

**DETECTION OF HUMAN CYTOMEGALOVIRUS (HCMV),
EPSTEIN BARR VIRUS (EBV) AND HERPES SIMPLEX VIRUS
(HSV) IN PERIODONTAL DISEASE AND EFFECT OF SCALING
AND ROOT PLANING (SRP) ON THE PRESENCE OF THESE
VIRUSES - A CLINICO MICROBIOLOGICAL STUDY**



by



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ABSTRACT

Aim: To evaluate the presence of HCMV, EBV and HSV-1 in subjects with chronic periodontitis and periodontally healthy subjects.

Materials and methods: The present case control study was designed to evaluate the presence of human cytomegalovirus (HCMV), Epstein- Barr virus (EBV) and herpes simplex virus type 1 (HSV-1) in patients with healthy periodontium and in patients diagnosed with chronic periodontitis. At baseline in the test group, subgingival plaque samples were collected from the periodontal pocket and in the control group, plaque samples were collected from the gingival sulcus. In the test group after the baseline plaque sampling was done, scaling and root planing was performed. Plaque was collected after 8 weeks of the SRP again. Hot staurt multiplex PCR method was used to detect the viruses in the plaque sample.

Results: Overall the presence of HSV-1 in the test group was statistically high at base line compared to the control group. There was significant reduction in HSV-1 after SRP in the test group compared to the baseline. There was also reduction in the HCMV and EBV in the test group after SRP .There was reduction in all the clinical parameters after SRP.

Conclusion: Herpes viruses were found in higher frequency in chronic periodontitis patients than in healthy subjects. SRP reduced the percentage of these viruses after 8 weeks.

Key words: HCMV, EBV, HSV-1, PCR, scaling and root planing, periodontal disease.