

Devastating effects of gum disease in working dogs

It's a tale of two cultures: The veterinary profession understates the significance of periodontal disease (gum disease) and its impact on the general health and wellbeing of domestic dogs, cats and ferrets whilst simultaneously seizing on the over-servicing potential turning gum disease into a primary profit centre of modern day vet practice.

The medical and dental professions, albeit belatedly, begin to assign critical importance to this chronic disease of the gums and supporting structures of the teeth. They investigate the complex and intriguing connections between gum disease and systemic ill health. Reports appear in the popular press warning people of the dangers of oral ill health and the need to brush and floss and thereby prevent life threatening disease.

What's going on, what do you need to know and what should you do about it?

Twenty years ago in December 1991 Dr Breck Muir blew the whistle in a letter to the Australian Veterinary Association condemning processed pet foods as a prime cause of periodontal disease and a host of diseases affecting pets. In a Sydney University newsletter I wrote that 'Oral disease is the source of the greatest intractable pain and discomfort experienced by our companion animals. This is a great and mindless cruelty we visit upon our animals from the whelping box to the grave.'

Breck and I reminded our veterinary colleagues that wild animals rarely if ever suffer from gum disease. By feeding on whole prey successful carnivores scrub, brush and squeegie their teeth clean at every meal. Alas we flew straight in the face of the veterinary propaganda machine that suggests domestic dogs and cats are somehow different to their wild counterparts and need to be fed out of the can or packet.

The junk pet-food industry, noting the controversy and sensing that periodontal disease is the weakest link in their armour, poured millions of dollars into research and development. Under siege the industry sought to surround itself with a human shield of vets and veterinary institutions. Nowadays every veterinary school is subsidized by and obligated to the junk pet-food industry. Veterinary associations provide cover and promotional opportunities for the industry. Governments, instead of investigating the unholy junk pet-food/veterinary alliance, provide revolving doors for the staff of their regulatory departments and the junk pet-food manufacturers. And of course almost every suburban veterinary clinic displays doggie toothbrushes and racks of packeted junk food — some baked kibble products purporting to clean teeth and gums!

How absurd! What chance you could brush and floss your husband's or wife's teeth every day? Would you ever contemplate cleaning your teeth with a cookie?

Medical and dental scientific evidence

The medical and dental professions, meanwhile, have been placing gum disease on centre stage. *Time* magazine in 2004 carried the front page article: 'The Secret Killer: The surprising link between inflammation and heart attacks, cancer, Alzheimer's and other diseases.'

Time tells us that ‘A long running, low grade infection — like gum disease — may keep immune cells fired up, or there may be a breakdown in the complex series of checks and balances that regulates the immune system.’

‘Chronic inflammation may be the engine that drives the most feared illnesses of middle and old age.’ For instance, heart attacks, cancer, diabetes, stroke and rheumatoid arthritis.

Other researchers point out the connection between maternal gum disease and the birth of stillborn, preterm and underweight babies.

Even before conception gum disease plays a pivotal role. The European Society of Human Reproduction and Embryology heard at its 2011 meeting:

Women who wish to fall pregnant should be advised to brush their teeth and floss regularly as gum disease affects chances of conception . . .

Periodontal disease can delay the time it takes to conceive by two months on average, an effect similar to that of obesity in women.

Whether or not you wish to conceive, I suspect that henceforth you’ll pay more attention to brushing and flossing your teeth. However, it’s the health of dogs that concern us here. Dogs with their relatively larger jaws and 42 permanent teeth, as opposed to the 32 teeth we humans possess, are more seriously affected by periodontal disease. Halitosis (foul breath) affects most if not all domestic dogs fed junk food.

Gum disease starts early

Most puppies have stinky breath even before they leave the nest. Between two and six weeks of age the 28 deciduous teeth erupt through the gums. In nature this coincides with the mother providing the first chewy, tough food for the puppies to mouth and then to gnaw and thus toughen the tender inflamed gums. Unfortunately, as part of a long and misplaced tradition, most puppies are first offered gruel and canned slops. Gums remain sore and inflamed such that chewing on hard kibble, unyielding wicker baskets and chew toys fails to soothe.

The next major gum upheaval occurs between four and six months of age when the permanent teeth cut through the gums pushing out the deciduous shells. In nature a litter of wolf cubs competing for prized parts of a deer carcass need to tug, rip and tear at rapid rate using maximum force. Incisors nip the hide and shave tissue from bones; sharp canine teeth sink into the flesh which is then raked from the bones; premolars shred tissues and molar teeth crush bones. Each and every tooth gets its allotted workout and becomes ever more firmly fixed in its socket.

By contrast most puppies raised in domestication miss out on these physical pleasures and physiological essentials. Instead they slurp slops or swallow abrasive kibble with no benefit to the inflamed gums and the deciduous teeth hanging on bleeding shreds of tissue. Plaque bacteria flourish in the warm wet bleeding environment and are

further nourished by the junk food debris coating the teeth and gums. So starts a lifetime of gum disease leading to the litany of non-specific skin, intestinal, liver, kidney and other diseases known to be associated with periodontal disease. Specific diseases such as cancer, diabetes, autoimmune joint disease and a raft of other diseases become the fate of many.

Since strong, sharp, clean teeth are the tools of trade of the carnivore we should not be surprised if chronic oral disease is the harbinger of doom for dogs of all shapes and sizes. Whilst we may not fully understand the mechanisms in detail some broad principles apply. I discovered that patients with depressed immune systems and foul periodontal disease affected mouths responded exceptionally well to dental extractions and a change of diet to raw meaty bones. Immune cell numbers returned to normal, gums healed, breath freshened and the elderly pets gained a significant leap in health and vitality. 'Like a puppy again' said delighted owners.

My scientific paper detailing the immune recovery and entitled Periodontal Disease and Leucopenia was published in 1995 in the *Journal of Small Animal Practice*. But then the outrage and indignation poured out from aggrieved vets. The editor of the journal confided that she wished that she had not published the paper and the British Small Animal Veterinary Association and the Australian Veterinary Association attempted to suppress the paper.

Abandoned and betrayed by a compromised veterinary profession, dog owners begin to look for their own solutions. Unfortunately they run the gauntlet of various quacks, niche marketers and others exploiting the vacuum left by the veterinary profession. Various minced meat and vegetable diets, gum lotions, deodorizers, dried pigs ears and rubber bones are touted as the solution to chronic gum disease. Fortunately an increasing number of people get lucky and find their way back to nature's teachings.

Gum disease ruins a dog's sense of smell

With more than twenty years counseling dog owners in numerous countries across the globe, I can assure you that the whole dog from the tip of the nose to the tip of the tail improves in health and wellbeing when a junk food diet is consigned to the bin and replaced with a raw carcass/raw meaty bones based diet. Healthier, happier dogs live longer and in the case of working dogs, they're easier to train and work better. For police, army and customs dogs working well depends on a highly trained and efficient sense of smell.

Here are a couple of anecdotes from pet owners enthusing about the sense of smell of their raw meaty bones fed dogs. Scully, Lyse Lepage's German Shepherd x Labrador has Cushing's disease:

She eats 1.5lbs/day and so far in one month, she lost a whopping 5 pounds. I have never seen my dog so slim! Her sense of smell is becoming refined. She dragged me over 50 feet in the park for a bagel. This morning she tried to catch a duck. Her walking pace is a bit faster too. From looking at her now, she looks very healthy and happy. She is having her blood work done for Cushing's in November and my gut tells me, the results are going to be extremely favorable. I have not seen her look so healthy in a very long time.

Barbie Smith wrote from Ireland updating me on her two raw meaty bones fed springer spaniels:

Ruby is a special girl in her own right and alerts people to ill health. I was on my knees making the fire one day and she always comes for a snuggle if I'm on the floor, but this particular day she buried her head in my chest and became very agitated and upset. She did it again the next day, just as my husband walked in. He asked me what was wrong with her and I just said that there was either something wrong with her or something wrong with me! I never disregard 'unusual' or 'out of character behavior'

I got her checked over (she was tip top). I then went to my doctor and told her why I was there and what had happened. She sent me for a mammogram the next day and they found an aggressive tumor as a result. It was so far back (almost on my chest wall) that they couldn't believe I had felt it. I told them I didn't and explained what had happened. I expected to be laughed out of the clinic but my specialist is young and very open to anything that contributes to good health. He didn't laugh; on the contrary, he just casually explained that because it had started in a milk duct, she would have smelt the chemical changes in my skin! I had the surgery but I knew the results weren't going to be what I wanted to hear because she did it again!!!

I went for the pathology results and he told me that unfortunately, they had found a different kind of cancer, which hadn't shown up on any of the previous tests. He was concerned that I was handling it so calmly (but I already knew). Subsequently, I have undergone 2 yrs of treatment and am now testing clear. Early intervention was the key but the chances of me becoming aware of it were unlikely due to its position.
She saved my life!

In a preliminary study researchers were able to demonstrate how dogs with clean teeth are better able to detect odors. Beagles used to detect bovine estrous gradually lost the ability to perform the trained detection task. All the dogs were found to have extensive tartar (calculus) build up on their teeth. Following teeth cleaning the dogs' sense of smell returned to 'normal' levels. Further testing showed that the reduction in sense of smell roughly correlated with tartar build up.

Now spare a thought for the farmer who depended on reliable bovine estrous detection. The beagles were likely unhappy with their plight too. As sensitive pack animals aware of minute changes in their competitive position the loss of a vital sense most likely creates considerable anxiety. My feelings are a mixture of shock and awe. Shock that millions of domestic dogs suffer from foul mouths and a much reduced ability to sniff and savor the aromas of this wonderful world. Awe that in wild canines — animals that live by the tooth and die by the tooth — a build up of tartar would lead to a twist in the downward spiral, diminution of the sense of smell and likely beginning of the end.

We can take action

With \$millions invested and lives at risk, it would be reasonable to expect governments and research institutes to be keen to know more. Unfortunately we may have a while to wait. But there's no use waiting in vain. Every dog and every dog handler deserves the best nature has to offer. As a first option feed whole carcasses and as an acceptable second best option feed raw meaty bones. Watch your dogs; make observations and keep records just like Lyse Lepage and Barbie Smith. Soon we'll have a mountain of data that will establish beyond doubt the veracity of our position.