

Ask the Vet:

Cats and Dogs Need Comprehensive Oral Health Care

By Nancy Irvine, DVM – Daisy Hill Animal Hospital, Ltd.

Recognizing that dogs and cats have just as much need for care of their teeth as people do is the first step in understanding why and how to help your own pet. Like people, few pets are blessed with nice straight teeth and an ideal immune system that is ready to clear away bacterial invaders but not overreact to insult. The majority of pets and humans need help to maintain a healthy mouth. More than 85% of dogs and cats older than four years have significant disease. This statistic is a major health issue when oral disease translates to discomfort and risk of health to heart, lung, joints, liver, and kidneys.

Disease of the mouth takes different forms. Redness and swelling of the gingiva (gums) may be mild or very painful and severe. Disease of the gingiva, cementum, periodontal ligament, and bone surrounding the tooth root is defined as periodontitis, because these structures make up the periodontium – the tissues that surround the tooth.

Tooth structure enamel and dentin may be chipped or fractured by contact with hard objects resulting in pain and exposure of the pulp cavity to bacteria. The dentin which lies underneath the enamel coating has pores which lead to the pulp. With or without an obvious visible entry pathway, bacterial infection of the pulp cavity causes swelling of the tooth pulp where the nerve and the blood supply for the tooth exist. This results in pain and often death of the tooth. If not treated, infection spreads beyond the tooth to the adjacent jaw bone. Just the impact from biting on a hard object or from hard impact can also cause swelling of the pulp, tooth death, and jaw bone damage.

Periodontal disease starts when plaque forms; plaque is a transparent adhesive material composed of mucin, sloughed epithelial cells and bacteria. Plaque starts forming less than 12 hours after dental cleaning. If the plaque is not removed, minerals in the food and saliva can precipitate to form hard dental calculus. The calculus is irritating to the gingival tissue, it provides “housing” and protection for bacteria, and it facilitates pH changes of the mouth in pockets that allow bacteria to survive subgingivally. By-products of these bacteria “eat away” at the tooth's support structures spreading the infection deeper to the jaw bone. Jaw bone fracture from infection is a terrible result of oral disease.

A different disease form is resorption of focal sites of the tooth which occurs most obviously in cats, but also in dogs. This disease has no known cause or specific treatment, yet. It causes severe pain from pulp nerve exposure to the oral cavity. Identification of advanced resorption can be found during physical exam, but most teeth with resorption are found when intra-oral x-ray images are evaluated. Extraction of the diseased tooth provides relief by removing the pain.

Another inflammatory disease, stomatitis, is also found at early or late stages of severity. Stomatitis occurs when the pet's immune system is reacting without control. It is over-reacting and causing severe harm. In advanced cases, the gums are fiery red, swollen, and bleeding. Many pets with this disease resist having their jaws handled due to the pain. Successful treatment requires absolute plaque control. Most often tooth extraction of affected areas or the entire mouth is needed, because the tooth is a structure that provides a harbor for plaque bacteria. When treatment is not delayed, success of surgical treatment is extremely good.

Prevention and management of oral disease begins when you have your pet examined by your veterinarian. You should ask questions and request reference information if you need more understanding. Oral home care involves plaque control by training your pet to accept the daily brushing of their teeth with a super soft toothbrush and enzymatic, non-fluoride toothpaste. Several products have been proven to be helpful in plaque control. Many others are advertised with unproven claims.

Not all veterinarians enjoy the challenge and tedium of oral evaluation and surgery. When your pet needs her teeth cleaned, examined radiographically, or treated surgically, choose your veterinarian as you would choose your own oral surgeon.