

## The Poor, Misunderstood Root Canal

What is the one dental procedure that is most often made fun of in the popular entertainment media. Think about how many times you have heard some actor say, “I’d rather have a root canal than ...”. You fill in the blank.

I admit that I, as a dentist, may be a little more sensitive to “dental humor” than the average person. But all most people know about root canals is they sound scary and lots of TV or movie characters would rather do almost anything than have one.

So what is the poor misunderstood root canal and is it really all that scary?

Root canal therapy, for which is medical term is Endodontic Therapy, is the way that many teeth are saved that would otherwise have to be removed. A little anatomy first...The outside of the tooth is enamel, the middle layer is dentin, and the inner layer is the pulp (commonly called the nerve). The pulp is actually composed of nerve tissue and blood vessels.

Why are root canals needed? Root canal therapy is needed when the pulp tissue is dead, dying, or irreversibly damaged. Once the pulp dies, the tooth will usually get infected (abscessed), although not all dental abscesses are from this cause.

What causes the pulp to die? The most common reason is a deep cavity (decay) that gets near or into the pulp. Less common reasons are trauma to the tooth or sometimes severe gum disease.

So does a root canal take the roots out? No, only the inner layer, the dead or dying pulp tissue is removed. The roots are still there following root canal therapy.

So how is it done? The tooth is anesthetized and an opening is made into the pulp chamber of the tooth. Tiny rotary files are used to remove the pulp tissue all the way down to just short of the end of the root (or roots) making a tiny canal in each root. The canals are disinfected and then filled with an antibacterial, rubbery material called gutta percha.

That’s it. Front teeth usually have one canal, premolars (bicuspid), usually have two, and molars have either three or four. That’s why a molar root canal takes longer than a non-molar.

How does the root canal save the tooth? The root canal gets rid of the infection or potential infection. What keeps the infection from coming back is the seal that the root canal therapy at the end of the root. The inside of a dead tooth is a great incubator for bacteria. The root canal filling seals off this space and prevents the tooth from becoming reinfected.

Does anything need to be done after the root canal? Most teeth will need to have a crown (cap) done to make the tooth strong. In fact, if not restored properly, a tooth with a successful root canal will usually be lost eventually.

Do all capped teeth need to have a root canal first? No, most teeth that need caps do not need to have a root canal first. If, however, the pulp has a poor prognosis, it is a good idea to do the root canal therapy first.

Are root canals painful? There is usually no discomfort during the procedure once the tooth is good and numb. There is usually mild or moderate discomfort for a couple of days afterward.

Are all root canals successful? Unfortunately, no medical (including dental) procedures are 100% effective. Root canal therapy is approximately 80-90% effective.

So why are people afraid of root canals? My best answer is fear of the unknown (and a scary name).

Should all abscessed teeth be saved with root canal therapy? No, if the tooth is too badly damaged to repair, if there is significant gum disease, or if the tooth does not hit against another tooth when chewing then extraction of the tooth should be considered. In fact, since implants are so useful, any tooth that needs a root canal can be replaced and sometimes should be. Your dentist will discuss and advise you on the best way to go.

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