

PEARLS

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Bonding Impacted Teeth Without Moisture Contamination

Moisture contamination can make it difficult to bond an orthodontic attachment to an impacted tooth, especially if the exposed surface is small and blood is oozing.^{1,2} Self-etching and hydrophilic primers are designed to bond in moist conditions, but they still require drying the tooth surface.

A simple method to clean and dry the etched surface of an impacted tooth before bonding is to gently wipe the enamel with an alcohol swab. Water irrigation is not needed to clean the tooth surface, and the alcohol evaporates without blow-drying.

Dennison and Craig showed that etching leaves an extremely sensitive and fragile enamel surface that can be damaged with the slightest abrasion.³ Hormati and colleagues found no significant difference in shear bond strength, however, whether the etchant was rubbed or dabbed on.¹ Under a scanning electron microscope, the etch pattern created by rubbing was not as sharp as that created by dabbing; the prism peripheries (sheaths) were shorter and more blunted. This might explain why we have found no clinical difference in bond strength after wiping an etched enamel surface with an alcohol swab.

The technique presented here is especially useful in cases where there is minimal exposure of an impacted tooth surface and where moisture and blood contamination make conventional irrigation and blow drying inadvisable.

REFERENCES

1. Hormati, A.A.; Fuller, J.L.; and Denehy, G.E.: Effects of contamination and mechanical disturbance on the quality of acid-etched enamel, *J. Am. Dent. Assoc.* 100:34-38, 1980.
2. Silverstone, L.M.; Hicks, M.J.; and Featherstone, M.J.: Oral fluid contamination of etched enamel surfaces: An SEM study, *J. Am. Dent. Assoc.* 110:329-332, 1985.
3. Dennison, J.B. and Craig, R.G.: Characterization of enamel surfaces prepared with commercial and experimental etchants, *J. Am. Dent. Assoc.* 97:799-805, 1978.



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