CLINICAL AND RADIOLOGICAL ASSESSMENT OF PERIODONTAL STATUS IN PATIENTS OF RHEUMATOID ARTHRITIS AT BASELINE AND 6 MONTHS POST TREATMENT WITH DISEASE MODIFYING ANTI-RHEUMATOID DRUGS WITH PARTICULAR REFERENCE TO THE LEVELS OF C- REACTIVE PROTEIN IN THE GINGIVAL CREVICULAR FLUID

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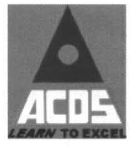

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ABSTRACT

Objectives: Periodontitis is an infection initiated by bacteria present in the dental biofilm, which is characterized by chronic inflammation and is associated with the destruction of both connective tissue and alveolar bone. Rheumatoid arthritis (RA) is an autoimmune disease that affects several organs and systems and it is also associated with the destruction of connective tissue of joints and bone loss.

Both periodontitis and rheumatoid arthritis present an imbalance between pro-inflammatory and anti-inflammatory cytokines, which is deemed responsible for the tissue damage. Both are associated with destruction of bone, mediated by inflammatory cytokines such as interleukin-1, tumor necrosis factor and prostaglandin E2. A bidirectional relationship of rheumatoid arthritis and periodontitis may exist. There is also the possibility of a common genetic trait predisposing to both conditions (dysregulation of the inflammatory mechanisms).

As the same inflammatory cytokines are involved in the pathogenesis of rheumatoid arthritis and chronic periodontitis, it becomes important to see the effect (if any) of the disease modifying anti rheumatoid drugs on the periodontal status of the patient.

Methods: The study consisted of 30 patients taken from the Dept. of Rheumatology, NIMS, Punjagutta. The patients were examined clinically and radiographically with particular reference to the levels of CRP in the GCF to assess the changes in the periodontal condition of patients of rheumatoid arthritis 6 months post treatment with disease modifying anti-rheumatoid drugs.

Results: Results showed statistically significant decrease in the pocket probing depth, clinical attachment gain and bone changes. The change in the levels of CRP were however not statistically significant.

Discussion: Data suggests that, the significant decrease in the probing depth and clinical attachment loss in patients undergoing treatment of RA with disease modifying anti-rheumatoid drugs indicate a possible beneficial effect of the drugs on the periodontium.

Key words: Periodontitis, bone loss, rheumatoid arthritis