Aim: The aim of the present study is to evaluate the effect of the non-surgical periodontal therapy on serum and salivary 8-OHdG and 8-iso-PGF2α levels in chronic periodontitis (CP) patients.

Material and Methods: Twelve generalized chronic periodontitis patients have completed the study. The clinical periodontal parameters (gingival index, plaque index, bleeding on probing, pocket depth, clinical attachment level) were recorded, and serum and salivary samples were provided to evaluate the levels of 8-OHdG and 8-iso-PGF2α at the baseline. All of the patients have received one stage full mouth debridement (FMDEB) procedure within 24 hours. The recording of the clinical periodontal parameters, serum and salivary sampling were repeated after two months.

Results: The clinical parameters were found significantly decreased after FMDEB (P<0.05). The serum and salivary 8-OHdG and 8-iso-PGF2α levels were significantly lower after two months when compared to the baseline values (P<0.05).

Conclusion: The decreased serum 8-OHdG and 8-iso-PGF2α levels after non-surgical periodontal therapy in CP patients should be evaluated as the most important result of the present study, in terms of the commitment of 8-OHdG and 8-iso-PGF2α to the systemic inflammatory burden and their role in cardiovascular disease risk.