A comparison between periodontal status of smoker and non-smoker diabetic patients

**Introduction:** Periodontal disease is an inflammatory process with alveolar bone loss and it can cause loss of teeth. Smoking and diabetes are potential risk factors of periodontal diseases.

**Aim:** The aim of this study is to compare periodontal states of smoker and non-smoker diabetic patients.

**Methods:** This study is a case-control one with a sample size of 80. Cases and controls were enrolled in the study after complete periodontal examination. This examination included measurement of plaque index, probing depth, clinical attachment levels and bleeding on probing. Gathered data has been analyzed by SPSS statistical software.

**Results:** Binary comparison between different groups showed that although we found no difference between smoker and non-smoker diabetic patients in terms of plaque size, there was a significant difference between other groups. Binary comparisons between groups showed that the only significant difference of mean probing depth index among groups was between the control group diabetic nonsmokers and non-smoking patients. Furthermore, binary comparisons showed that there was a significant difference of mean clinical attachment level between groups, including the control group nonsmokers with diabetes and non-smoking patients. The percentage of bleeding on probing in diabetic non-smokers (79%) was more than diabetic smokers (32%).

**Discussion:** According to this study and other studies, smoking & diabetes are risk factors for periodontal disease, therefore dentists can encourage their patients to control diabetes and smoking which can reduce systemic complications caused by diabetes and stop smoking.

**Key words:** periodontal disease, diabetes mellitus, smoker