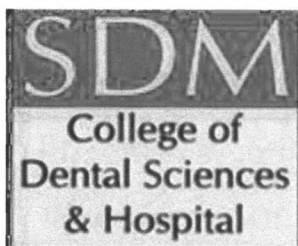


**EFFECT OF SUPEROXIDE DISMUTASE SUPPLEMENT ON  
CHRONIC GENERALIZED PERIODONTITIS PATIENTS- A  
RANDOMIZED CONTROLLED CLINICAL TRIAL**



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## ABSTRACT

**BACKGROUND:** This study investigated the levels of reactive oxygen metabolite (ROM) in plasma of chronic periodontitis (CP). In addition, the outcome of scaling and root planing (SRP) with and without superoxide dismutase (SOD) supplementation was evaluated in terms of changes in periodontal parameters and reactive oxygen metabolite (ROM).

**MATERIAL AND METHOD:** Sixty patients were randomized into two groups depending on the treatment. In both groups scaling and root planing was performed and in patients with group II superoxide dismutase supplementation was given. Plasma samples were collected in all the individuals. Plasma ROM levels in 60 patients with CP were estimated using d-ROM test. Both clinical parameters and plasma ROM levels were evaluated at baseline and 1 month recall and comparison was done between groups. Statistical analysis was performed using Mann Withney U test and Wilcoxon matched pair t test.

**RESULTS:** There was significant reduction in clinical parameters and plasma ROM in both the groups from baseline to 1 month, but no statistical significant difference was observed between the groups.

**CONCLUSION:** This study showed that adjunctive use of SOD did not have additional benefit compared to SRP.

Keywords : ROM, periodontitis, d- ROM, Superoxide dismutase, antioxidant.