

# Root Canal Treatment



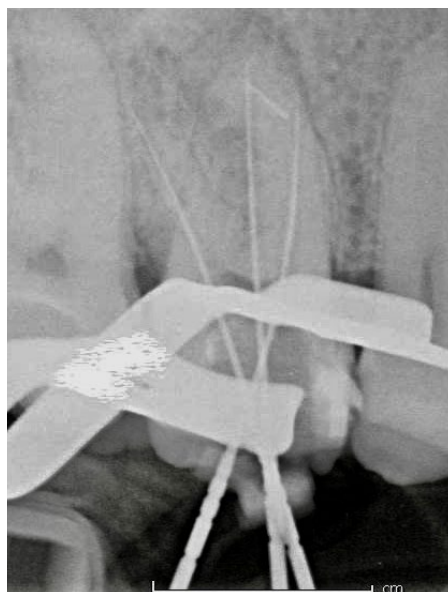


## What is root canal treatment?

A root canal treatment is a dental procedure used to treat infection or damage inside a tooth, specifically in the pulp (the soft tissue at the centre of the tooth). It involves removing the infected or damaged pulp, cleaning the inside of the tooth, and then sealing it to prevent further infection.

The goal of a root canal is to save a tooth that would otherwise need to be extracted. After the procedure, the tooth is often restored with a crown to protect it and restore its function.

Root canal treatment is offered when the dental pulp is dead but the tooth itself can be saved. It is called root canal treatment because it involves cleaning inside the root canals and placing a filling in the roots of the teeth.



X-ray with instruments in the root canals of a molar tooth

## Why do I need root canal treatment?

Root canal treatment is advised for a range of clinical scenarios, including:

- When decay reaches the deepest part of the tooth (the pulp) and infects it.
- When a tooth suffers from heavy trauma.
- When repeated dental procedures cause irreversible trauma to the dental pulp.
- When there is a tooth abscess.

## What happens during root canal treatment?

Root canal treatment is split over several appointments. The treatment involves removing the dental nerve remnants, cleaning the inside of the tooth and placing a filling in the root canal system. The length and number of appointments needed for root canal treatment varies between patients. Usually root canal treatment takes 2-3 appointments lasting 1-2 hours each but in some cases it can take longer.

Before your Root canal treatment:

- Examination - You'll be assessed to see if you are suitable for root canal treatment. This assessment involves x-rays (see our radiograph leaflet for further information) to judge if the tooth is healthy enough to be treated.

During your Root canal treatment:

- Local anaesthetic is usually given to numb the tooth site and keep you comfortable. On occasions, this may not be needed.
- A rubber sheet (called rubber dam) is placed over the tooth to protect the tooth from saliva, and protect your mouth from debris.
- A hole is made in the tooth to gain access to the root canal system.
- Instruments are used to remove infected dental pulp tissue and shape the canals for cleaning and filling.
- The canal system is cleaned with disinfectants.
- X-rays are taken at certain stages of treatment to check progress.
- Once cleaned and shaped, the root canal system is filled with a rubber-based filling material.

Between appointments a temporary filling is placed in the tooth to keep it clean and functional. If at any point the temporary filling is lost or breaks down, please contact your dentist to ensure that a new one is placed.



Rubber dam isolation a tooth during root canal treatment

## What are the advantages of Root canal treatment?

**Tooth retention:** It allows you to keep your tooth

**Pain relief:** If you are in pain, successful root canal treatment aims to eliminate pain.

## What are the risks of root canal treatment?

**Failure:** Root canal treatments can fail and may not be re-treatable. As a result, extraction may be necessary even if root canal treatment is undertaken. This can be a consequence of:

- » The infection not responding to treatment
- » Irreversible damage to the tooth/root during treatment
- » Blocked root canals that prevent further treatment

**Instrument separation:** The instruments we use are very small and there is a risk of them separating in the root canal. The instruments are single use and sterile.

**Discomfort:** After treatment, you may experience some discomfort - this can usually be treated with over-the-counter painkillers.

**Tooth/restoration damage:** Teeth/restorations may be fractured/chipped during treatment - this may result in a need for further dental treatment.

**Infection:** In some cases after treatment, healing may be incomplete and you may experience infections.

**Adverse reactions:** It is rare, however sometimes reactions to local anaesthetics or chemicals can occur.

**Perforation:** Damage to the structure of the tooth, often due to unusual anatomy, can in a small number of cases, lead to losing the tooth.

**Discolouration:** This can occur due to the death of the tooth. Teeth can sometimes turn grey. If this does occur, there are a number of treatment options available, which can be discussed as part of your treatment.

**Extrusion of hypochlorite** (one of the cleaning agents used): Whilst rare, the chemical irrigant used to disinfect the canal (sodium hypochlorite), can spill out into the vital tissues surrounding the tip of the tooth's root and cause injury. This may cause a period of discomfort and swelling. Depending upon the severity, pain relief and other clinical support may be required.

The disinfectants used can bleach fabrics; whilst an apron is used to protect your clothes from splashes, please don't wear your best clothes to root canal appointments in case of accidents.

## What are the alternatives to root canal treatment?

We will always discuss the options available to you in depth before any decisions are made. Such options may include:

- No treatment
- Monitoring the tooth and acting on more definitive symptoms in a later appointment
- Extraction (removal of the tooth)

## What happens after root canal treatment?

To check that your root canals are filled to the correct length, a final x-ray is taken.

It is important to restore a tooth with a filling or crown after root canal treatment to protect the weakened tooth. Crowns are often required on any back teeth that have undergone root canal treatment.

To check that you and your dental professional are happy with the outcome of your treatment, you will be reviewed after your treatment is finished.

When all of your dental treatment is complete, you will be discharged from the dental school. We advise that you find a dentist outside the dental school to continue to look after your teeth and restorations.



An x-ray showing a finished root canal filling

## Types of questions you may want to ask...

- Can my tooth be restored after root canal treatment?
- How will I know if my root canal treatment has worked?
- How much time should I leave between having a root canal treatment and having the tooth restored?
- Will a root filled tooth look different to my natural teeth?

## And finally...

Maintaining good oral hygiene is crucial for healthy teeth and gums, and will help reduce the risk of decay and gum disease. Brush your teeth twice daily for 2 minutes with fluoride toothpaste and clean between your teeth with floss or interdental brushes.

Smoking and alcohol increase the risk of oral disease. If you want to quit smoking or reduce your alcohol intake, please talk to the clinician you see for further advice.

It is important to attend dental check-ups regularly, as this will help your dentist to identify any dental disease early.



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**Contact us:**

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