



530 Massachusetts Avenue ❖ Boxborough MA 01719 978-929-9200 Fax: 978-929-9979 ❖ www.veterinarydental.com

Bonnie H. Shope, VMD, DAVDC Paul Q. Mitchell, DVM, DAVDC Diane Carle, DVM, DAVDC Kristina Feigin, DVM

Gingivitis and Periodontal Disease: The Facts

Periodontal disease is a disease of the tissues that support the teeth in the mouth. Both bacterial infection and inflammation play a role in this pervasive disease of dogs, cats and people. These tissues are the gums, the jaw bone, and the periodontal ligament which connects the tooth to the bone. Periodontal disease occurs when the body's immune system reacts to the bacteria and toxins which are constantly forming on the teeth in the form of plaque.

If plaque is not removed, it will eventually accumulate and harden into dental calculus, also called tartar. Calculus can become a hard yellow brownish covering over the crowns of the tooth. It's like cement and is difficult to remove. With heavy build-up, calculus can also cover the gum so that the plaque beneath the gum-line cannot be cleaned. This build-up exacerbates the situation, creating a nice environment in which the nastiest plaque bacteria thrive. The plaque beneath the gum-line is the real enemy in periodontal disease. Fortunately plaque is easy to remove with tooth brushing.

As the plaque accumulates and the bacteria multiply, the pockets around each tooth become deeper and more painful for your pet. An early sign of this stage is a swelling and reddening at the gum-line around each tooth. If you touch this area, your pet may shy away and the gums may bleed. This is gingivitis, the earliest form of periodontal disease. Gingivitis is a reversible inflammation of the gums. If the teeth and gums are cleaned now, the mouth can be "as good as new." However, if the pockets around the teeth are deep enough, the gums recede, or the bone supporting the teeth begin to resorb, irreversible changes have occurred in the mouth. This is advanced periodontal disease. At this stage the disease can be arrested, but the damage it has caused cannot be completely reversed.

Systemic disease has been associated with periodontal disease. However, it is very difficult to prove a "cause and effect" relationship. The bacteria and their toxic by-products can travel through the blood stream. This, along with inflammatory mediators associated with the periodontal disease, may contribute to damage of other organs in the body, such as the liver, kidney, heart and lungs.

Periodontal disease can be insidious. Many pets do not show obvious symptoms until significant damage has occurred. An annual dental cleaning, an oral exam under anesthesia,

dental radiographs and daily oral hygiene are helpful in screening, prevention and control of periodontal disease.