

# Teeth Cleaning

## By Dr. Cliff Faver

Let's start by looking at the basic anatomy of the tooth and supportive tissue and work from there. The basic tooth is held in by the gums, bone, and the periodontal ligament. All of these structures are critical to the health and well-being of the tooth. As the pet matures (usually around three to four years of age), a substance called tartar will start building up on the tooth. Tartar is actually a hard substance formed from saliva, food particles, and bacteria. It takes several years to start forming in the young pet, because the enamel (outer surface of the tooth) is very slick in a young pet; tartar does not adhere to it very well. With the aging and roughening of the enamel, tartar begins to stick. Once tartar starts building up, it will continue to "grow" until it is removed.

Tartar not only forms on the part of the tooth you can see but also under the gum line. The tartar buildup under the gum line is the most damaging. It causes irritation and infection of the gums, which can cause a breakdown of the periodontal ligament and a loss of the boney cup or sulcus. When enough bone loss occurs, the tooth becomes loose, causing movement and severe pain for the animal. At this point, there is typically a shedding of bacteria into the bloodstream, especially during chewing activity. The bacteria can systemically cause secondary infections in heart valves, kidneys, bladders, etc., not to mention the secondary effects on the other organs and joints associated with chronic infection.

Knowing that the main disease process occurs below the gum line in dental health allows one to know the correct pathway of treatment. Anesthesia is the best method to ensure complete care of all the teeth and to avoid putting a pet through potentially painful procedures. A complete dental cleaning includes evaluating the health of each tooth (often including radiographs), cleaning the teeth above the gums and below the gum line, as well as polishing and doing fluoride treatments on all teeth. This process is typically done with a machine that uses vibration to remove the tartar from the teeth. This minimizes the etching process with hand instruments. This machine also uses water not only to clean the teeth but also to reduce heat, which could damage the tooth further. Polishing and fluoride are important in the process to smooth out any micro-etching that has occurred normally or by the use of the cleaning instruments.

Another method that has gained popularity recently is hand-scaling or anesthesia-free dental cleanings. One problem with this procedure is the animal is awake. If in pain, the animal will move, making it hard to do an adequate cleaning job. Another issue is, in most cases, it is almost impossible to clean the inside of the teeth due to the difficulty of holding a conscious animal's mouth open during the procedure. A third problem is being able to polish adequately and use fluoride to remove the etching that is caused by the hand instrument. If these etchings are not removed, then it actually sets the animal up for more problems. These small etchings give tartar something to attach to, thereby adding to the problem versus correcting the problem. Brushing has also been used to clean teeth, but it only takes off the debris left in the last few days.

Another part of the discussion is who can legally do each one of these procedures. By law, only veterinarians are allowed to administer anesthesia, therefore the complete cleaning is limited to the veterinary field. It varies from state to state as to whether hand-scaling can be done legally by groomers, so you will have to check with your state. Most states consider hand-scaling part of practicing medicine, therefore it is not allowed by groomers.

Lastly, there is the ethical question of whether the person doing the procedure is honestly representing the best interest of the pet. If a client has a false sense of security as to the level of cleaning occurring, the client may not know to address more severe issues to the detriment of the pet.