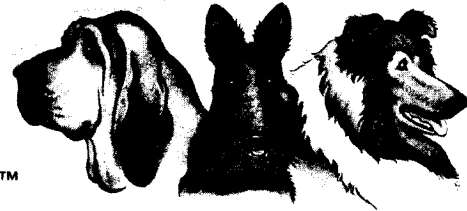


YOUR DOG™



A NEWSLETTER FOR DOG OWNERS

MEDICINE

Dental Care

Periodontal disease is the most common disease in dogs. Indeed, periodontal disease is the most common disease of *any* kind in both dogs and cats. "And it's also the most overlooked disease," says Dr. Laura LeVan, a veterinarian with a special interest in dentistry who is on the staff at the Foster Hospital for Small Animals at Tufts University School of Veterinary Medicine. "Sometimes dogs suffer with severe periodontal disease for years before anything is done about it."

Unfortunately, if left untreated, periodontal disease only gets worse. Eventually, it seriously undermines the general health of your pet. Bacteria from a diseased mouth can affect the kidneys and possibly the heart, liver, and nervous system.

Owners should not think of periodontal disease as something to take care of in their pets' later years. In fact, studies show that most dogs over 2 years old have some degree of periodontal disease. Therefore, we recommend that you begin a program of dental care early in your dog's life.

The telltale signs of periodontal disease include your dog avoiding food (or at least hard, crunchy food); refusing to pick up favorite toys; appearing lethargic or low in energy (showing little interest in play); drooling and pawing at its mouth; and, of course, breathing "doggy breath" (*halitosis*).

YOUR DOG'S HEALTHY MOUTH

During its lifetime, a dog has two sets of teeth—a deciduous set and a permanent set. Deciduous teeth are those 28 needle-sharp baby or "milk" teeth (incisors, canines, and premolars) that puppies use to chew on the

corners of your favorite books. When a young dog reaches 4 to 6 months, 42 permanent teeth—20 in the upper jaw and 22 in the lower—replace the deciduous teeth. (A small dog may have fewer permanent teeth.)

Become familiar with your dog's dentition. If a dog retains deciduous teeth, such as deciduous canines, these teeth may displace the permanent canines. And too many teeth can lead to overcrowding, which can cause a dog's teeth to rotate.

PERIODONTAL DISEASE

Periodontal disease involves the tissue and structures that support the teeth—the gum (*gingiva*) and the bone (*alveolar bone*). The disease ranges in severity from inflammation of the gum (*gingivitis*) to ulceration of the gum and acute loss of supporting bone structure (*periodontitis*). Advanced periodontitis leads to the loosening and eventual loss of teeth. In fact, "the teeth that dogs lose are almost always healthy teeth lost to periodontal disease," observes Dr. LeVan.

GINGIVITIS

You can easily recognize gingivitis. It appears as a red line of inflammation where the gum meets the tooth. This inflammation of the *gingival* (gum) tissue is caused by deposits of *plaque* that build up on the surface of the tooth and beneath the gingival tissue. Plaque, a combination of bacteria, food particles, and saliva, is constantly forming and hardening on the surface of the tooth. The high concentration of bacteria (80 percent) in plaque makes it an effective *pathological* (disease-causing) agent.

As the plaque deposit builds up, it hardens into *calculus* (*tartar*) and enlarges the pocket (*sulcus*) between the tooth and the gum. This enlarged sulcus traps debris and creates a fertile environment for bacterial growth.

INSIDE

Dog Law

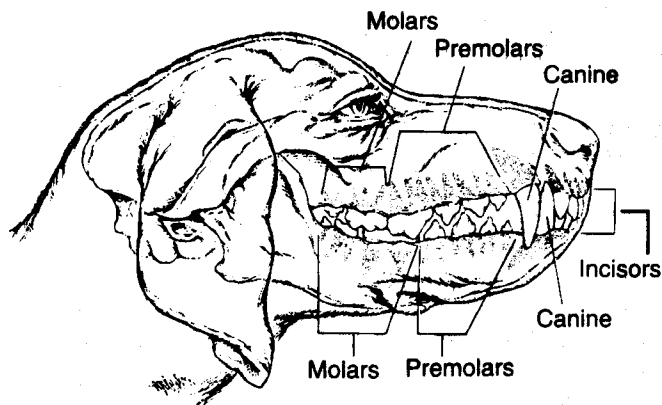
Hip Dysplasia

My Dog:
Springer Spaniel



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OCTOBER 1994

CANINE DENTITION



Saliva, which normally washes out the sulcus, cannot then effectively clear the sulcus. Multiplying bacteria invade the gingival tissue. The gums become swollen and are liable to bleed when probed. Fortunately, at this early stage of periodontal disease, no bone loss has occurred. So if gingivitis is detected and treated promptly, it is reversible.

PERIODONTITIS

Periodontitis is an advanced stage of periodontal disease in which bacteria, their waste products, and other toxins cause the gums to ulcerate. An increasing buildup of calculus causes ever-deepening pockets to form around the teeth. Eventually, the alveolar bone begins to erode. Finally, erosion of the gingiva and alveolar bone advances to such a degree that the teeth have nothing to support them. They become loose and fall out. Unfortunately, periodontitis is not reversible. But if treated early enough, it can be controlled.

HOME CARE

Plaque forms every 6 to 8 hours. And merely rinsing the mouth will not remove it. To effectively remove plaque, you need to brush your dog's teeth—preferably every day. Brushing your dog's entire mouth should take no more than 30 seconds (see box on p. 3).

While there are no miracle plaque removers other than brushing and professional treatment, you can also help control plaque buildup by feeding your dog dry food. The abrasive action of the dry food dislodges the plaque. Chew toys can also help. But a cautionary note about chew toys: they need to be resilient—made of soft latex, for example. Anything too hard (like hard plastic, dried bones, cows' hooves, and so on) may fracture your dog's teeth. Be careful, too, of rawhides, which may be good for teeth cleaning but can cause gastrointestinal blockages. (If you give your dog rawhides, replace them before they become soft enough to swallow.)

PROFESSIONAL CARE

Your dog's doctor is also your dog's dentist. Your veterinarian should examine your dog's gums and teeth at least once a year—and maybe more often if your dog needs it. (Some dogs build up plaque faster than others.)

To catch and treat problems early, it is essential that you and your veterinarian work as a team. An observant owner can bring subtle changes in a dog's mouth to the veterinarian's attention. Such information alerts the veterinarian to potential trouble spots, which he or she can investigate thoroughly during a documented oral examination while the dog is under general anesthesia. (Do not put off treating your canine senior citizen because

TIDBIT

Year of the Dog

Each Chinese lunar year (beginning on the second new moon after a winter solstice) is represented by one of 12 animals. The current Chinese year of 4692—which began February 10, 1994, and ends January 30, 1995—is the Year of the Dog. The dog is the eleventh animal in the 12-year lunar cycle. According to legend, people born during dog years—for example, "Hound Dog" Elvis Presley, Toto's pal (Judy Garland), and Snoopy's creator (Charles Schulz)—are honest, loyal, hardworking, and courageous.

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The goal of *Your Dog*, published by Tufts University School of Veterinary Medicine, is to present canine medical and behavioral information. *Your Dog* is not intended to be a diagnostic service for individual dogs. For a specific diagnosis, consult your veterinarian. We regret that we cannot respond to every individual inquiry regarding canine health matters.

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you fear anesthesia. Rather, talk with your veterinarian about an anesthetic protocol that is appropriate for your older pet.)

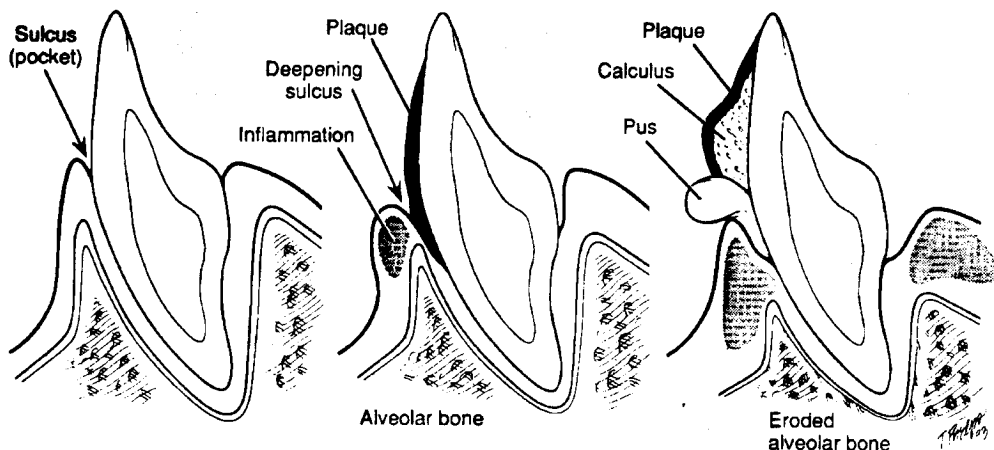
THE DENTAL VISIT

After anesthetizing your dog, the veterinarian removes calculus and plaque from its teeth. The veterinarian may plane the roots of the teeth, smoothing the roughened root surfaces to make it more difficult for plaque to adhere. Next, the veterinarian mechanically polishes the teeth and roots. Then, the veterinarian flushes the sulcus since the canine patient is unable to

“rinse thoroughly” for itself. The veterinarian examines each individual tooth and records the findings. “It’s like examining 42 patients,” explains Dr. LeVan. “You look at every tooth and measure the pockets.”

If any disease is evident, the veterinarian either deals with it immediately or plans future treatment. Finally, the veterinarian may apply a *fluoride* treatment. Fluoride provides four major dental benefits: it hinders the growth of bacteria; it desensitizes *dentin* and *pulp* (the sensitive layers beneath the enamel); it

THE PROGRESSION OF PERIODONTAL DISEASE



1 HEALTHY
In the healthy canine gum, the sulcus should be one millimeter or less.

2 MODERATE DISEASE
As plaque builds up, the sulcus deepens and the gum becomes inflamed.

3 ADVANCED DISEASE
In advanced periodontal disease, the gum is severely infected. The alveolar bone erodes, leading to tooth loss.

hardens tooth enamel; and it helps minimize bone and tooth loss.

Undeniably, canine dental care requires an investment of time and money. But periodontal disease will not go away on its own. We know that daily home care slows down the buildup of plaque, which in turn slows down the progression of periodontal disease. And we know that regular oral hygiene makes dogs feel better and probably prolongs their lives. So how about reaching for that toothbrush? ☐

Brushing: The Best “Medicine”

Week 1: Let's Play

During the first week, get your dog used to your daily look at its teeth. Establish a routine—every day, at the same time, call your dog and tell it what a swell time you are both about to have. Holding the dog’s head firmly with one hand, use your other hand to pull its lips back and up from the front. This allows you to check the canine teeth. Then, pull the lips back toward the corners of the mouth so you can see the premolars and molars. Make sure you look at all the teeth—top and bottom. Rub your finger along the gums at the sides of the mouth and along the gum line of the top and bottom incisor teeth. During the inspection, talk to your dog. Afterward, offer praise as you give your pet a favorite treat or take a few minutes to play. It’s important to reward your dog in some way at the end of each session.

Tufis’ tip: Remember your dog wants to please you.

Week 2: Practice Makes Perfect

Introduce your dog to the toothbrush (or cotton swab). Every day at the same time, rub the toothbrush (an unused human toothbrush is fine) or swab along your dog’s gums just as you did with your finger during the first week. Talk to your dog. Again, at the end of each session, praise your dog and reward it with its favorite treat or toy.

Tufis’ tip: A little is better than nothing.

Week 3: The Real Thing

Introduce toothpaste. Use a reputable brand of a canine teeth-cleaning agent. Do *not* use human toothpaste. The foaming agent in human toothpaste—detergent—is an irritant that can cause gastric problems in dogs. Plus, the foaming action can freak out some dogs. (Contrary to popular belief, salt and baking soda are *not* effective plaque removers. And they contain sodium—potentially dangerous for older dogs with heart disease.)

Once you have established a routine, stick to it. Do the same thing at the same time every day.

Tufis’ tip: Hang in there! Most dogs come to enjoy having their teeth brushed.