

What Nice Teeth You Have!

Veterinary dentistry's newest methods, procedures and products.

BY CHRISTINA CHAN

In 1990, only 19 board-certified veterinary dentists practiced in the United States. Today, 105 practice throughout the country. The numbers are indicative of a growing trend toward increased awareness of canine dental care and the availability of treatments and products to keep canine teeth healthy. "Consumers are more dentally educated [sic]," says Jan Bellows, D.V.M., a board-certified veterinary dentist at All Pets Dental practice in Weston, Fla. "And they're asking for ways to take care of their dogs' teeth."

Taking a bite out of dental disease

The latest changes in canine dental care run the gamut from new standards in dental terminology to surgical procedures. Veterinary dentists weigh in on what today's dog owners can expect in dental care for their pets.

Terminology update: The nomenclature associated with canine dental anatomy and its associated diseases can be mentally and verbally taxing even for the most savvy dog owner. Dog enthusiasts might use terminology that differs from that of the veterinary medical community. "People use 'overbite' to describe a dog's lower jaw being abnormally behind the upper jaw," Bellows says. According to Bellows, the veterinary term for this condition is "mandibular distocclusion," a term not used by the general public.

Today, there is a clear resource for canine dental terminology, which includes everything from a dog's incisors to the classification of periodontal disease stages. In October 2009, the American Veterinary Dental College updated a list of standard dental nomenclature. All terms go through the AVDC



board's approval process.

For more information, visit the AVDC website: www.avdc.org.

Instant X-rays: Performing dental X-rays used to require taking the image, carrying the film to a room for development, then waiting 15 minutes for the resulting image. Technology now produces near-instantaneous results with the use of digital dental radiographs.

"In a short period of time, you get feedback on what's going on below the gum line with digital X-rays," says Sandra Manfra Marretta, D.V.M., a professor of small-animal surgery and dentistry at the University of Illinois at Urbana-Champaign and the current president of the AVDC.

Dental radiographs, which require sedation because dogs will not hold their mouths open during the process, can provide information about a dog's internal tooth anatomy. Sixty percent of a dog's tooth is beneath the gum line, and X-rays will help veterinary dentists see this area without surgery.

According to Bellows, only 10 percent of general veterinarians take dental X-rays, but the technology is readily available and used in most veterinary dental offices. The new technology is also safer. "Digital X-rays use 75 percent less radiation than the traditional analog method," Bellows says.

Fresh facts on formulas and ingredients: One way to prevent the buildup of tartar and plaque is a gel called OraVet, manufactured by Merial. OraVet, only available through veterinarians, was approved for market distribution in April 2004. Owners place the gel at their dogs' gum line with an applicator once a week. OraVet is a waxy polymer. The product attracts plaque and tarter, keeping the offending formations away from the teeth. Dogs then swallow the wax (along with adhered plaque) without any difficulties.

Chlorhexidine is an effective plaque-reducing ingredient found in over-the-counter canine dental products. "Chlorhexidine is a very potent plaque



Veterinary dentists can now restore damaged teeth instead of removing them.

New treatment options: If you're wondering what treatments might soon be available for your dog, look toward the latest developments in human dental care. Anson Tsugawa, D.V.M., a board-certified veterinary dentist with a practice within the City of Angels Veterinary Specialty Center in Culver City, Calif., states that most veterinary dentists are up-to-date on current human dental care. "For the most part, the cost of the procedures is what delays the transfer of human dental procedures to canines," Tsugawa says.

Surgical scenarios: Ten to 20 years ago, the primary treatment for canine dental health included cleaning, polishing and extracting teeth. Today, restorative methods lead to a greater chance to salvage teeth so veterinarians don't have to remove them.

According to Manfra Marretta, D.V.M., president of AVDC, a dog with periodontal disease that has lost the connective tissue surrounding a tooth need not lose the tooth. "We can create

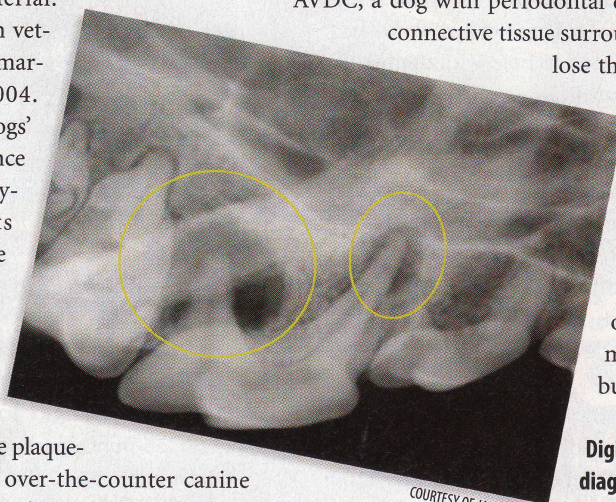
a flap, bring the tissues down, clean out the defected area and put bone grafting material in there."

This bone grafting material often consists of synthetic material that mimics some of the building blocks of a dog's

retardant," Bellows says. This ingredient is used in certain rawhide chews made for dental health.

Another plaque-fighting ingredient is sodium hexametaphosphate, which is incorporated into dental wipes made specifically for dogs.

Serious dental studies: Dog owners who are curious about the latest studies regarding canine dental health can look to veterinary research universities. "Universities, in particular the University of Pennsylvania, are currently in discussions to determine if bite abnormalities in dogs are due to dominant or recessive genes," Bellows says. For more information on current research interests and publications at the University of Pennsylvania, go to: www.vet.upenn.edu.



COURTESY OF JAN BELLOW

Digital X-rays speed up dental diagnoses by providing instant images of your dog's teeth.

Canine dentistry terms, such as those referring to jaw abnormalities, have been updated.



bone. "In some cases, the material might be products from the same dog or from the same species of dog," Tsugawa explains. Small quantities of bone might be removed, for instance, from a healthy area of a dog's jaw. That bone is then applied to the site that needs bone growth.

Canine veterinary dentistry is on a path to growth and specialization. New canine dental products will continue to come on the market, but ultimately, it's up to owners to take charge of their dog's dental care.

"People can be hesitant about proceeding with dental care for their dogs, especially when it comes to procedures such as anesthesia," Tsugawa says. But one thing to keep in mind is that sometimes, earlier treatments can prevent more dental damage as a dog grows older. "I commonly see delays in treatments that would have been less urgent procedures if done at a much earlier point in time." **DW**

Christina Chan is a freelance writer. She owns two Pugs.

NEW Canine Dental Products

Nutri-Vet Dental Chew Ball with Dental Gel:

This combination dental product includes a nubbed chew ball and antioxidant vitamin and oil gel, meant to clean teeth and gums. The product comes in two sizes for large and small dogs.

\$14.99 to \$19.99; Nutri-Vet; 877-729-8668; www.nutri-vet.com



Petrodex Cleaning Paste:

According to the manufacturer,

Sergeant's, the gel breaks down the chemical composition of tartar, and penetrates tooth enamel and the gum line to fight periodontal disease. **\$12. Sergeant's Pet Care Products; 800-224-7387**



Fresh Breath Made Easy: The dental care line from TropiClean includes Clean Teeth Gel for removing plaque and tartar, Water Additive for dental and breath maintenance, Dental Treats for cleaning teeth and gums, and Fresh Mint Foam for killing germs that cause bad breath. Prices vary; TropiClean; 800-542-7387; www.tropiclean.net

Zupè Breath Freshener: This all-natural product freshens breath and controls tartar and plaque. The breath freshener contains chitosan, meant to reduce plaque and tartar.

\$8.99; Next Gen Pet Products; 949-363-5586; www.nextgenpet.com



Ark Naturals Breath-Less Brushless-Toothpaste:

These chewable treats are designed to help with dental decay and remove plaque and tartar, as well as aid improving your dog's bad breath. The product's inside core contains toothpaste and other ingredients to support dental health.

\$13.99; Ark Naturals; 800-926-5100; www.arknaturals.com



Hartz Crunch 'n Clean Savory Flavors Dog Biscuits: Made with Denta-Shield technology, these biscuits freshen breath and reduce tartar formation, according to the manufacturer. The extra-crunchy biscuits ensure

longer chewing action to allow more time for plaque removal. Each box contains three flavors (Braised Beef, Rotisserie Chicken and Smokehouse Bacon). **\$3.49 (26-ounce package); The Hartz Mountain Corporation; 800-275-1414; www.hartzcrunchclean.com**