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**Impact of Retraction Paste on Universal Resin Cement Bond Strength**

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**Objectives** Blood deteriorates the bond strength of resin cements. AlCl<sub>3</sub>-based retraction pastes are an effective haemostatic but might also influence dentin bond strength if an unintended contamination occurs. This potential influence was investigated for a universal resin cement.

**Methods** 3M™ Astringent Retraction Paste (ARP) was applied to bovine dentin for 2min and rinsed off (water spray, 10sec). Untreated dentin samples served as control. 3M™ Scotchbond™ Universal Plus Adhesive (SBU+) was applied to half of the samples and left uncured. 3M™ RelyX™ Universal Resin Cement (RUV) was used to cement pretreated steel rods (4mm diameter) under standardized pressure (20g/mm<sup>2</sup>). After wiping off the excess cement, glycerine gel was applied, and self-cured samples were stored for 10min under pressure at 36°C. Light-cure samples were cured for 4 x 10sec using a 3M™ Elipar™ S10 LED Curing Light.

Shear bond strength was measured after 24h storage (36°C, 100% rel. humidity) on a universal testing machine (Zwick Z010; 8 groups n=6 ; crosshead speed 0.75mm/min). Data was analysed by One-Way ANOVA separated for adhesive / self-adhesive mode (Tukey; p<0.05). Groups sharing the same letter within one column do not show statistically significant differences.

**Results** The presence of ARP on dentin showed no significant influence on the bond strength of RUV when used with SBU+ as well as for RUV used in self-adhesive mode.

**Conclusions** Unintended contamination with ARP did not deteriorate the bond-strength of RUV when rinsed off properly with water.