

# Root Canal Therapy

## What is a root canal?

- A Root Canal is a treatment for teeth with endodontic disease.
- This means the inside of the tooth is either diseased, infected or dead.
- The inside of the tooth (the pulp) is removed with various files and disinfectants to leave your pet with a dead tooth, that will function normally and is non-painful!
- Any remaining infection outside the tooth is usually removed by the body.



X-ray showing the lower left canine tooth being filed

## Why should I consider a root canal for my pet?

- With a root canal the patient is left with a pain free, functional tooth.
- Compared to an extraction, root canals, are less painful, less traumatic and have less post-operative complications.
- Common reasons for a pet needing a root canal are broken or discoloured teeth.

## Broken teeth

Broken teeth are very common in dogs and cats, they are painful and will affect your pet's quality of life. Their teeth, same as ours, are made up of enamel, dentin and pulp tissue. The pulp tissue contains the blood vessels and nerves of the tooth. If the pulp is exposed it causes pain and allows bacteria to enter the tooth. The tooth will become infected and invariably die. Once the tooth has died, infection can spread to the area around the root of the tooth and eventually form an abscess. This can happen weeks to years later.



X-ray showing a lower left canine tooth after having root canal therapy

## Discoloured teeth

A discoloured tooth, means the tooth has suffered trauma and has had bleeding of the pulp. A study has shown that 92.2% of these teeth are dead and will develop an infection



## But my pet doesn't seem to be in pain.

Cats and dogs are very good at hiding the signs of oral pain. We know that in people, fractured teeth are very painful and infected teeth can be excruciatingly painful. We know from experience that once a fractured tooth has been treated, our patients seem to be a lot happier and more active. Imagine having a chronic infection that is painful and throbbing and then that pain is taken away.

## What are my options?

Fractured teeth involving the pulp or discoloured teeth require extraction or a root canal. Leaving the tooth is **never** a good option.

There are many advantages of root canal therapy over extraction. These include less pain and trauma, being left with a functional, non-painful tooth and less post-operative complications.

There is nothing wrong with extraction of the tooth, but for various reasons, people may want to keep it, if possible. Some teeth are more important than others. In cats the most important teeth are the canines, and these are the ones we tend to root canal. In dogs it is the canines and the Carnassials (the cutting teeth).

## What does a root canal involve?

The inside of the tooth, the pulp chamber and canal, is cleaned out and shaped with files and disinfectants to remove any remaining pulp tissue that could cause infection. The canal is then dried and filled. Finally, a filling is placed over the fracture site. This prevents infection from being able to enter the tooth. The tooth will need to be re X-rayed in 6-12 months to check it was successful. The success rate is high, varying from 70-90%.



X-ray showing an upper carnassial tooth after having root canal therapy

## What happens if we extract the tooth?

- Extraction of the upper canine teeth can cause the lip to sink in and the lower canine can catch the upper lip and cause trauma. The root is longer than the crown and requires removal of bone.
- Lower canine teeth have long roots and provide a large amount of strength to the lower jaw. With extraction there is a risk of jaw fracture.
- The upper fourth pre-molar, is important in chewing and extraction can cause more calculus to build up on the lower teeth. The tooth can be difficult to extract and is close to the eye and other important structures.
- The lower first molar takes up a large amount of space and in small dogs especially can have very little bone supporting the tooth. Extraction can result in a fracture of the mandible.
- Sometimes for various reasons, a tooth may not be suitable for a root canal. After evaluating your pet, we can provide a personalised treatment plan.

