseases . Evaluation of the severity of their periodontal diseases was done using the following clinical and radiographical parameters: Periodontal pocket bleeding index (PPBI). Plaque index (PU). Bleeding / Plaque ratio (B/ P). Probing pocket depth (PPD), and Bone level index (BLI), The results demonesterated a significant increase in (B / P) in all diabetics with (DR) comparing with Control group (P<0.01). While (PPD) showed a significant increase only in diabetics with Proliferative DR , (P < 0.01). Lastly registeration of (BU) revealed a significant reduction in Ihe mean value in diabetic patient wilh Proliferative DR. (P < 0.Q1). The results of the study showed that periodic periodontal examination of diabetic patients may be of diagnostic value in early detection of (DR),