ABSTRACT

Fibroblast growth factor (FGF) comprises of a large family of polypeptide growth factors that have diverse roles in regulating cell proliferation, migration and differentiation. In the human periodontium, bFGF plays an important role in regulating angiogenesis and connective tissue matrix turnover, both of which are affected by tobacco chewing habit. The aim of this study was to evaluate salivary FGF levels in periodontal health and disease.

MATERIALS AND METHODS

A total of 52 subjects were included in the study, 25 of whom were in periodontal health and 27 of whom were tobacco chewers with chronic periodontitis as classified by AAP. Patients with concomitant smoking habit or mucosal lesions were excluded from this study. Saliva was collected using the technique described by Navazesh, and stored until further use. The basic FGF was analyzed using sandwich ELISA technique.

RESULTS

The concentration of bFGF (mean) is higher in chronic periodontitis patients with tobacco chewing habit (329.012 +/- 178.643 pg) than healthy patients (92.261 pg), which was statistically significant p value <0.000
CONCLUSION

Within the limits of this study, it can be concluded that salivary bFGF levels increase in chronic periodontitis patients with tobacco chewing habit than healthy patients, suggesting a potential role for use as a disease marker.

However, further controlled clinical trials with large sample size should be executed to evaluate the effectiveness of this factor.

KEY WORDS

BASIC FIBROBLAST GROWTH FACTOR, PROBING POCKET DEPTH, CLINICAL ATTACHMENT LOSS.