The Effect of Different Root Canal Sealers on the Bond Strength of Different Fiber Post Systems

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In the present of this study, the effect of resin based sealers on the bond strength of different fiber post systems were evaluated.

One hundred and twenty maxillary anterior central extracted human teeth were used in this study. The roots were separated and adjusted to 18 mm. The roots were instrumented by using Protaper rotary system. Specimens were randomly divided into four groups and obturated by using lateral condensation of gutta-percha with four different root canal sealers (AH Plus, Kerr, Epiphany, Endorez).

After 7 days, teeth in each group (n=10) were received three different fiber posts systems (DT Light, Transluma, Everstick) with Duolink resin cement. Then, the roots were embedded in acrylic resin blocks. After this period, the specimens were sectioned in three slices (apical, middle, coronal).

The push-out test was performed in a universal testing machine. All samples submitted push out test were examined under stereomicroscope.

Data were submitted ANOVA and Tukey test. Teeth obturated with AH Plus and received DT Light fiber post system showed the highest bond strengths (p<0.05). Teeth obturated with Kerr pulp canal sealer and Transluma fiber post system showed the lowest bond strengths (p<0.05). Teeth obturated with Endorez and received Everstick fiber post system showed the highest bond strengths (p<0.05).

**Key words:** Canal sealer, fiber post system, push out test