Alterations in pH of Gingival Fluid among different types of controlled Diabetes Mellitus.

Soliman. O. Amr. *

Abstract:

Ninety-three periodontal pockets from maxillary and mandibular anterior teeth were studied in 1 S male patients to determine the changes in sulcular pH with local inflammatory status and in cases of both types of diabetes mellitus; namely; insulin-dependent (type 1) and non-insulin dependent (type II). All patients had established marginal periodontitis. The pH of fluid flow from each gingival sulcus was detected colorimetrically by inserting filter paper strips containing the pH indicator for quantitative evaluation of fluid pH. The intracrevicular pH in diabetic patients showed lower figures as compared to non-diabetic subjects. The worst values of pH were related to type 1 diabetics as compared to type II diabetics, yet the difference was not statistically significant. This might be attributed to the higher glucose content of gingival exudate in controlled diabetes. The result of the present study could add a further support to the earlier postulates that subgingival calculus might be a result of gingival inflammation.

* Lecturer of Oral Medicine and Periodontology, Faculty of Dental Medicine, Al-Azhar Univ., Asyout Branch.