

## **Dental Disease**

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#### **Why do we even want to talk about dental disease?**

Likely the most common reason for a pet owner to become aware of dental disease in their dog or cat is bad breath. Bad breath, or halitosis, can keep you from wanting to be close to your pet. But beyond your own aversion to the odor, that bad breath is a sign that tells you something is wrong with your pet's health.

That bad breath is usually a sign of bacteria growing and harming the gums and teeth of your dog or cat! Even worse, those bacteria contribute to heart disease, bronchitis, kidney problems and other health problems.

Dental disease can also lead to pain and just down right grumpiness. Who wants that for their pet?

So we want to talk about dental disease both to preserve your close relationship with your pet AND to prevent health problems!

#### **Let's start with some definitions so we can understand the problem**

\*Gingivitis- is redness or swelling of the gums. Mild gingivitis by itself is usually the beginning stage of dental disease. Progression of gingivitis can lead to recession of the gums, tooth loss, infection and pain.

\*Plaque- is the slimy, invisible film created by bacteria that have fed on carbohydrates in the mouth. Plaque is not a problem in and of itself, but it is easier to treat plaque than the next stage, tartar

\*Tartar- is mineralization of plaque. Tartar is the hard, visible coating on teeth. Tartar irritates the gums, traps bacteria, and leads to recession of the gums and erosion of the bone of the tooth sockets. Surprisingly, the visible tartar is not main problem! It is the tartar that extends under the edges of the gums that do the damage, hence the need for thorough cleaning rather than just "popping" the tartar off.

#### **What causes dental disease?**

Why is it that Chihuahuas and other small breeds of dogs have more dental problems? One theory is that the smaller mouths of these breeds results in overcrowding of the teeth. Retained baby teeth also contribute. The smaller, crowded spaces between these teeth do not allow normal movement of saliva and food particles, thus encouraging the formation of plaque, tartar and gingivitis. A genetic component is also suspected.

It is likely that the pH of the mouth affects formation of plaque and tartar. Here is where diet and overall health might play a role.

Diet plays a further role, as many of the bad bacteria involved in dental disease and plaque formation feed on carbohydrates. So a high carbohydrate diet, such as most kibble based diets, probably encourages the formation of plaque and tartar. Contrary to popular belief, only kibble specifically created for dental disease helps prevent tartar (T/D, Iams). Hard food in and of itself does not help prevent tartar, any more than it does for humans. And even "grain-free" kibble can still high in carbohydrates, from pea or potato rather than grain.

A final contributing factor is the lack of mechanical abrasion of the teeth which would be provided by bones and hide in the wild. This can be replaced with bones, chew treats, and brushing.

### **Why is dental disease a problem?**

As we talked about earlier, the problem is not just cosmetic. We are talking about the health and comfort of your pet!

In time, gingivitis, plaque and tartar can lead to:

\*Erosion of bone of the tooth sockets- is caused by the tartar trapping bacteria. This bone loss allows teeth to loosen and fall out. In some small breed dogs, the tip of jaw actually dissolves away!

\*Abscess- an infection of the root of tooth. In early cases, the problem might be missed. In advanced cases, pus might be seen at gum line, along with odor, pain, and possibly swelling under the eye or next to the bridge of the nose.

\*Systemic Illness-occurs when bacteria from mouth get into the bloodstream as your pet chews. These floating bacteria can settle out in many places, contributing to heart valve disease and worsening of heart failure, bronchitis, kidney problems, and chronic inflammation which can lead to many degenerative diseases and early ageing.

### **How do you know if your pet has dental disease? Look for these signs:**

\*Bad breath- doggy breath is probably not normal! Bad breath is likely an early sign of problems.

\*Visible tartar

\*Red, swollen or bleeding gums

\*Loose teeth, missing teeth

\*Difficulty eating, holding head to side, chewing on one side of mouth, unwilling to eat, pawing at mouth

\*Even lack of energy can be a sign of dental disease. Bacteria in the bloodstream and chronic pain can cause lethargy. Many dogs act like puppies again once painful dental disease has been addressed!

### **So what can you do to help your pet?**

Preventing dental disease before it begins would be the obvious best choice:

\*Remove retained baby teeth at time of spay/neuter to avoid crowding of the teeth

\*Feed a diet low in carbohydrates to help prevent plaque formation. This means avoiding kibble! Consider a raw food or balanced homemade diet; consult with a person experienced with raw diets first!

\*Provide mechanical abrasion to remove plaque and tartar as it forms

\*Raw chicken necks- these bones are small and provide excellent benefits for small pets. Turkey necks can be used for larger pets. All bones have some risk for cracking teeth, choking, and intestinal obstruction, although the risk is small. Be sure that bones are indeed raw, as cooked bones are very brittle and can puncture the intestines. Supervise the eating of bones. Bones in the shape of a ring with a hollow center can become lodged around the lower jaw.

\*Dental chew treats- have some potential problems. Many of the dental chew treats are not fully digestible, a problem which can result in blockage of the intestines. Most chew treats contain unnatural additives such as propylene glycol, preservatives, and dyes. Chew treats are often given daily, so any bad ingredients really add up and count! Green type products often owe their green color to dyes. In addition, avoid products imported from China. In the end, you really have to read the ingredient list! ZiwiPeak and mercola.com make good products.

\*Daily brushing- with pet toothpaste and a toothbrush, Q-Tip or gauze. The task is usually simple if a pet is trained as a youngster. Older pets can be trained with patience and time. Ask your veterinarian for help.

\*Probiotics- good bacteria which help minimize the bad bacteria, reducing plaque and gingivitis

If your pet already has dental disease, you will need to get the teeth clean and deeper problems addressed before being able to use to a preventative approach:

\*If tartar is mild, consider products which dissolve tartar. I have had good success with PetzLife and Leba III for removing tartar

\*Probiotics and colostrum (a powdered supplement which contains lactoferrin) can be used for gingivitis and overall mouth health

\*Feed a diet to optimize health and minimize carbohydrates- no kibble. Feed a raw or balanced homemade diet.

\*Feed raw bones of an appropriate size and type to remove plaque and tartar (see the earlier discussion of bones)

If tartar or gingivitis is moderate to severe, evaluation by your veterinarian is recommended. Anesthesia and radiographs are sometimes required to fully evaluate the problem and rule out tooth root infections. Dental cleaning, extractions, and antibiotics might be indicated. Follow any course of antibiotics with a two-week course of probiotics. Pain control, when needed, is an important part of the protocol.

Anesthesia-free dental cleaning and polishing is a reasonable consideration under many circumstances. Be sure that any person treating your pet's teeth is adequately trained, polishes the teeth, and provides home care support. Anesthesia-free cleaning can be ideal for pets who cannot tolerate anesthesia.

After resolving existing problems, preventative treatment with diet and mechanical abrasion (raw bones, healthy dental treats, and/or brushing) are critical to maintain dental health. Do not rely on frequent anesthesia and cleanings to treat problems once established. It is much better to PREVENT problems with home care!