

## WHY IS PERIODONTAL DISEASE STILL SO COMMON?

For a review of periodontal anatomy and physiology visit:

<http://www.toothvet.ca/PDFfiles/PerioAnat&Physio.pdf>.

Once the cause of a disease is known, we should be able to prevent it to a large degree. We can either avoid the causative agent, create a vaccine to protect against the agent or ensure that diet and life-style will reduce the risks of developing the condition.

So why is periodontal disease still rampant among pet animals? We know the cause (bacterial infection of the tissues supporting and investing the teeth). We know many of the risk factors (malocclusion, poor diet, poor home care, immunosuppression, lack of professional care, genetic predisposition...). Why can't we get ahead of this insidious malady? My guess is that "out of sight – out of mind" has a lot to do with it.

Periodontal disease is much like an iceberg. What you see above the surface is just a hint of what lies below. Once the problem is obvious above the surface, you can be certain that things are much, much worse below the surface.

An illustration I like to use in the front office is to tell my client that I have a handkerchief in one of my pockets. I ask them to tell me which pocket it is in and what colour it is. Of course, they can do neither, because the hanky is hidden from view in my pocket. The only way they are going to find and inspect this hanky is to knock me out first. So it is with periodontal disease – the bulk of the problem is hidden in the pocket, below the gum line and the only way to find the problem and deal with it in a dog or a cat is to anesthetize the patient first. Many clients are still nervous about anesthesia, so we tend to wait until there is an obvious problem that definitely needs attention to justify the anesthetic. Then we get in the mouth and find all sorts of other trouble.

Here is an anecdote. Ms. D. brought her geriatric shih tzu to me many years ago. At the first visit, I extracted many teeth due to end-stage periodontal disease. I then saw this dog annually 'til the end of its days to prevent any further

problems from developing. When Ms. D. got a new shih tzu, she decided to bring it to me at a young age "before troubles developed". This little dog was only three years old, but I still found several teeth in need of extraction due to end-stage periodontal disease. Why? Many of them were in trouble because of severe crowding and malocclusion due to the architecture of the shih tzu head. Selective extraction of a few teeth at seven months of age would have prevented infection around several other teeth later. But because these problems were hiding in the mouth and below the gum line, no one noticed them.

So much of what we do in veterinary medicine is aimed at prevention of disease and maintenance of optimum health. When it comes to periodontal disease, we should also be thinking of prevention, because once disease is established, it is far harder to manage and you can forget about a cure (other than extraction).

### Steps in Preventing Periodontal Disease

Identify animals at risk of developing periodontal disease. Start by focusing on the micro-dogs as they seem to have very little natural resistance to periodontal disease. Try to reduce or eliminate as many risk factors as possible as early as possible. If there is dental crowding or malocclusion, selective extraction is indicated.

Start on a homecare program BEFORE there is trouble. A tooth brush is for prevention of disease, not for treatment and trying to start a brushing program in a mouth with disease will likely be unpleasant for the animal and so the program fails.

Get all your patients on an annual periodontal assessment and maintenance program at a very early age – remember that we are trying to prevent diseases. Here is another illustration I use up front. I brush twice a day with a sonic brush, I floss every day and I still see my dentist and hygienist for a professional cleaning every nine months. Though they always compliment me on my good oral hygiene, they also always find something to clean that I have been missing.

So, even if your clients are brushing their pet's teeth daily, feeding a dental diet, offering appropriate chews, there will still be areas hidden from view that are in need of attention after a year. Get in there for a detailed examination (with good lighting, magnification and radiographs) and get problem areas cleaned up before any serious damage is done.

## Get Aggressive

Another reason of the prevalence of periodontal disease is that many general practices are not nearly thorough or aggressive enough in managing periodontal disease. I get to review a lot of case records and see a lot of animals who have been receiving professional dental care for years. I often find teeth that should have been extracted years ago and teeth that needed periodontal surgery but that only got a coronal scaling.

Remember, that while we may think our objective is to save teeth, the primary objective is to prevent/treat disease. The goal is to have a mouth free of infection and pain. No tooth is important enough to take precedence over that. So, if a tooth has significant periodontal disease (gingival recession, bone loss, pocketing, mobility) it either needs advanced periodontal surgery or extraction.

What do I mean by "advanced periodontal surgery"? Well, for a periodontal pocket over 5-mm deep, it will mean reflecting a gingival flap all around the pocket, root planing to remove all plaque and calculus from the root surface, subgingival curettage to remove all inflamed soft tissue lining the pocket, possibly placement of a bone graft and suturing of the flap back in proper anatomic alignment. The goal is to have a clean root surface on one side and either clean bone or fresh bleeding connective tissue on the other side. Then healing has a chance. Less aggressive treatments will leave bacteria hidden deep within the pocket and healing will have no chance. The result will be persistent periodontal infection and progression of the destructive processes of periodontal disease.