



Patient Information Leaflet

Root Canal Treatment

Cork University Dental
School & Hospital



This leaflet has been designed to explain root canal treatment and it contains answers to many of the commonly asked questions. If you have any other questions that the leaflet does not answer, or you would like further explanation, please ask us.

Why and when do I need root canal treatment?

Root canal treatment is undertaken to treat or prevent an infection occurring inside the tooth. Treatment may be required after extensive decay in a tooth, a deep, fractured or leaky filling or crown, repeated replacement of fillings, extensive gum disease and its treatment, tooth injuries or a tooth that has developed a crack.

Occasionally, a healthy tooth may need root canal treatment to enable a crown to be retained (referred to as 'elective root canal treatment').

Is root canal treatment always feasible?

Success of the treatment may be influenced by the quality of the new filling or crown. If there is not enough tooth structure left, it may be necessary to extract the tooth.

What is involved in root canal treatment?

The treatment is carried out under local anaesthetic to ensure your comfort. Where a decision has been made to proceed with root canal treatment, the procedure will involve:

1. Placement of 'Rubber Dam' (an isolation technique) that enables the tooth to be kept dry and prevents it from becoming infected from your saliva. It also prevents disinfectant from being swallowed.
2. Entry to the centre of the tooth (root canals) by drilling through the tooth, filling or crown. If the filling or crown is defective it may need to be removed and replaced with a temporary material.
3. Using specialised instruments to prepare the root canals for washing.
4. Taking multiple x-rays to check the length of the root canals and the quality of root filling.
5. Use of disinfectants to wash the root canals.
6. Dressing of the tooth temporarily between appointments.
7. Placement of a root filling material to prevent the root canals from becoming re-infected.
8. After the root filling the tooth will require a filling or, in many cases, a crown.

Will I experience pain during treatment?

Pain during treatment is a rare possibility. It may occur when the nerve is inflamed. Under these circumstances, local anaesthesia is not so effective. A number of strategies are open to the dentist under these conditions. Some forbearance is required though to achieve immediate progress in treatment. Mild discomfort after treatment may be caused

by one or a combination of several factors; local anaesthesia, rubber dam placement or the treatment procedures, lasting between 24-72 hours after treatment.

How long does the treatment usually take?

The process of finding, placing instruments into, preparing and washing root canals is a highly skilful procedure and takes time and patience. Multiple visits, often longer than normal appointments (1.5 – 3 hours) may be needed.

What are the risks associated with root canal treatment?

The number of risks are minimised by the high standard of care. However, sometimes unforeseen problems can occur and may include the following;

1. Pain during treatment
2. Mild discomfort after treatment
3. Leakage of antiseptic agents into the mouth
4. Tooth fracture
5. Failure to locate or negotiate root canals
6. Blockage of root canals
7. Fracture of files/instruments in the canal
8. Root perforation
9. Extrusion of antiseptic through the end of the root into the surrounding soft tissue

How successful is the treatment?

Failure despite adequate treatment is a possibility in a small proportion of cases and is usually due to persistent infections. The success rate for teeth with inflammation around the end of the root is about 85%. In case of failure, either re-treatment, surgery or tooth extraction may be considered.

What happens after my root canal treatment?

Following completion of the root canal treatment, the tooth will be filled with a permanent filling material. You may then require a cast restoration such as a crown to protect the tooth from fracturing. Failure to place a crown on the tooth after root canal treatment puts the tooth at risk of fracture which may require the tooth to be extracted.

The tooth is normally monitored from time to time to make sure that the bone around the root end is healing. This requires an x-ray. The healing can take anything from six months to four years and sometimes longer.

This leaflet is available online at <http://www.ucc.ie/en/dentalschool/patients/>