Tooth Resorption

Tooth resorption has been known by many names. These lesions have previously been referred to as feline odontoclastic resorptive lesions (FORLs), neck lesions, cervical lesions, cervical line lesions, feline caries, dental resorptive lesions, external odontoclastic resorptions, cervical root resorptions, feline odontolysis and most likely many more.

By whatever name these lesions are referred to, they are not a new phenomenon, with tooth resorption having been detected in feline skeletons many hundreds of years old. Tooth resorption has a high prevalence with up to two-thirds of cats being affected. Older cats and purebred cats may be more susceptible. Some cats will have a single tooth affected by tooth resorption, others will develop multiple lesions over their lifetime.

What is tooth resorption?

Feline tooth resorption is a condition in which the body begins breaking down and resorbing the structures that form the tooth. The dentin (makes up the bulk of the tooth structure) is eroded by cells called odontoclasts and eventually becomes irreparably destroyed. Over time, all areas of an affected tooth, from root to crown, may become involved and the crown may be lost. These odontoclasts are normal cells of the body, who should remain dormant after performing their main role – destruction of the deciduous teeth. For some reason they become reactivated later in life.

The cause of tooth resorption has not been definitively established, we also do not know how to prevent tooth resorption.

Clinical signs

Tooth resorption can be a very painful condition for cats with these lesions. Cats are adept at masking signs of pain and discomfort and as such the signs can easily be missed. Many owners fail to identify that their pet is painful until they experience behavioural changes (brighter, happier pet) subsequent to treatment for tooth resorption.

Signs and symptoms that may be observed in cats experiencing pain associated with tooth resorption include:

1. A change in food preference from hard to soft foods or suddenly swallowing food without attempting to chew
2. Increased salivation
3. Chattering” or pawing at the mouth especially after eating or drinking – acute dental pain
4. Pink or red granulation tissue growing up the crown of the tooth
5. In advanced lesions, a pinkish discolouration to the tooth – granulation tissue within the tooth structure
6. Increased calculus (tartar) on ONE side of the mouth only
Diagnosis and Treatment

Extractions is the only effective treatment for tooth resorption once diagnosed as the lesions are progressive.

Tooth resorption may be diagnosed by visual inspection of teeth, tactile observation and most importantly dental radiographs.

Dental radiographs are essential in both diagnosis and treatment planning. They are the most sensitive tool for detecting tooth resorption and are an essential tool in determining the type of tooth resorption that is present. There are two main types of tooth resorption identified on dental radiographs in cats – type I and type II. Type I tooth resorption results in focal loss of dental hard tissue with retention of the periodontal ligament. Teeth with type I resorption should be completely extracted using standard techniques. Type II tooth resorptions results in the tooth being replaced by bone and the periodontal ligament anchoring the tooth and bone is lost. Standard extraction technique with removal of the entire root may not be practical or possible. In these cases, crown amputation with partial root retention may be an appropriate technique for your pet.

Patients that have been diagnosed with tooth resorption and those having had crown amputation procedures performed should follow-up dental radiographs performed every 6-12 months. This is to ensure no concerns are detected with the crown amputated tooth roots and that additional teeth are not developing radiographic signs of tooth resorption.