ABSTRACT

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BACKGROUND: Leptin is a adipose tissue derived pleiotrophic hormone that plays

an important role in the inflammatory diseases of the human being including the

inflammatory periodontal disease. The role of non-surgical periodontal therapy

(NSPT) in altering the leptin concentrations in serum of CP patients is yet to be

ascertained.

AIM: The aim of the present study is to assess and evaluate the concentration of

leptin in serum before and after phase I periodontal therapy in chronic periodontitis

patients.

MATERIALS AND METHOD: Level of serum leptin was determined in healthy

subjects (control group, n=25) and patients with chronic periodontitis (study group,

n=25) and compared with clinical parameters like gingival bleeding index, plaque

index, probing pocket depth and clinical attachment level before and after phase-I

therapy.

RESULTS: Clinical parameters and leptin level were increased in the serum of

patients with chronic periodontitis before phase I therapy compared to healthy

subjects. Statistically significant (p=0.00) reduction in clinical parameters and serum

leptin level were seen after Phase-I therapy.

CONCLUSION: These results suggest that periodontal inflammation may

up-regulate serum leptin level and increase clinical parameter values in patients with

chronic periodontitis and phase I therapy was able to restore the serum leptin levels

and clinical parameters.

KEYWORDS: Serum Leptin, Chronic periodontitis, Phase I therapy