An Interview with Dr. Richard J. Walicki on Dental Crowns and Bridges

Dr. Richard J. Walicki is a Philadelphia dentist and has answered some common questions Bizymoms visitors have about Dental Crowns and Bridges.

Q. What are dental crowns and tooth bridges?

A. Dental crowns are artificial replacements for missing tooth structure. There are several specific circumstances that typically call for crowns. Most commonly, these are when:

- A tooth has been filled several times before and there is not enough tooth structure remaining to support a new filling.
- A tooth has broken and lost a large portion, known as a cusp.
- Enamel has cracked due to clenching or grinding.
- Cosmetic enhancement is required or simply desired by the patient.

Making a crown or bridge requires that a tooth be reduced in size to accommodate the replacement material. This is one reason for the increased popularity of implants, which can replace missing teeth without needing to alter the remaining ones.

Crowns can be made of entirely out of metal, such as gold or gold alloys; they can be all-ceramic, or a combination of both.

Bridges, on the other hand, are designed to replace a single tooth or multiple missing teeth by anchoring the replacement teeth to those that are still available. Bridges are cemented to the prepared teeth and are not removable by the patient. You can think of bridges as several crowns that are joined together in the laboratory. They are custom fitted to match the appearance of your teeth and to fit your bite. Like individual crowns they can be made out of metal, all-ceramics, or a combination of both.

Q. Is root canal treatment needed before a crown or a bridge?

A. Not necessarily. I have placed many crowns and bridges over the years that have not had root canals. Nevertheless, the potential need for root

canals is a risk of crown and bridge treatment. After being crowned, there is always a possibility that the tooth may develop a condition known as pulpitis or pulpal degeneration. It is important to remember that the tooth is often being treated with a crown precisely because it may have been traumatized by deep decay, extensive preparation, fracture as a result of an accident, or other causes. Depending upon the circumstances, your dentist will generally make a recommendation as to whether he feels a root canal is warranted. Where sensitivity is in question, many patients will opt to perform a root canal so they don't have to face the prospect of having a root canal completed through their newly fabricated crown or bridge at a later date.

Q. How are crowns and bridges made?

A. Traditionally, crowns and bridges have been custom crafted in a dental laboratory by hand. The process begins in the dental office where the doctor removes any decay or defective parts and replaces them with dental fillings which provide support for the crown. He then makes an impression of the prepared tooth and places a temporary crown on the tooth. The impression is sent to the laboratory technician who uses it to make a model of the crown preparation. At this point, the crown or bridge is either hand crafted on the model, or may be precision manufactured using a computer-assisted CAD/CAM technique.

Q. How long do crowns and bridges last?

A. This is an excellent question, but not the simplest to answer. University studies and insurance company estimates place the life expectancy at about five to fifteen years. This is just one of the reasons why many insurance companies will pay for a new crown after five years (though some companies are now increasing this exclusion to seven years). It has been my observation that there are two main factors which have the greatest effect on the longevity of crowns and bridges, however. First, is home care. Second, are excessive forces on the teeth, such as might be found in patients that clench or grind their teeth.

I have found it interesting to see that patient who take care of their teeth with daily flossing, who brush after meals and get regular checkups, seem to get a lot more life out of their dental work than patients who neglect their dental health. In fact, I would go so far as to point out that I have seen patients come into the office with excellent dental work that was already failing after two years because of the patient's neglect. Likewise, I have seen shoddy work last as much as twenty-five years in the mouth of a patient who had excellent home care and dietary habits.

With respect to grinding and clenching – depending upon the severity – this can easily lead to chipping and breakage. Some people can exert up to several hundred pounds of pressure per square inch on their teeth. But many factors can contribute to breakage, including such things as chewing excessively hard materials, changes in biting forces, and trauma – such as might occur with blows, falls, or auto accidents. Another common source of trouble is trying to open things with one's teeth. This is simply something you should never do. Remember, your teeth were made for eating.

Q. Is the procedure painful?

A. Patients are anesthetized for the procedure, so the procedure itself is not painful. After preparation of the teeth for reception of either crowns or bridges, the teeth may exhibit sensitivity. It may be mild to severe. This sensitivity may last only as short period of time or may last for much longer periods. If it is persistent you should notify your dentist as this sensitivity may be from some other source. Depending upon the type of crown preparation, it is also possible for the gums to be sore for several days after the procedure.

Q. How do I take care of my dental crowns and bridges?

A. The best way to take care of your dental crowns and bridges is to treat them as you would your own teeth. This should be to brush after meals and floss at least once a day. You should also pay attention to dietary factors, avoiding those elements that lead to the formation of excessive mouth acids. If you have been diagnosed as someone who clenches or grinds their teeth, talk to your dentist about corrective measures. At the very least, you should consider a preventive custom-fitted mouth guard. Though an added expense, it can save you a lot of money in the long run – not to mention protect you from breakage and tooth loss.

Q. Are the non-metal crowns as strong as metal crowns?

A. Ceramics are getting stronger, but metal crowns and porcelain fused to

metal still have the longest track record of success. Computer-generated CAD/CAM crowns coupled with improved porcelain technologies have shown great promise though. More and more dentists are providing these types of crowns due to increased cosmetic demands and they are holding up quite well. For patients who grind their teeth, however, metal has been the preferred choice. Today, we have a new alterative that is tooth-colored. It is made of completely of zirconia, and while possibly not as attractive as many porcelains, it looks a lot better than metal and is virtually unbreakable.

Q. How can we contact Dr. Walicki if we have further questions?

The best way to reach me is via e-mail: <u>info@toothwiz.com</u>. My office telephone number is 215-634-7006.