

Alterations in Salivary Factors among Different Types Diabetes Mellitus

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Abstract

The purpose of this work was to determine whether hyperglycemia could interfere with salivary pH, buffering capacity and flow rate of saliva and to evaluate the possible relationship between the previous salivary factors and the level of metabolic control in diabetic patients. 152 diabetic patients (JOJ = type 2, 51 = type 1) and 50 control subjects participated in this study and they were sex and age grouped. Two samples were collected/row all subjects, one salivary sample for evaluation of salivary' flow, pH and buffering capacity of saliva , while the blood sample was used to measure the glycosylated hemoglobin concentrations (HbA_{1c}) for diabetics as a measure of glycemic control and random blood glucose level for non-diabetics subjects. Results showed that age and sex of diabetes did not adversely affect salivary factors. Although, the mean flow rate was found to be lower among the patients groups compared to control (1.41, 1.7 Sand 1.94 ml / min respectively). The difference was not statistically significant. On the other hand, diabetics had consistently lower pH value, and lower buffering capacity in comparison to non-diabetic groups . There were no significant changes between type 1 and type 2 in the diabetic group in the salivary properties. Regarding glycemic control (HbA_{1c}).the salivary flow rate, buffering capacity and pH of saliva is not related to the level of metabolic control

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