

Talking with Patients

Composite Bonding

André V. Ritter, DDS, MS

WHAT IS IT?

In dentistry, composite bonding refers to procedures that bond a tooth-colored resin material to the tooth. In the past, restorations always had to be mechanically retained in the tooth. As a consequence, the dentist was required to routinely create retention forms at the expense of sound tooth structure; otherwise, the restorations would become loose. Currently, restorations can be adhesively bonded to nonretentive preparations in the teeth by means of dental adhesives.

The benefits experienced from bonding are a result of the evolution of a concept that was introduced several decades ago. Bonding enables the dentist to restore a tooth conservatively. The materials that are most commonly bonded to teeth are resin-based, tooth-colored composites.

WHEN IS IT NEEDED?

Composite bonding is primarily indicated to restore defects in anterior teeth but also can be used in posterior teeth. These defects include decay, lost or broken fillings, and abrasion or erosion defects that occur near the gum line of the tooth. Composite bonding also is often indicated for elective

cosmetic treatments that alter the form or color of teeth to improve esthetics. Frequently, this includes closing gaps or spaces that occur between anterior teeth or correcting defects that appear on the front surfaces of the teeth.

CONCLUSIONS

Because of the esthetic quality afforded by tooth-colored dental materials, composite bonding is used extensively in dentistry. Composite bonding represents one of the most significant advances that have taken place in dentistry over the past 25 years. Conservative and esthetic treatment options currently are available to treat and prevent tooth defects because of composite bonding. Composite bonding has afforded patients a conservative, affordable means for improving dental esthetics.

ADVANTAGES

- conservative
- may reinforce tooth structure weakened by defect
- excellent esthetics
- relatively inexpensive

DISADVANTAGES

- limited durability
- sensitive technique
- subject to staining, wear, or chipping over time, requiring maintenance, repair, or replacement

The following pictures illustrate a clinical case in which two front teeth were treated with composite bonding for esthetic improvement. (Photographs courtesy of Dr. Harald O. Heymann.)



Before



After

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