

# The Root of the Problem

Inside your teeth is a soft material called pulp that contains blood vessels, nerves, and connective tissue. If this pulp becomes infected, it can cause severe tooth pain. In some cases, that infection will require root canal therapy.

## What is a root canal?

Nerves enter at the tip of the tooth's roots and run through the center of the tooth in small, thin root canals, which join up in the pulp chamber. Each tooth has at least one root canal but may contain more.

## Why might I need root canal therapy?

Injury or trauma to a tooth may cause the pulp to become inflamed or infected; eventually, the pulp may die. Damaged or dead pulp leads to increased blood flow and cellular activity, creating pressure inside the tooth that cannot be relieved. This may result in pain when biting down or chewing with the affected tooth, or when consuming hot or cold drinks. Without treatment, the infection may spread, the bone around the tooth may degenerate, and the tooth may fall out.

## What is root canal therapy?

Root canal therapy is a procedure to remove damaged or dead pulp. After the pulp chamber and root canal are cleaned out and reshaped, the canal is filled with a rubber-like substance called gutta percha to prevent recontamination, and the tooth is permanently sealed.

Treatment usually involves one to three appointments. After cleaning and reshaping, the dentist may seal the tooth with a temporary crown, leave it open to drain, or fill the canals, depending on the tooth's condition. A topical medication also may be applied in the area to fight bacteria.

Temporary fillings will be removed on subsequent visits. If the tooth is still weak after the pulp chamber and canal are filled, a metal or fiber-reinforced resin post may be used to reinforce the tooth.

Finally, the area is permanently sealed, and a gold, porcelain-fused-to-metal, or ceramic crown usually is placed over the tooth to reinforce its structure and improve its appearance.

## How will I feel after treatment?

Tissue inflammation in the area may cause some discomfort. This usually can be controlled with over-the-counter pain relievers. Aftercare includes maintaining regular visits with your dentist, brushing for two minutes twice a day, flossing once a day, and avoiding chewing hard foods with the treated tooth.

## Are there any potential complications?

On rare occasions, new infections may occur. This can happen for a variety of reasons, including an undetected crack in the root of the tooth, a defective restoration, or the breakdown of an inner sealing material. In these cases, additional follow-up and treatment may be necessary.



## Are there any alternatives to root canal therapy?

The only alternative to root canal therapy is extraction of the infected tooth. This can eventually cause the surrounding teeth to move, which may result in a bad bite that ultimately requires an implant or bridge. It's always best to keep your original tooth if possible, and root canal therapy allows you to do so.

To learn more about root canal therapy and determine whether it's the best option for you, talk to your general dentist.



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