The aim of a root canal treatment (also called "endodontic" treatment) is to save a tooth that has been badly damaged due to decay, disease, or injury.

Many millions of teeth each year are saved from extractions by having root canal treatment. Most people prefer to save their tooth because generally it will function better than an artificial tooth.

Your own tooth is usually stronger and more efficient for biting and chewing. Cleaning and maintenance of a natural tooth is also much easier. However good an artificial tooth can be, it will never be more than just a substitute for a real tooth.

Often it may seem like removing a tooth would be a cheaper and easier option, but this can also cause additional problems. For example, nearby teeth can move out of their normal position and tilt into the space left by a missing tooth. This can make things like chewing and biting difficult or create hard to clean areas leading to more decay or gum disease.

Root canal treatment is successful in most cases. If you take good care of the treated tooth, it may last for many years and possibly for the rest of your life.

Your tooth will not be treated unless the treatment is likely to succeed. Root canal treatment may not be appropriate in some cases, and extraction may be the best or only option.

Your dentist will be able to complete your root canal treatment unless a referral is required under special circumstances. In these cases, you'll be referred to an "endodontist" who is a root canal specialist.

A HEALTHY TOOTH

Inside the hard exterior of the tooth is the pulp, which is soft tissue containing nerves, blood vessels and connective tissues extending from the tooth crown to the tip of each root. The pulp is important for normal growth and development of the tooth; however, a fully developed tooth can function normally without a pulp if root canal treatment has been successful.



Infection or inflammation of the pulp can be caused by:

- Breakdown of a filling or crown
- A deep cavity
- Trauma
- Gum disease
- Crack or chip in the tooth
- Extreme wear
- Extensive dental work to the tooth

Symptoms may include pain, sensitivity to heat or cold, tooth discolouration, and swelling or soreness in the gums surrounding the tooth. When the pulp is infected or inflamed, root canal treatment is needed to save the tooth.

To improve the chances of success, root canal treatment should be started as soon as possible. All root canals in the affected tooth must be treated. Different teeth have different numbers of canals so the number of canals treated will depend on the tooth.



WHAT HAPPENS DURING A ROOT CANAL?-

Root canal treatment is usually conducted over multiple visits to make sure the antibiotics have time to take effect.

At the first appointment, your dentist will examine the tooth and take a xray to check the tip of the roots. You will always receive a local anesthetic to make sure you are comfortable throughout the procedure. The dentist will clean out any decay and access the pulp. They will then use special instruments, called files, to remove the inflamed or infected pulp and place an anti-inflammatory and antibacterial medicine inside the tooth. A temporary filling is then placed to seal the tooth keep any additional bacteria from inside the tooth.

Following your first appointment, any pain or discomfort should settle within a few days.

At your second visit, the tooth will be covered with sheet of rubber dam to isolate it and keep it clean and dry during treatment. The temporary filling is then taken out and the canals are widened and shaped ready for the tooth to be filled. Your dentist will take several xrays throughout the course of your treatment to investigate the shape and length of the root canals as well as check for any remaining infection. At this time your dentist will advise as to whether they can complete the treatment at that appointment or if it is best to place more dressing in the tooth and leave it for another month.

Once your dentist is satisfied that there is no remaining infection the root canals are filled, and the tooth is sealed with a permanent filling.

3 months following the completion of your root canal treatment it is highly recommended to have a crown placed on that tooth. A root treated tooth has a higher risk of fracture and a crown helps to strengthen and protect the tooth over the long term.

POSSIBLE COMPLICATIONS OF ROOT CANAL TREATMENT

As with all dental and medical treatments, root canal treatment has risks. The following list of possible complications is intended to inform you, not to alarm you. There may be others not listed. If you have concerns about possible complications, ask your dentist.

Loss of tooth:

While root canal treatment can save many teeth, we cannot guarantee that it will be successful in every case. It is not possible to predict how long the tooth will last after treatment, although it should last for many years. Success also depends on a patient's health, age, capacity to heal, oral hygiene, and many other factors, particularly the amount and strength of the remaining tooth structure.

An important factor is the final restoration. To ensure the best chances of success the treatment should be completed, and the tooth crowned to avoid breakage or bacteria re-entering the tooth and causing another infection.

Infection:

Infection in the tooth is likely to resolve completely once treatment is undertaken. The risks of re-infection are low. However, if the infection recurs, the tooth may have to be treated again or removed.

Discolouration:

In some cases, the treated tooth may lose its original whiteness and become darker. If a front tooth is affected, the person may feel unhappy about the tooth's appearance. Discolouration can be treated by bleaching, or the fitting of a crown following treatment

Pain or discomfort: Some people may continue to have pain or discomfort around the tooth during and following treatment. Your dentist may recommend an over-the-counter pain relief but always let us know if the pain is severe or lasts more than a few days.

