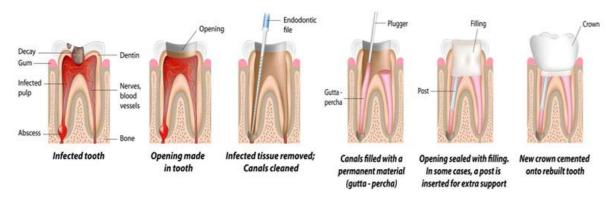




Root Canal Treatment – Saving the Tooth!

Root canal treatment is needed when the nerve of the tooth has been compromised. Commonly, a large area of deep tooth decay allows bacteria to infect the nerve of the tooth or the nerves of the tooth die after direct trauma or accumulated trauma from having the need for repeated treatment due to dental problems. The tooth may be extremely sore to temperatures during the early stages of nerve damage as the nerves try to tell you something is wrong, presenting especially as a lingering pain to cold things or a general feeling of hotness in the tooth termed a "hot pulp". As the nerve dies, the sensation changes from temperature reactions to pressure reactions, namely a soreness to bite on or touch the tooth, as an abscess or sac of infection may have formed around the root of the tooth. There may also be a gum swelling next to tooth which indicates infection has spread from the tooth to the surrounding bone and gum. In extreme situations, there may also be a swelling in the cheek or palate next to the tooth, indicating major infection.

Root Canal Therapy



In the centre of a tooth is a root canal system that houses the nerves and blood vessels of the tooth. When a tooth's root canal system becomes traumatised, it must be removed in order for the tooth to be saved. Most commonly, a tooth's root canal system is traumatised due to bacterial infection.

The root canal system is accessed through the chewing surface or the back of the tooth. The root canal system is cleaned out using special instruments, disinfectants and medications. The root canal system is then filled up to prevent further infection.

A tooth's root canal system is very complex and may consist of several passageways which take time to negotiate so there is usually the need for 2 to 3 appointments. Time is also required for disinfectants and medications to have optimal effect.

The root canal system cannot be seen with the naked eye so there is a need to take radiographs (x-rays). Several radiographs may be taken to ensure the progress of treatment.



Root Canal Treatment

After root canal treatment, the tooth usually requires a crown. A tooth that requires root canal treatment is usually badly broken down or has had a lot of dental work with little good tooth structure remaining. Although root canal treatment saves a tooth, removal of the root canal system leaves a tooth more brittle and prone to injury. A crown protects the remaining tooth structure and helps prevent reinfection of the root canal system.

A tooth in which the root canal system is not alive or no longer present may discolour and become darker over time. If a crown is required for the tooth, the crown will hide any discolouration. If the tooth does not require a crown, the discolouration may be reversed through tooth whitening.

As root canal treatment involves dealing with infection and inflamed tissues, pain and discomfort may be experienced during or following the treatment. The pain and discomfort is usually short lived and is relieved by common pain killers and antibiotics. Following root canal treatment, a tooth may feel a little different from other teeth because there is no longer a root canal system inside the tooth. For example, the tooth is saved but no longer senses temperature.

Specialised fine instruments are used to clean the complex and often curvy root canal system and may occasionally fracture inside the root canal system. This is uncommon but if it occurs, the fractured portion may be left or a special procedure may be required for its removal.

Root canal treatment may be carried out in most teeth by a general dentist, however, sometimes you will be referred to a specialist endodontist if your case is very difficult. The alternative option to root canal treatment is the removal of the tooth. In most cases if tooth extraction is selected, replacement of the lost tooth with an implant, bridge work or denture needs to be considered after extraction to prevent undesirable effects on the remaining healthy teeth. Root canal treatment is successful in most cases, but reinfection of the root canal system may occur in some cases. If this occurs, the decision is again between retreatment or tooth removal.



Central Brisbane Dental uses a special computerised rotary endodontic system to ensure root canal treatments are carried out in the most efficient and effective manner. A computer guides the dentist through the root canal cleaning process to achieve predictable results. A powered handpiece using nickel-titanium files allows efficient negotiation of root canals of all shapes and sizes. An auto torque reverse function on the handpiece helps avoid files binding in the root canal and fracturing. A root apex locator accurately determines the bottom of the tooth to ensure proper cleaning of the whole root canal system and avoid over-instrumentation.