

ABSTRACT

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
