

# Waterpik® Dental Water Jets Significantly Reduce Plaque, 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® dental water jet 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, gingivitis, and bleeding indices and probing depth. The cytokines measured were IL-1 $\beta$ , PGE<sub>2</sub>, IL-10, and INF- $\gamma$ . Data was collected at baseline and 14 days.

### **Results**

The addition of the Waterpik® dental water jet to routine oral hygiene resulted in statistically significant reductions in plaque, gingivitis, bleeding on probing, and probing pocket depth. The Waterpik® dental water jet produced a host modulation effect by reducing IL-1 $\beta$  and PGE<sub>2</sub>, cytokines associated with bone and attachment loss, raising IL-10, an anti-inflammatory agent, and stabilizing INF- $\gamma$ , a bacteria-killing cytokine.

### **Conclusion**

Adding the Waterpik® dental water jet to routine oral hygiene inhibits periodontal disease activity and significantly improves periodontal health.