

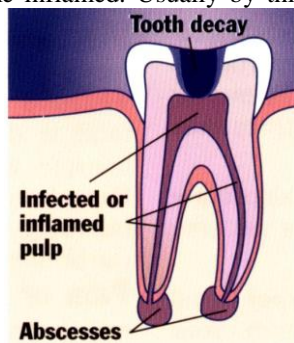
# ROOT CANAL TREATMENT

Ancient civilizations developed this highly refined method of saving teeth that otherwise would have been lost. More recently, scientific research has allowed us to understand that clean and complete removal of the nerve and infection inside the tooth is the best way of eliminating toothache caused by extensive decay, disease, a crack or injury.

## INFECTION OF THE ROOT CANAL SYSTEM

Inside the centre of every tooth is a hollow space, or root canal. It contains blood vessels, nerves, immune and other specialized cells. This is called the pulp. This pulp tissue is fed by blood vessels that enter the tooth from the very tip of the roots and travel up the root canal into an area in the middle of the tooth. If the tooth has three roots, such as upper molars, the three root canals converge at this central chamber. It is this pulp that people call the “nerve” of the tooth.

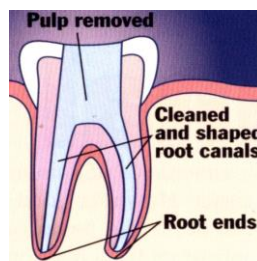
As tooth decay, injury or a crack in a tooth approaches the pulp chamber, bacteria and their secretions will come into close proximity to the pulp. These irritate the pulp tissues, which become inflamed. Usually by this time there is a toothache to hot, cold or sweet food and drinks. If nothing is done (such as a filling or a crown to remove the irritant), the pulp eventually becomes irreversibly inflamed and dies. At this point the patient will have an excruciating toothache. Sometimes the pulp becomes necrosed or died without a toothache, however if the root canal has become infected, there may be an abscess, causing swelling and the tooth to become very sore to touch or bite on.



## CLEANING AND FILLING THE ROOT CANAL SYSTEM

The tooth is anaesthetized thoroughly and a protective rubber dam cover is placed over to isolate the tooth and

keep the inside sterile. Sometimes we recommend removal of all the existing fillings to allow proper assessment of the remaining tooth, decay or any cracks. Otherwise a small hole is made into the tooth to allow access to the pulp chamber. Any remaining pulp tissue is removed, and small files are used to clean and shape the inside of the canal, making sure all bacteria and toxins are removed.

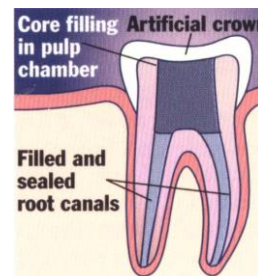


Confirmation of the file reaching the very tip of the root is accomplished via x-rays showing the actual location of the file in respect to the root canal and root tip.

Once the length has been established, the canal is shaped to facilitate its filling. All of the convoluted anatomy inside the root canals cannot always be accessed with a file so we flush the inside of the tooth with chemicals while cleaning it and usually an antibacterial and anti-inflammatory medication is left inside for a number of weeks to ensure thorough penetration. A well-sealing temporary filling is placed.

Once we are sure that the root canal is free of infection and clean and sterile inside, it is dried, then filled successively with rubber cones and a paste. This allows for the canal to be completely filled up in the long term, preventing further chance of infection.

It is important to then place a crown over the tooth, to help maintain its sterility and strength over the years (a filled tooth is slightly more brittle). Regular clinical and x-ray checking of the root canal treatment is also recommended to ensure it is staying healthy and successful in the long term. Root canal therapy has over a 90% success rate – although this is lower if more pre-existing infection was present.



11 Kings Road, Subiaco WA 6008  
Phone 9388 1557

