

## ***Root Canal Treatment (Endodontic Treatment)***

### **What is root canal treatment and why is it carried out?**

Root canal treatment is carried out when the pulp (nerves and blood vessels within the tooth) has become infected by bacteria (germs). These germs cause pus to form at the tip of the root, in the jawbone, this is called an abscess. Symptoms one might expect when this occurs are sensitivity to hot drinks/food, unable to bite on the tooth, a dull ache or severe throbbing pain and sometimes one may have a facial swelling. There are times when no pain is experienced; this is because the abscess is dormant.

### **The pulp becomes infected for the following reasons:**

- the tooth is decayed
- the tooth has a large, deep filling or a crown
- there is a crack in the tooth
- if the tooth has been subjected to trauma

An infected tooth is treated by root canal treatment (to save the tooth) alternatively the tooth can be extracted (removed). ***Antibiotics do not 'cure' the infection.***

There are cases when the tooth has already had a root canal treatment and has become infected again. The treatment options are to have the root canal treatment repeated or to extract the tooth.

### **What does root canal treatment involve?**

The aim of root canal treatment is to remove the infected pulp. The infected pulp is accessed through the tooth and is cleaned out. The space is then filled with a rubber-like material called gutta percha. All treatment is carried out using local anaesthetic.

Generally, the front teeth have one canal and the back teeth have 3 or more canals. These canals may be curved or blocked. For these reasons, root canal treatment can be complicated and may take two or more visits, although sometimes it may be completed in one visit. This decision will be made by the endodontist. ***The duration of each visit is between one to two hours long.***

***Several x-rays will be taken during treatment.***

### **Will the procedure be successful?**

Root canal treatment normally has a high success rate however this differs depending on what state your tooth is in; for example if it is a first time root canal treatment, a re-treatment or has a chronic (long standing) or aggressive infection. ***It is a biological procedure, and despite our very best efforts, the success of the treatment can not be guaranteed, sometimes the tooth does not respond to treatment and may need an extraction or if possible an alternative treatment plan.***

Root canal treated teeth are usually very heavily restored and are at high risk of fracturing, and in some instances when they fracture, they may need to be extracted (resulting in loss of the tooth). Once the root canal treatment is completed, your dentist may recommend placement of a crown on the tooth. A crown provides support for the tooth and prevents it from fracturing. The long term prognosis of the tooth is better with a crown

### **Is the treatment painful?**

Root canal treatment is performed using local anaesthetic so one should experience little or no discomfort during treatment. Every possible effort will be made to ensure your comfort throughout the procedure.

### **After the treatment:**

Some discomfort may be expected; this is usually controlled with painkillers and resolves after 7 to 14 days. Occasionally, in teeth with severe infections, one may experience a facial swelling. In this case, your dentist or the endodontist should be contacted and advice will be given.

### **Possible unforeseen complications that may occur during/after treatment:**

- 1) Occasionally (in approximately 5% of cases), after treatment, one may experience severe pain and facial swelling. In this case, your dentist or the endodontist should be contacted and advice will be given.
- 2) Fine instruments are used to carry out root canal treatment. Very rarely can these instruments fracture within the root canal. It may not always be possible to remove the fractured fragment; in most cases this will not affect the prognosis of the treatment or cause any problems to one's health. However, in some instances (very rarely), such an occurrence can cause failure of the root canal. If this should happen, your endodontist will inform you.

- 3) When providing root canal treatment through an existing crown, then there is a risk that the porcelain of the crown may fracture. In this case, you will require a new crown (this is not included in the cost of root canal treatment).
- 4) The tooth may fracture between appointments; sometimes it may fracture in such a way that will make the tooth unsalvageable, the treatment will not be continued, and your tooth will need to be removed (extracted).
- 5) There is a possibility that the root canals in your tooth are blocked or that there is an extensive crack in the tooth. If this is evident once treatment begins, then you will be notified, and the root canal treatment will not be continued. An extraction will be the only option.

**Why have I been referred to an endodontist (a root canal specialist)?**

All dentists have received training in endodontic procedures. However, there are occasions when root canal treatment can be very complex and an endodontist has more training, experience and equipment to deal with difficult, complicated cases.

**If you have any further questions about your treatment please do not hesitate to contact the clinic.**