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ESTIMATION OF PROTEOLYTIC ACTIVITY OF SUBGINGIVAL MICROFLORA OF DIABETIC & NON-DIABETIC INDIVIDUALS

The purpose of this study was to estimate the proteolytic activity of subgingival microflora of diabetic and non-diabetic individuals as an attempt to clarify the role of these enzymes which are produced by some Gram + ve and Gram - ve bacteria in the pathogenesis of periodontal tissue destruction in patients suffering from diabetes mellitus.

Clinical indices and microbiological parameters were determined of 39 adult patients, their age ranged from 35-65, 18 diabetic (non-insulin dependent diabetes mellitus) and 21 non-diabetics.

The clinical results demonstrated the significant increase in all gingival clinical parameters in diabetics comparing with the non-diabetics, Microbiologically, staphylococcus aureus, micrococcus sp., Gram - ve bacilli and yeasts showed higher percentage of isolates in diabetic patients than in non-diabetic patients.

Thus diabetic status may, not only affect the clinical aspect of the gingival tissue of the diabetic patients, but may also modify microbial plaque activities.