Study of the Association between periodontal status and chronic obstructive pulmonary diseases (COPD)

Abstract:

Introduction: Chronic obstructive pulmonary disease (COPD) is the fourth common cause of mortality and one of the reasons of chronic disability in the world. The objective of this study was to associate between periodontal status and the severity of chronic obstructive pulmonary disease (COPD).

Materials and methods: The demographic data of patients with COPD were recorded in the form of a check-list and severity of airflow obstruction was determined by spirometry and they were classified according to GOLD criteria. CAT was determined based on the patient's quality of life. COPD Exacerbation and dyspnea severity was determined based on the MMRC. The patients were evaluated by measurement of periodontal index (PPD, BOP and LOA) in both cases and controls.

Results: 36 patients with COPD and the mean age of 57.88 years and 36 healthy control subjects with a mean age of 56.58 years were studied. The results showed that there is a significant positive correlation between periodontal indexes contains PPD, BOP, LOA and quality of life in COPD patients on based CAT. (P = 0.001, P = 0.002, P = 0.002) Also there is a significant positive correlation between indicators of PPD, BOP and LOA with COPD Exacerbation (P = 0.001, P = 0.002, P = 0.001).

Conclusion: The results showed that periodontal status of COPD patients is worse than healthy subjects and there is relationship between periodontal index (PPD, BOP and LOA) and quality of life on based of CAT, COPD Exacerbation and severity of dyspnea MMRC in patients with COPD.

Key words: COPD, GOLD, CAT, MMRC, PPD, BOP and LOA