Periodontal Disease and Coronary Artery Disease Complicated By Diabetes Mellitus and Smoking

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Abstract

The purpose of this cross-sectional study was to determine the effects of diabetes mellitus and smoking on the prevalence and severity of periodontal disease. 75 patients aged 30-75 years of both sexes were presented for cardiac catheterization at Ibn Al-Betar Center for cardiology. Each patient had been admitted with cardiac symptoms and had been diagnosed as having Coronary Artery Disease. The patients were divided into three equal groups:

1- Subjects with CAD only. This group was regarded a control.

2- Subjects with CAD complicated by diabetes mellitus for ten years or more.

3- Subjects with CAD and had been smokers for ten years or more.

All subjects answered a written questionnaire regarding their dental and medical histories. Name, age, any systemic disease and smoking habit.

The following periodontal parameters were recorded: plaque index, gingival index, bleeding on probing, pocket depth, attachment loss and number of missing teeth.

The results of this study showed an association between poor oral hygiene and coronary artery disease.

A statistically significant differences were found in respect to BOP with P-Values (0.04) (0.032), PD (0.037) (0.039), AL (0.032) (0.036), and number of missing teeth (0.032) (0.029), when comparing the diabetic group and the smoker group respectively with the control.

Non-significant differences were found with GI scores between smokers and the control.

The diabetic group had the highest means of PLI scores (1.821), GI (1.788), AL (2.225) among groups, which means greater periodontal tissue destruction.