

The Waterpik® Water Flosser Removes 99.9% of Plaque Biofilm After 3-Second Treatment

Biofilm Removal with a Dental Water Jet

Gorur A, Lyle DM, Schaudinn C, Costerton JW. *Compend Contin Ed Dent* 2009; 30 (Suppl 1):1 - 6.

Objective

To evaluate the effect of the Waterpik® Water Flosser on plaque biofilm removal using scanning electron microscopy (SEM).

Methodology

Eight periodontally involved teeth were extracted. Ten slices were cut from four teeth and were inoculated with saliva and left for four days to further grow plaque biofilm. Four slices were treated with the Classic Jet Tip, four slices were treated with the Orthodontic Tip, and two slices were used as controls. The remaining 4 teeth were treated with the Orthodontic Tip to evaluate the removal of calcified plaque biofilm. All teeth were treated using medium pressure for three seconds and evaluated by SEM.

Results

The Classic Jet Tip removed 99.9% and the Orthodontic Tip removed 99.8% of the plaque biofilm from the treated areas after a 3-second exposure as viewed by SEM. The Orthodontic Tip significantly removed the calcified biofilm from the surface of the four teeth as viewed by the naked eye and SEM.

Conclusion

The Waterpik® Water Flosser significantly removes plaque biofilm.

