

Gentleness

in vitro study

In vitro effect of power toothbrushes on orthodontic bracket bond strength

de Jager M, Nelson R, Schmitt P, Moore M, Putt M, Kunzelmann KH, Nyama I, Garcia-Godoy F, Garcia-Godoy C. In vitro assessment of toothbrushing wear on natural and restorative materials. *Compend Contin Educ Dent.* 2007; 28 (suppl 1):42-50

Objective	To evaluate the effect of two new power toothbrushes and a manual toothbrush on the bond strength of orthodontic brackets bonded to human enamel using simulated clinical conditions.
Methodology	Orthodontic brackets were bonded to 36 extracted teeth and exposed to Sonicare FlexCare power toothbrush or Oral-B P-35 Soft® manual toothbrush for the equivalent of a two-year exposure to brushing in the presence of a toothpaste slurry. After brushing, the force needed to debond the orthodontic brackets from the teeth was measured.
Results	There were no statistically significant differences in bracket debonding strength between any of the treatments ($p>0.05$).
Conclusion	This study demonstrated that the Sonicare FlexCare is safe to use for patients with orthodontic brackets compared to a manual toothbrush.

