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The European Journal of Orthodontics, Volume 18, Issue 1: January 1996.

## Comparative shear bond strength of some orthodontic bonding resins to enamel

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## **ABSTRACT**

The aim of this study was to compare the in vitro bond strength, to bovine enamel measured in shear, of the orthodontic adhesives Lee Insta-bond (LiB), Rely-a-Bond (RaB), Right-on (Ro), Concise precoating method (Cc), Concise mixed method (CaB), Super-C (Sc), and Orthon (Or), and of the glass ionomer cement Ketac-Cem (KC). The fracture surfaces after debonding were also examined in order to determine the sites of failure. The results indicate that there is a significant difference between the shear bond strength obtained with the different adhesives so that the mean shear bond strength decreases in the order {Ro~Cab~Sc}>{LiB~RaB~Cc}>Or>KC>. Moreover, for Cab and Sc it was found that the shear bond strength varies depending on the location on the bovine tooth. The failure site was essentially at the resin-bracket interface, except for Concise, where only 50 per cent of the cases failed at the resin-bracket interface.

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Last modification: 6 November 1997.

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