

Root Canal Therapy

MINIMALLY INVASIVE DENTISTRY

By: Dr. Chanda Miles, DVM, DAVDC,
and Kate Lawrence | www.gcvcs.com

Dental disease is a well-known and common problem in veterinary medicine. Surprisingly, one of the most common problems in veterinary dentistry are fractured teeth. Animals can fracture teeth in many ways - from trauma such as running into something or being hit by a car, to rough play, or chewing on hard bones or toys. When an animal fractures a tooth, many times the tooth's blood supply and nerve, called the pulp, is exposed. When pulp is exposed, it can be very painful for the animal. It also allows bacteria to move into the tooth, causing an infection that can move into the tooth root, compromising the blood flow to the tooth and in some cases leading to the death of the tooth. Once the bacteria have lodged in the tooth root, it is very difficult for the body to eliminate it, and chronic infection can cause abscesses, draining tracts, pain, and deterioration of the bone. Just like in people who have tooth root infections, one of the best choices for animals experiencing this problem is to perform a root canal on the affected tooth. Root canal therapy allows the patient to maintain function of the tooth even when the tooth is no longer vital.

Root canals in animals are becoming more and more common as veterinarians recognize the importance that teeth play in the overall health and vitality of our pets. Some of the most common teeth

affected by fractures and other endodontic conditions are teeth that are considered to have the most functional significance in pets. These teeth include the canines, and carnassial teeth (major chewing teeth). In cats the most common tooth fractures are seen in the canine teeth. In many situations extraction of the affected tooth is not recommended, due to situations such



as tooth root fractures, tooth ankylosis (when the tooth has become fused to the jawbone), jaw fracture, and abnormally curved tooth roots. The process of performing a root canal on an animal is similar to root canal therapy in people, with one big difference - animals need to be under anesthesia for root canal therapy, unlike their human counterparts. First, the veterinary dentist uses specialized equipment to safely remove the diseased pulp tissue and infection, then once the tooth is clean and disinfected, an inert material is inserted into the space to prevent bacteria from re-infecting the tooth. The tooth is then

sealed with a restoration (similar to a cavity filling) and a crown is often recommended to cover and protect the restoration, allowing a full return to function in most cases. Dental radiographs should be performed during and after root canal therapy, which will confirm the removal of the affected pulp as well as the appropriate placement of the materials, just like they do in a human dentist's office!

While root canals are a great way to treat discolored, infected, or broken teeth in many cases, some patients are not candidates for root canal therapy. Dogs who enjoy chewing, for example, may not be ideal for root canal therapy due to the increased likelihood of fracture recurrence or dislodging the restoration that is placed. In these situations, modification of the pet's chewing behavior to softer items may be considered. Fractured or diseased teeth can be quite painful (even though pets can be good at hiding their discomfort), and can also lead to infection of both the tooth root and the jaw bone itself, so these conditions should be addressed with your family veterinarian or a veterinary dentist as soon as possible.

If you have questions about your pet's teeth or gums, or think that your pet may be experiencing endodontic pain, schedule an appointment with your family veterinarian for an evaluation, and consider a consultation with a veterinary dentist - your pet will thank you!