Gentleness

*in vitro study*

**In vitro effect of power toothbrushes on orthodontic bracket bond strength**


**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.