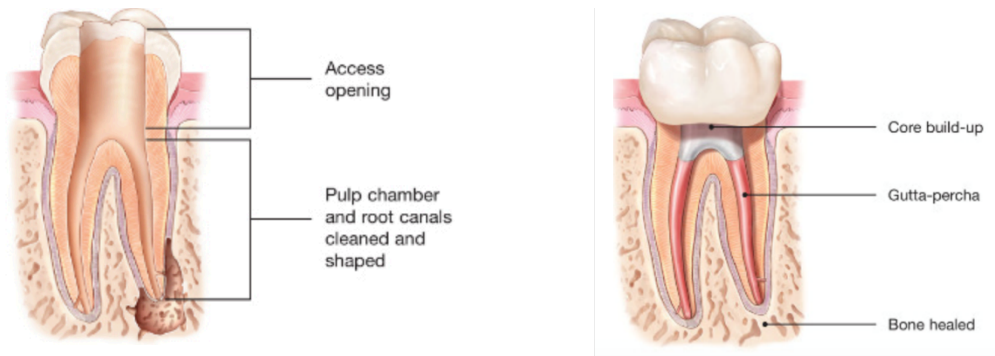


INFORMATION FORM ENDODONTICS

Definition

Root canal treatment is also termed endodontic treatment. This is derived from the greek meaning of "endo" (within) and "odont" (tooth).

This is a complex procedure in which the diseased or damaged pulp (core) within the tooth and root is carefully removed in an attempt to salvage the tooth. The pulp chamber and root canals (inside areas of the root) are cleaned, shaped and filled (with gutta percha) ensuring a tight seal.



Root Canal Treatment Outline of Procedure

This treatment is performed under local anaesthetic. Oral or Intra venous sedation can also be given as a supplement for nervous patients.

A special latex free sheet called a "rubber dam" is used to isolate the tooth to keep it dry and clean during treatment.

Fine instruments called "endodontic files" are used to clean out the root canal system in an attempt to work as far towards the tip of the roots as possible.

The number of appointments required will depend on the degree of infection, inflammation and technical difficulty of the individual case. Each appointment can last approximately 90 -120 minutes, where possible and appropriate we will attempt to complete treatment in a single visit.

Benefits

The aim of root canal treatment is to eliminate pain, restore function and retain the tooth by increasing its life span.

The length of time the tooth can be retained after root treatment will vary between individual cases. Some cases will have a better prognosis than others particularly, when there has been no previous intervention and where there is early and mild inflammation and infection.

If left untreated, the persistence of bacteria and inflammation can lead to severe pain, an acute dental abscess or facial swelling. In the long term, if allowed to progress these areas of chronic inflammation can cause dental cysts which reduces the prognosis of tooth dramatically.

Risks

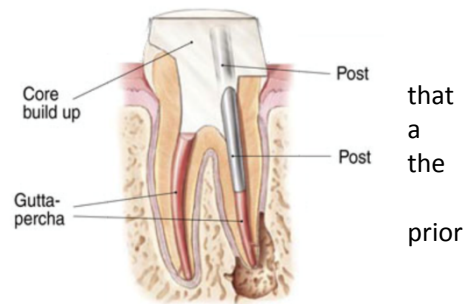
Immediate/During Treatment

- Pre-existing blockage of canals due to natural calcifications or in cases of previous root fillings it may mean that it is not possible to reach the tips of the roots. The prognosis will vary among individual cases.

- On removing the existing filling, we must first investigate restorability. It may become apparent that there is a catastrophic fracture and split within the tooth or insufficient tooth structure remaining to withstand root canal treatment or the subsequent crown. In this event, the tooth will be unsalvageable and will need to be extracted. This can be an increased risk in patients who are bruxists (grind their teeth), trauma cases and in situations where there is a pre-existing post.



- Post placement: prior to commencing root canal treatment, where limited tooth structure remains in may become apparent to the clinician a post is required in order for the tooth to sustain crown. In this event, the post will be placed by endodontist and there will be a supplemental charge, where possible you will be informed to the procedure.



- Instrument fracture: as we use fine flexible instruments, in certain situations such as narrow and particularly curved anatomy, instruments can fracture within the tooth. If this happens early in the treatment before the canals can be fully cleaned it may reduce the success. If it occurs at the end of cleaning, the prognosis is not usually affected. Depending on the case, attempts will be made to retrieve the instrument. However, if this occurs in the tip of the root occasionally we would leave the instrument and continue in filling the canal.



- Perforation: in some cases there is a higher risk of creating an additional opening or hole in the tooth or root. The risk is increased in cases where there is deep decay, sclerosis or calcification of the tooth or when attempting to do treatment through an existing crown or bridge. The prognosis of this complication will depend on the infection status, size and position of the perforation. In the event of finding a pre existing perforation or an occurrence, you will be informed and attempts will be made to repair the hole. Ultimately it can result in the treatment being unsuccessful and having to have to the tooth extracted.



Risks

Short term

- In between appointments, we ask you to take care eating and avoid biting on the tooth or clenching the jaw. This can cause a **fracture** and may cause small microscopic cracks to propagate and worsen. The tooth will be ground down to prevent this from occurring, but you will still need to be cautious on eating and function until the tooth is crowned.
- **Pain and tenderness** following treatment: this can be more pronounced when pain is pre-existing. When there are no symptoms prior to treatment, pain can sometimes be experienced following the procedure.
- **Swelling**: this can occur following treatment due to the body's immune response following treatment. This occurs in 10-20% of cases, and you will need to see your dentist for Antibiotics.

Long term

- **If the tooth is left unprotected, and a crown is not provided following root canal treatment there is a high risk of fracture which can result in loss of the tooth.**
- **Surgery** can sometimes be required, in cases where the infection is persistent and a cyst has formed. This means conventional root canal treatment has not been able to eliminate the entire source of infection. This will involve a procedure whereby the tip of the root is removed surgically. We cannot always predict which cases will require surgery, but usually this is required for large areas of inflammation.
- Root treated teeth can still have mild symptoms for some time following treatment, this does not mean that the treatment has not been successful and will subside at different rates in different individuals.

ALTERNATIVE TREATMENT OPTIONS

1. **No treatment**: The potential risks are the disease gets worse resulting in acute or chronic pain and swelling due to a greater, more-stubborn infection. Such infections can reduce success rates, can appear with little notice and can be very serious. This may also affect the bone around the tooth which may complicate implant placement should I wish to consider this in the future.

Where there are no symptoms, but an existing root canal filling needs to be improved upon prior to further treatment, without root canal retreatment there is a risk of flare up at any time.

2. **Surgery** around the root (discussed)
3. **Extract** the tooth then either leave the gap or consider a denture, bridge or implant-supported restoration.

If you have any further questions, please ask your dentist prior to treatment commencing.