

What Are Sealants and When Should I Get Them for My Child?

These are two of the most common questions I hear in my practice. So I am very happy to have this opportunity to address them in detail.

A sealant, simply put, is a plastic coating, which is applied to the rough, grooved chewing, surfaces of the big molars in the back of the mouth. The plastic fills the grooves, which are too deep and too narrow to be cleaned properly. This eliminates the possibility of decay forming in these grooves. It is estimated that within two years after the eruption of the permanent six-year molars, more than 80% have the decay process started in these grooves if they have not been sealed.

Sealants do not require and numbing (shots) or drilling, they are one of the simplest procedures that can be performed in the mouth and after they are applied the patient can eat and drink immediately. There is no down time, no reason to miss school, no concerns about biting numb lips, ect.

Sealants were developed more than 30 years ago. I can remember placing my first sealants in patients during my pediatric residency program in 1974. At that time sealants were in the early stages of development stages and were extremely time consuming. It took approximately 10-15 minutes per tooth. Even then, sealants were touted as one of the best preventative measure since fluoride because of their ability to prevent decay in areas, which, before that time we were unable to do anything about.

Since that time, sealants have become one of the most researched and tested procedures in the history of dentistry. Because of this they have evolved into an extremely simple procedure, which takes approximately 2-3 minutes per tooth. The procedure involves simply

isolating the tooth, cleaning the tooth, preparing it chemically for 10-15 seconds, and then applying the sealant material. This material, which is a resin compound, is applied as a liquid, which flows into all the cracks and crevices, and then; it is exposed to light which activates it, and causes it to set up to a hard plastic. The light is held on the sealant material for 10-20 seconds. Once the procedure is completed, the patient can eat and drink immediately.

Sealants are most commonly placed on the chewing surface of the first permanent molars, which erupt at about 6 years of age. They come in behind all the baby molars. They are also typically placed in the 12-year molars, which erupt in at approximately age 12, behind the six-year molars and in some cases sealants are necessary in the permanent bicuspids which erupt in around 11-13 years of age pushing out the first and second primary (baby) molars. This depends on the depth of the grooves and whether they are chalky or if they retain debris and become stained. Not all bicuspids require sealants.

This is also true of baby molars that erupt in at 1-2 years of age. Baby molars normally do not have deep grooves and do not require sealants. However, there are occasions, and in my practice, I have found about 1 child in 3, may need sealants on his or her second primary (baby) molars sometimes even the first primary molars. Primary Molars are evaluated on an individual basis and I never place sealants on primary molars without first taking cavity disclosing x-rays to determine if there is any decay in-between the molars, or at the bottom of the grooves underneath the enamel. If there is a decay process occurring between the teeth or deep in the grooves, the teeth would not be considered for sealants, they would have to be restored with fillings.

Placing sealants in primary molars is usually done around 4-5 years of age. This is still a simple procedure but requires special techniques to perform even this simple procedure on a 3 to 5 year old child.

In my practice sealants have proven to be one of the most cost effective and least invasive ways to prevent decay. Children tolerate the procedure extremely well and insurance will usually cover some or all of the cost for sealants in 6 and 12-year permanent molars. The bicuspids and the primary or the baby molars are usually not covered, but the cost of the sealant is less than a third of what a filling would cost. Therefore, if the dentist recommends a sealant, even if it is not covered by your insurance the right decision would be to pay the smaller fee for the sealant which is a non-invasive comfortable procedure that can be performed without anesthetic instead of allowing a cavity to occur which would require more costly and invasive procedure.

If sealants have a down side, it is, that they can only be placed of the groovy surfaces of the teeth, the smooth surface on the sides and in-between the teeth cannot be sealed; there is no way for the sealant material to held by the smooth surface. Therefore, these areas can still decay even if the tooth has a sealant on the top in the groovy surface. The good news about this is that the smooth surfaces are easily cleaned with brushing and flossing. With proper brushing and flossing and sealants in place the risk of dental decay almost non-existent.

William A. Keaty, DDS is a board certified practicing Pediatric Dentist in Lafayette, LA. Questions can be submitted by email at drkeaty@nocavitykids.com , by mail @ 350 Doucet Rd., Ste. 101, Lafayette, LA 70503. Answers will be addressed in this column as time and space permit.