

Relax - there is no need to lose your troubled tooth...

# Endodontics

(Root Canal Treatment) can save it for you.

Your dentist has advised you to have Root Canal Treatment. What is this essential therapy?

## The Dental Pulp

The dental pulp is the name given to the soft tissue inside the canal or channel that runs through the root of your tooth. This canal or channel is also known as a pulp chamber. The dental pulp consists mainly of blood vessels, tissue fibres and some nerve fibres. The main function of the dental pulp is to regulate the growth and development of the tooth during childhood. Once the tooth is fully formed nutrition for the tooth comes from the issues surrounding the root. Therefore, a tooth can function without its pulp and, in the majority of cases, can be kept indefinitely. After endodontic treatment the tooth is pulpless, but it is not a dead tooth.

## How Does The Pulp Become Diseased?

The most common cause of pulp damage is deep tooth decay which allows bacteria to reach into the pulp. The pulp may then become inflamed or infected. Products of infection may then spread through the opening at the tip of the root into the surrounding bone - an abscess could result and this may cause pain and swelling. Not all abscesses cause pain or swelling.

Other causes of pulp damage include: traumatic blows to teeth, loose fillings, excessive wear of teeth, cracked teeth and gum disease. These processes can also lead to infection of the pulp.

## What Is Endodontic Treatment?

1. Access is gained into the tooth, removing decay and allowing for endodontic treatment to be commenced.
2. During endodontic treatment, the infected or damaged pulp is removed from the inside (i.e. the root canal) of the tooth via the small access hole.
3. The root canals are then cleaned, disinfected and shaped to a form that can be completely sealed.
4. The next stage is to seal (fill) the root canals with a filling material to prevent re-infection.

This treatment can take several appointments, depending on how complex your tooth is. Teeth may vary in shape depending on the number, length and curvature of the roots. Sedative dressings and temporary fillings may be placed inside your tooth between each visit to help settle the surrounding tissues and destroy remaining bacteria. In between visits you can use your tooth for chewing, but some care should be exercised.

During the endodontic treatment, your tooth will be isolated and protected with a sheet of rubber ("rubber dam ").The rubber dam isolates the tooth, so only the tooth can be seen during the treatment. This prevents debris from within the tooth entering the mouth, or saliva and bacteria from the mouth entering the tooth during the treatment process.

A metal band may also be placed around your tooth to protect the tooth and help retain the temporary filling. This band remains in place until the crown of the tooth is finally restored.

## Is There An Alternative To Endodontic Treatment?

Endodontic treatment is a safe procedure. There is no real substitute for your own tooth. It is far more efficient in chewing and biting than an artificial tooth. Endodontic treatment is undertaken to save your tooth. The only alternative

method of removing the infection is to extract your tooth. If you do not have the tooth replaced with an artificial one, the adjoining teeth may shift, interfering with biting and chewing. Loss of a tooth may also lead to other complex problems including gum disease, decay of other teeth, jaw joint and jaw muscle problems. Replacing your tooth with an artificial tooth often involves more complex treatment such as bridgework or implants.

## **Why Are X-Rays Taken?**

It is necessary to take a number of radiographs (commonly called x-rays) during treatment - these are required to check various treatment stages. Since the roots are under the gum and in bone, the root canals cannot be seen with the naked eye and can only be visualised using the assistance of radiographs.

## **Will There Be Any Pain?**

Endodontic treatment is a comfortable procedure and it involves little or no pain as the tooth will be anaesthetised with local anaesthetic during treatment. However, sometimes you may have discomfort after an appointment. This may be due to inflammation in the tissues surrounding the tooth. This may take a few days to settle and sometimes a mild analgesic may be required. If you experience severe pain, or if your discomfort lasts for more than several days, then you should call your dentist or endodontist for advice.

## **Success Of Treatment**

Your tooth will only be treated if there is a good chance it will last a long time. However, no guarantee can be given - because people have varied healing responses and some infections may respond differently. Studies have shown the majority of endodontic treatments are successful and uneventful. If your case is considered less favourable, then you will be informed. Healing of the jaw bone around the tooth can be slow and it is important to have your tooth reviewed regularly to assess success. You will be recalled for these checks. Rarely, additional treatment in the form of an endodontic surgical procedure may be required to aid the healing of the tissues around the tooth. Your dentist or endodontist will discuss this procedure with you if it becomes necessary.

## **After Treatment?**

When endodontic treatment has been completed, a filling or crown (cap) will be necessary. This will restore your tooth to its original shape and function. The tooth should be restored properly as soon as possible as there is a risk of

damage to the tooth from biting forces. Following endodontic treatment you must look after your tooth, as you do your other teeth, as endodontically treated teeth may still get decay or gum disease.

## **How Much Will It Cost?**

Endodontic treatment is a complex procedure and the cost will vary depending on the type of tooth and difficulty of the treatment. In general, back teeth (molars) are more difficult to treat than front teeth. Endodontic treatment is usually less expensive than extracting a tooth and replacing it with an artificial one.

## **Who Does Endodontic Treatment?**

All dentists are trained to carry out endodontic treatment. Some dentists will refer complicated and emergency cases to an Endodontist. Endodontists are specialist dentists who limit their practice to Root Canal Treatment. If specialist care is Indicated, your dentist will discuss this with you.

## **Need To Know More?**

If you would like further information, please contact your dentist or Endodontist who will be happy to talk with you.

Prepared by The Australian Society of Endodontology (Inc.)