Ozone as an adjunct to conventional nonsurgical therapy in chronic periodontitis: A randomized controlled clinical trial

Abstract
Currently, only limited data are available from controlled clinical trials regarding the effect of irrigation by ozonated water in the treatment of periodontitis. The aim of the present study was to determine the clinical and biological effects of the adjunctive use of ozone in nonsurgical periodontal treatment. Forty-one patients with chronic periodontitis were randomized to treatment with either subgingival scaling and root planing (SRP) followed by irrigation with ozonated water (test) or subgingival SRP followed by irrigation with distilled water irrigation (control). The following parameters were evaluated at baseline (T0), 3 mo (T1): plaque index; gingival index; bleeding on probing; probing pocket depth; gingival recession; and clinical attachment loss. In addition, the serum concentrations of high sensitivity C-reactive protein were measured at T0 and T1. Forty-one patients with chronic periodontitis were included in the analysis (20 in the test group and 21 in the control group). There was statistically significant improvement in the study parameters in both groups between T0 and T1, except for gingival index. However, there were no significant differences in any study parameter between test and control groups. Irrigation with ozonated water as an adjunctive therapy to SRP produces no statistically significant benefit compared with SRP plus distilled water irrigation.