Waterpik[®] Sensonic[®] Professional Toothbrush: Unsurpassed Plaque Removal Beyond The Bristles

Efficacy of Various Side-to-Side Toothbrushes for Noncontact Biofilm Removal

Schmidt, JC Astasov-Frauenhoffer M, Hauser-Gerspach I et al. Clin Oral Invest 2014; 18(3):793-800. Study conducted at University of Basel, Switzerland

Objective

To evaluate the efficacy of the Waterpik[®] Sensonic[®] Professional Toothbrush to other sonic powered toothbrushes for noncontact (beyond the bristles) biofilm removal.

Methodology

Plaque biofilm was formed in vitro on protein-coated titanium disks and was exposed to four different side-to-side sonic toothbrushes using brushing times of 2, 4, and 6 seconds and brushing (bristle-to-disk) distances of 0, 2, and 4 mm. The biofilm volumes were measured using volumetric analyses with confocal laser scanning microscope images to determine biofilm removal.

Results

The overall median reduction in plaque biofilm for the Waterpik[®] Sensonic[®] Professional Toothbrush was 80%, while the median reduction for the Sonicare[®] Flex-Care was 62%. The other two toothbrushes in the study removed 9% and 13% respectively.

Conclusion

The Waterpik[®] Sensonic[®] Professional Toothbrush was unsurpassed in removing in vitro plaque without bristle contact.

