

Waterpik® Water Flossers Significantly Reduce Plaque Biofilm, Gingivitis, Bleeding, and Pocket Depth in Periodontal Patients

Clinical Benefits of oral irrigation for periodontitis are related to reduction of pro-inflammatory cytokine levels and plaque.

Cutler C, Stanford T, Abraham C, Cederberg R, Boardman T, Ross C. *J Clin Periodontol* 2000; 27:134-143.

Objective

To determine the impact of the Waterpik® Water Flosser as an adjunct to routine oral hygiene on clinical signs of periodontitis and on the levels of cytokines in the gingival crevicular fluid.

Methodology

Fifty-two subjects with mild to moderate periodontitis participated in this single center, blinded study. The clinical signs of periodontal disease were evaluated via plaque biofilm, gingivitis, and bleeding indices and probing depth. The cytokines measured were IL-1 β , PGE₂, IL-10, and INF- γ . Data was collected at baseline and 14 days.

Results

The addition of the Waterpik® Water Flosser to routine oral hygiene resulted in statistically significant reductions in plaque biofilm, gingivitis, bleeding on probing, and probing pocket depth. The Waterpik® Water Flosser produced a host modulation effect by reducing IL-1 β and PGE₂, cytokines associated with bone and attachment loss, raising IL-10, an anti-inflammatory agent, and stabilizing INF- γ , a bacteria-killing cytokine.

Conclusion

Adding the Waterpik® Water Flosser to routine oral hygiene inhibits periodontal disease activity and significantly improves periodontal health.