

NEW FOREST VETERINARY DENTAL SERVICE

REFERRAL VETERINARY DENTISTRY AND ORAL SURGERY

Periodontal Disease

Definition

Periodontal disease the most common dental condition seen in companion animals, and develops due to the presence of plaque and bacteria around the gum line. In the initial stages only the gum is affected but, if left untreated, it will progress to involve other supporting structures of the tooth including the ligament attaching the tooth to the bone and even destruction of the bone itself. During the active phase of the disease, the animal's mouth will be uncomfortable, and the inflammation resulting from the periodontal disease can cause unwanted effects in the rest of the body. The end result of periodontal disease may be loss of the teeth involved, and if significant bone is lost can lead to spontaneous fractures of the jaw or a communicating opening between the nose and the mouth (an oronasal fistula).

Gingivitis is inflammation of the gum tissue and is caused by plaque accumulation on the tooth. Plaque is a sticky accumulation of bacteria, food and saliva that adheres to the tooth surface. Plaque is difficult to see (unless specifically stained) and accumulates rapidly after cleaning. The bacteria trigger local inflammation in the gums. This can be seen as a red line at the edge of the gum that may bleed. If the plaque is removed regularly and frequently, the inflammation will resolve, but if left untreated, may progress to more severe disease. Once the other supporting structures become involved the condition is known as *periodontitis*, and the damage is irreversible. This affects the attachment of the tooth and ultimately can lead to loss of the tooth.

Tartar or calculus is mineralised plaque seen as hard brown accumulations on the tooth that can only be removed by professional means. It acts as a rough surface allowing plaque accumulation and when large amounts are present it can lead to pockets forming around the gum line which helps food material to become trapped there.

Diagnosis

Early signs of gum disease include a red swollen gum margin that may bleed if touched. If there is more advanced attachment loss, loose teeth, gum recession, with root exposure, can become visible. Bad breath in domestic pets is usually associated with periodontal disease and should never be considered normal. Early professional diagnosis and treatment is important to help prevent progression and stabilise the condition. Although, general anaesthetic is required for full assessment, conscious examination of a patient by a veterinary surgeon will usually reveal the presence of periodontal disease.

Treatment

Attachment loss cannot be determined until the gums and teeth are assessed under general anaesthesia. A periodontal probe is used to check the ligament attachment of the tooth and the surrounding bone is assessed using dental x-rays. Each tooth is checked in a systematic approach and all findings recorded on a dental chart. This is important for on-going assessment and further planning.

The first stage in treating animals with periodontal disease is to remove tartar and plaque from the tooth surface (above and below the gum margin) before instituting home care. Gingivitis is reversible, and if this is the only disease process that is present, professional cleaning and then regular home care should result in the return of normal oral health.

It is important to understand that periodontitis is irreversible and on-going management will be required throughout your pet's life. If the periodontitis is treated early, then professional cleaning followed by good home care may be able to prevent its progression. However, if the disease is more advanced, extraction of the affected teeth may be required to prevent the disease affecting the other teeth and the supporting structures of the jaw.

Prevention

The management of periodontal disease is not just about sweet smelling breath and shiny teeth. It can have more serious local and systemic consequences if untreated. Studies have shown that advanced periodontal disease can lead to heart, liver, kidney and respiratory problems. Periodontitis can also complicate the management of diseases such as diabetes.

Locally, advanced periodontal disease can result in bone destruction and communication between the mouth and the nose, spontaneous jaw fractures and severe pain.

Professional treatment, carried out in an appropriate manner and followed by good home care, is essential for the welfare of our pets.