



502 Jefferson Highway N.
Champlin, MN 55316
763 427-1311

www.moffitrestoratedentistry.com

Saving Your Teeth with **ROOT CANAL THERAPY**

YOUR TOOTH NEEDS THERAPY: ENDODONTICS

If you have a tooth whose internal structures are damaged, you may benefit from root canal therapy. Also called **endodontics**, root canal therapy can restore your tooth to its healthiest state by removing damaged tissue from the inside of your tooth's root. Your dentist, who may be a **general practitioner** or an **endodontist** (a root canal therapy specialist), can evaluate your tooth's health as well as provide the expert care that your tooth needs.

Your Tooth Is Damaged

You may not know it, but your tooth may be damaged: Its internal structures may be inflamed or infected, and these problems could spread throughout your tooth and into your jawbone. You may experience symptoms ranging from occasional sensitivity to hot and cold foods, to constant throbbing or a dull ache, to pain when you chew. Or you may have no symptoms at all. Whether or not you have symptoms, your tooth will worsen over time, and it may eventually have to be removed.

Your Dentist Can Help

Your dentist may be able to save your unhealthy tooth. A dental evaluation can identify problems with your teeth you may not be aware of and determine whether root canal therapy can help you. If you learn how healthy teeth can become damaged, you'll understand why root canal therapy may be the best treatment for you. The sooner you get treatment, the better: Your risk of losing the damaged tooth is decreased, your pain can be relieved, and your dentist may prevent infection from spreading further.

YOUR DENTAL EVALUATION

During your dental evaluation, your dentist will assess the health of your teeth. Your dentist takes a dental history, examines your teeth and gums, and x-rays your teeth to examine the underlying roots and bone. If your dentist discovers that your tooth is damaged, root canal therapy may be recommended. Remember, the longer you wait for treatment, the harder it may be to relieve or prevent symptoms.

Your Dental History

Your dentist will begin to evaluate the health of your mouth by asking if you have any symptoms such as throbbing, aching, or pain when you chew. You may be asked about previous dental work or injury to your teeth and any medical conditions you may have.

Your Dental Exam

After your history is taken, your dentist will examine your teeth. Your dentist looks for cavities, assesses the condition of any fillings you have, checks to see if your teeth are sensitive to hot or cold and feels for loose teeth. Your dentist may also tap on your teeth to check for pain and may evaluate your gums to find out how healthy they are. An **electric pulp test** evaluates the health of the nerves in your mouth, and a fiberoptic test may reveal cracks in your teeth as your dentist shines a special light on them.

X-rays

X-rays (radiographs) allow your dentist to see the inside of your teeth and the surrounding bone. With an x-ray, your dentist can detect any unhealthy changes in your tooth or bone that may or may not be causing symptoms.

A TOUR OF YOUR TEETH

Understanding your teeth may help take the mystery out of root canal therapy for you. Each tooth is covered by a tough outer shell that protects the underlying structures, and soft tissue inside your tooth helps keep your tooth nourished. But if the soft tissue becomes damaged, the health of your tooth is at risk.

A Healthy Tooth

Your tooth has two basic parts: the crown is the part you see above the gum, and the roots anchor your tooth to your jawbone. Inside the crown and roots is soft tissue (**pulp**) made up of tiny structures that help keep your tooth nourished.



An outer enamel layer and the dentin inside protect the tooth's underlying structures and prevent bacteria from entering the tooth.

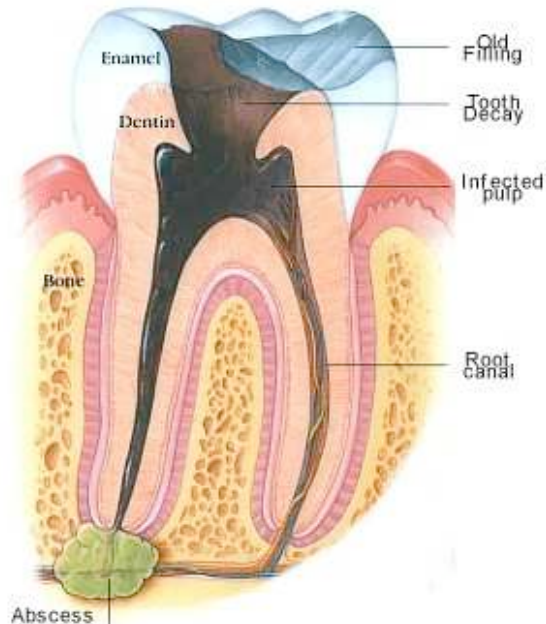
The pulp helps nourish the tooth and is made up of tiny blood vessels, nerves, and lymph vessels. The blood vessels and lymph vessels carry nutrients and waste to and from the tooth, and the nerves give feeling to the tooth.

The root canals house the pulp and extend to the underlying bone.

The bone holds the tooth with the help of tiny periodontal ligaments attached to the roots. The pulp tissue enters and exits through openings at the root tips.

An Unhealthy Tooth

The health of your tooth depends in large part on the health of your pulp. If it is inflamed or infected, your pulp is unable to nourish your tooth properly. If left untreated, the infection may even spread to your bone (**abscess**).



Bacteria can invade your tooth through a loose filling, a cavity, or a crack.

Your pulp becomes inflamed (irritated) and infected as it is attacked by bacteria. Eventually, the bacteria may destroy the pulp.

The inflammation and infection spread down the root canal, often causing sensitivity to hot or cold foods, throbbing, aching, or pain when you chew.

Your bone may become infected and abscessed as the bacteria escapes through the root openings. The bone breaks down, and your periodontal ligaments may swell and loosen your tooth.

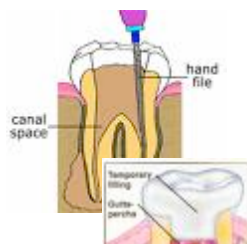
TREATMENT FROM START TO FINISH

The goal of root canal therapy is to improve the health of your damaged tooth. During treatment, the pulp is removed from your root canals through a small opening in the crown. Then the canals are sealed with special materials to prevent bacterial from reaching your bone. Your dentist then restores the outside of your tooth so it will function properly and have a healthy appearance. After root canal therapy, your tooth continues to be nourished by your surrounding gums and bone.

Root Canal Therapy

Your treatment may take one or more visits. Your visits may last one to two hours, and you may receive local anesthesia. A rubber dam (a protective sheet of rubber that covers your mouth) may be used to isolate your tooth and prevent bacteria from entering it. Your dentist may take x-rays periodically to make sure the full length of your root canals is being treated. If your roots are unusually shaped or there are other complications, you may need to have **apical surgery**. If you need this surgery, your dentist will discuss it with you.

- **Cleaning and shaping your root canals.** First, your dentist makes an opening in your tooth and removes any filling and decay. Then your dentist removes unhealthy pulp with tiny, flexible files. Using delicate, up-and-down motions, your dentist gently cleans and smoothes your canals to prepare them for the canal-filling materials.
root canal is



Your tooth is opened; then your cleaned and shaped.

- **Filling your**

root canals. After the pulp has

been removed from your root canals and they have been smoothed, your root canals will be filled. Your dentist may fill the canals with tiny cone-shaped pieces of **gutta-percha**, a firm, rubber like material, or use another dental material. A sealer-cement is used to seal the filling material in place. **Your root canal is filled with dental materials such as gutta-percha and may be covered with a temporary filling.**

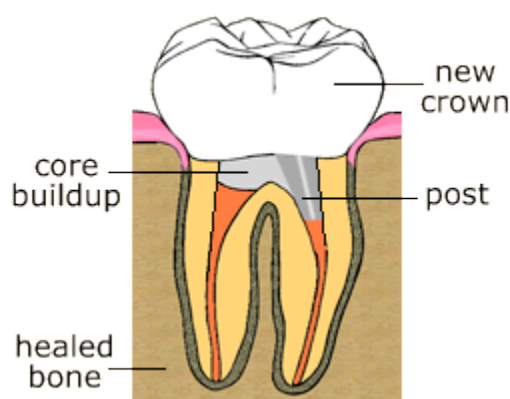
Between visits

If you need more than one visit for root canal therapy, your tooth may be protected by a temporary filling over a small piece of cotton. Pamper your treated tooth: avoid foods like popcorn, carrots, candy, and sticky foods because they may loosen your temporary filling. Brush and floss as you are instructed. Your dentist may prescribe antibiotics to fight infection or pain medication to minimize discomfort. Call your dentist if your filling loosens or falls out, your gums swell, or your tooth is sore after several days.

Restoring Your Tooth

After the inside of your tooth has been treated, the outside will be restored, usually by your general practitioner, to protect your tooth's underlying structures and give your tooth a healthy appearance. If your tooth needs extra support, your dentist may remove some gutta-percha and insert a post before the filling and crown are applied.

- A post, stainless steel or another metal, is sometimes cemented into your root canal to build up your tooth after root canal therapy.
- A filling, usually silver or a tooth-colored dental material, may be used to fill the opening in the top of your tooth.
- A crown, usually gold or porcelain, may be used to cover a tooth that has a large opening after root canal therapy.



A post supports your tooth and a crown protects it after treatment.

Follow up with Your Dentist

After root canal therapy, your tooth should function and feel like your other teeth. You and your general practitioner (or endodontist in some cases) may schedule an appointment for a routine follow-up. **Call your dentist** if your experience any problems with your treated tooth, like pain, swelling, or a loose filling or crown.

SAVE YOUR TEETH: TAKE CARE OF THEM!

After your root canal therapy, take care of your treated tooth the same way you would your other teeth. Brush after every meal, and floss before going to bed. Also, have regular dental checkups, cleanings, and any other dental work you may need so your teeth last as long as you do!

