

Talking with Patients

Adhesive Dentistry

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WHAT IS IT?

The term *adhesive dentistry* refers to procedures in which resin-based dental adhesives are used to fill cavities and to bond veneers and crowns (caps). To use a simple analogy, dental adhesives are a type of “superglue” for teeth. When applied, they form a thin and invisible coat that links the tooth and the filling material, veneer, or cap. In years past, whenever dentists had to fill a cavity or place a crown on a tooth, the filling or crown had to be retained mechanically in the tooth. Mechanical retention almost always required cutting into a sound portion of the tooth so that the filling could be locked in place. With the advent of dental adhesives, many fillings and crowns can now be attached to teeth by bonding to the enamel and dentin instead of by mechanical locking.

The use of dental adhesives to bond fillings and crowns also results

in a better seal, reducing leakage and staining at the edges of the restorations.

WHEN IS IT NEEDED?

Dental adhesives have revolutionized the way dentists plan and perform numerous clinical procedures. They are used in many esthetic procedures, such as with porcelain veneers, all-ceramic crowns, and other tooth-colored fillings. Braces and sealants also are placed using dental adhesives.

When a dentist places a filling using a dental adhesive, the first step after removing any decay is to clean and condition the prepared cavity or tooth surface with a mild acid. Second, the dentist covers or primes the prepared area with the thin resin-based dental adhesive, which is then usually cured (hardened) with a special blue light. The third and

final step is the application of the filling material.

CONCLUSIONS

The effective use of resin-based dental adhesives represents one of the most significant advancements that have taken place in dentistry over the past 25 years. A considerable amount of time and resources have been invested in research of adhesive dentistry to enable dentists to provide the most conservative and effective treatment options for their patients. Today many patients benefit from adhesive dentistry and dental adhesives when receiving tooth-colored fillings, esthetic veneers, crowns, braces, sealants, or other restorations.

The following pictures show a tooth being restored by means of adhesive dentistry.

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