

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

The goal of root canal treatment is to save a tooth that might otherwise require extraction. Although root canal treatment has a high success rate, as with all medical and dental procedures, it is a procedure whose results cannot be guaranteed. Furthermore, root canal treatment is performed to correct an apparent problem and occasionally an unapparent, undiagnosed or hidden problem arises.

**Other Treatment Choices:** These include no treatment at all, waiting for more definitive symptoms to develop, and tooth extraction. The risks involved in these choices may include, but are not limited to pain, infection, swelling, loss of teeth, and spread of infection to other areas of the body, which in rare circumstances, may become life-threatening.

This procedure will not prevent future tooth decay, tooth fracture or gum disease, and occasionally a tooth that has had root canal treatment may require re-treatment, endodontic surgery, or tooth extraction.

**Risks:** Are unlikely, but may occur. They might include but are not limited to:

- a) Instrument separation/breaking in the canal.
- b) Perforations (extra openings) of the canal with instruments.
- c) Blocked root canals that cannot be ideally completed.
- d) Incomplete healing.
- e) Post-operative infection requiring additional treatment
- f) Tooth and/or root fracture that may require extraction.
- g) Fracture, chipping, or loosening of existing tooth or crown.
- h) Post-treatment discomfort.
- i) Temporary or permanent numbness.
- j) Change in the bite or jaw joint difficulty (TMJ problems or TMD).
- k) Medical problems may occur if the root canal is not completed.
- l) Reactions to anesthetics, chemicals or medications.

The following other treatment options might be possible:

- a) No treatment at all.
- b) Waiting for more definitive development of symptoms.
- c) Extraction: To be replaced with either nothing, a denture, a bridge or an implant

After the completion of the root canal procedure, you will require a permanent restoration. Failure to have the tooth properly restored in a timely manner (generally within 30 days) significantly increases the possibility of failure of the root canal procedure or tooth fracture.

### **COMPLETION OF TREATMENT**

Root canals are sometimes completed in a single appointment or may take several appointments. If the treatment spans several appointments, you will have a temporary filling placed on the tooth to protect the canal. If the filling should come out, please call the practice so we can replace it. Once treatment is begun, it is absolutely necessary that the treatment be completed, and the patient must diligently follow any and all instructions.

### **SENSITIVITY**

Just like with fillings, a root canal tooth can be sensitive both during and after final treatment. Usually this sensitivity disappears in several weeks. If it does not or appears to worsen, please call the practice to let us know.

Pain is a common side effect of a root canal treatment and can be managed with painkillers. Occasionally during or after the tooth may feel tender to touch or bite on and rarely a swelling may occur.

### **CROWN NEEDED**

A crown is usually recommended for any tooth that has a root canal. This is because root canal teeth no longer have a blood supply to them and become more brittle than your other teeth. This is especially true of your back chewing teeth—the molars and premolars. A crown goes over the root canal tooth to strengthen it and protect it from breakage.

### **CAUSES OF FRACTURE**

One of the main reasons root canals fail is because of breakage or fracture of the tooth. A fractured tooth (especially a vertical fracture) can require extraction of the tooth. One of the best ways to prevent fracture of a root canal tooth is to have a crown put over the tooth to strengthen it. Other causes of fracture include grinding of teeth, improper bite, trauma, etc. These fractures can occur either before or after the root canal and often are invisible and/or hard to detect.

### **PROPER CARE**

Root canal teeth have no nerve, but they can still decay. It is important to take care of root canal teeth just as you would any other tooth: good home care, proper diet, and regular dental checkups.

### **ADDITIONAL TREATMENT**

Additional treatment may be necessary. Occasionally, root canal treatment alone does not complete the treatment. The canals of the tooth can be very narrow or curved or calcified. There may be infection around the roots of the tooth. Instruments used to treat the tooth may become separated in the canal. The tooth may remain or become sensitive. A surgical procedure or possibly extraction may be necessary to try to resolve the problem.

Once the tooth is opened it may be that it cannot be completed and referral to a specialist is needed.