

# Feline and Canine Dentistry at Chanhassen and Chaska Clinics

### What is dental disease?

Periodontal disease starts with the buildup of plaque (bacteria) along the gum line; within days this plaque hardens to become calculus/tartar. This irritates the gums and allows infection to take hold. The infection causes destruction of the tissue and bone that holds teeth in place. It is important to note that although we can only visualize dental disease that is above the gum line (on the tooth surface), it is what is going on below the gum line (on the roots of the teeth) that is actually harmful and painful to your pet.

Periodontal disease progresses through 4 stages:

**Stage 1:** Gingivitis: inflamed gums along the teeth and tartar accumulation. Treatment can reverse this condition

**Stage 2:** The entire attached gum is inflamed, noticeable bad breath; the pet's mouth is painful. Less than 25% of the supporting tissues have been lost. Professional treatment can prevent this from becoming irreversible.

**Stage 3:** Infection and calculus are destroying the gums and bad breath is constant. At this stage the pet's mouth is quite sore and behavior might be affected. 25-50% of the supporting tissues have been lost. Damage done may not be reversible.

**Stage 4:** Chronic bacterial infection is destroying the gum, teeth and bone. Greater than 50% of supporting tissues have been lost. Bacteria may be spreading in the bloodstream throughout the body.

#### Does my pet need a dental prophylaxis?

Over 80% of adult pets have dental disease. Signs include tartar buildup, redness of the gums, and bad breath caused by oral infection. Chances are, if you can see tartar on your pet's teeth they would benefit from a cleaning. The longer dental disease goes untreated the more damage it causes and the more likely it is that your pet will lose teeth. If you are unsure if your pet would benefit from a dental prophylaxis, we would be happy to evaluate his/her mouth.



### Why is it important to get my pet's teeth cleaned?

Many people wish to address their pet's dental health simply because it will improve their stinky breath, but there are many more important reasons to do so. First of all, dental disease can be very painful - if you've ever suffered from a cavity, broken tooth, abscess, or sore gums - you know how bad it can be. Pets are very good at hiding signs of pain and most animals will go on eating hard food despite severe mouth pain. Symptoms are often extremely subtle and can include reluctance to chew on one side, not wanting to play tug-of-war, being head-shy, or just not acting like him/herself. Many pets have been suffering with dental disease for so long that their owners notice no perceptible changes until the problem is fixed and suddenly their pet is much more active. In addition, chronic infection in the mouth can lead to systemic effects on the whole body. Keeping your pets mouth healthy has been shown to add years to their life!

# What is involved in a dental prophylaxis?

We start with pre-surgical bloodwork and a complete physical exam of your pet to evaluate the severity of dental disease and make sure your pet is healthy enough for anesthesia.

The night before the procedure we ask you not to feed your pet after 8 p.m., and to pick up the water in the morning. Please ask if you have any questions about when or if you should give any medications they are taking.

The day of the procedure we have you drop your pet off in the morning, and schedule a time to pick them up in the afternoon. We'll ask you to leave a phone number where you can be reached during the day if we have any questions.

A technician will check you in and go over the estimate with you, and then the doctor will do a physical exam of your pet. After being checked in and examined, your pet will receive a pre-anesthetic injection to help them relax. When the time comes for their procedure, the technicians place an IV catheter, and administer injectable anesthesia. The pet is intubated (tube placed in the windpipe to protect the airway) and maintained on oxygen and inhalant anesthesia. A pulse oximeter is hooked up to monitor heart rate and oxygenation. A technician stays with the pet during the entire procedure to monitor their depth of anesthesia, heart rate, body temperature, blood oxygenation, and carbon dioxide levels.



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A technician uses an ultrasonic scaler to remove calculus both above and below the gum line. The next step involves going over all surfaces of the tooth with a hand scaler. A periodontal probe is then used to evaluate the pocket depth on all of the teeth (an indication of disease under the gums). They finish by polishing the teeth to remove any microscopic abrasions caused by the scaling and applying fluoride. The doctor then performs a full oral exam, decide if any teeth need to be x-rayed, and evaluate the x-rays. They will then formulate a treatment plan, contact the owner if extractions are necessary and proceed with further treatments recommended.

When the procedure is finished, a technician recovers the patient from anesthesia and they rest comfortably until they are awake enough to go home. The doctor will call you after your pet is awake to discuss all of their findings and recommendations.

# Isn't brushing enough?

Many people wonder if brushing the teeth (or having them cleaned at the groomer) will be sufficient. Tooth brushing is an excellent *preventative* for dental disease, but it does nothing to remove tartar that has already developed on the tooth surface. The key to brushing is doing it regularly - Remember that plaque begins to harden into calculus after only a day or two, so brushing daily is the most effective way to control tartar build up. Having the teeth cleaned every 6 weeks at the groomer is no more effective than if you brushed your own teeth once every 6 weeks.

## Why is anesthesia necessary?

The reason anesthesia is necessary for dental procedures on pets are multi-fold. Most obviously, if you have tried to look in your pet's mouth, you may have noticed that they are not always cooperative - even a quick brushing can sometimes be quite difficult! Secondly, a thorough prophylaxis involves a complete oral exam and scaling both on the tooth surface as well as underneath the gums - something impossible without the utmost cooperation. Additionally, x-rays are extremely helpful in evaluating disease under the gums, and patients can't be instructed to hold the film gently between their teeth. Lastly, many of our pets require extractions to remove diseased teeth, a painful process that frequently involves anesthesia even in humans.

#### Is anesthesia safe?

Many people are concerned about the safety of putting their pet under anesthesia. Any type of anesthesia includes some degree of risk, but we do everything in our power to Feline and Canine Dentistry



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minimize those risks, safety of the patient is our top priority. This is why we perform physical exams and bloodwork prior to anesthesia, regularly have our anesthetic protocols evaluated by specialists, and closely monitor the patient throughout the procedure. Remember, age is not a disease. If your pet is older, but the bloodwork and physical exam are normal, he/she has no higher risks of anesthetic complications than a younger animal.

# Understanding the cost estimate

Perhaps you have already received a dental estimate and are confused by all the terms and price ranges, this guide helps explain our estimate in more detail. If you have not yet received an estimate please call to set up an appointment to have your pet's mouth evaluated so we can draw up an accurate treatment plan.

- **Pre-surgical Blood Screen:** Bloodwork done before the procedure is to make sure your pet is healthy enough to tolerate anesthesia. It evaluates the liver, kidneys, blood sugar, red and white blood cells, and platelets.
- **Dental Prophylaxis:** The charge for a routine dental procedure includes an examination, hospitalization, anesthesia, pain and antibiotic injections, nail trim, dental supplies, and complete cleaning and oral exam.
- **Dental Radiography:** Because greater than 70% of dental problems occur under the gums, full mouth x-rays are recommended for the majority of pets to help us identify these conditions. If you do not elect to have full mouth x-rays done we will only x-ray teeth that have evidence of disease on the tooth surface. X-rays are required before and after any extractions.
- Extractions: Tooth extractions are only performed on teeth that are diseased and causing problems for your pet that cleaning cannot repair. There is usually a significant price range on extractions because we cannot tell for sure how many teeth will need to be extracted until the pet is under anesthesia. We will let you know during the procedure if any teeth are being extracted, and can give you a cost update when the procedure is complete.
- Gas Anesthesia -additional 1/2 hr.: Extensive cleaning or extractions can add significant time to a dental procedure. Additional anesthesia is charged per half hour of time beyond what is considered a routine dental procedure (1 hour).
- Nerve Block: Nerve blocks are used for all extractions. This numbs the site of
  the extraction to minimize the levels of gas anesthesia that are necessary, as
  well as allowing for a more comfortable recovery. These blocks give additional
  pain relief for 6-8 hours.



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- Any Medications will be additional: Medications are routinely sent home with
  patients who've had extractions, as well as in some other select cases.
   Medications typically include an antibiotic as well as one or 2 pain medications.
- **Doxirobe Dental Pocket Treatment:** An antibiotic gel that is injected around teeth in select situations. This is used to try to preserve key teeth that have a mild amount of periodontal disease with deep pocketing but have not progressed far enough to need extraction. This is only used if necessary.
- **Consil:** A product used to stimulate bone growth in the jaw when a large tooth has been extracted. This is only used in select circumstances.
- Dental Disease Score of 0-4: A method of grading dental disease based on severity.

# Why would teeth have to be pulled?

Unfortunately, extractions are a common component of veterinary dentistry. Extractions can become necessary for several different reasons.

The most common reasons in **dogs** are:

- 1. Periodontal disease (extremely common in small breed dogs): As tartar builds up on the teeth the gums become inflamed and infection begins to set in. The inflammation and infection surrounding the tooth gradually destroy the tissue and bone that holds the tooth in place this is a painful process that eventually results in loose teeth that can fall out. If this process is caught early on, cleaning the tooth surface can allow the gums to strengthen and re-attach, but if too much damage is done the tooth must be extracted.
- 2. Fractured teeth (more common in large breed dogs): When teeth become broken or chipped there is sometimes exposure to the pulp cavity (the center of the tooth which contains the blood and nerve supply) when this happens bacteria can penetrate into the tooth and cause an abscess below the gum line. This is an extremely painful process and requires that the tooth be removed.

The most common reason for extractions in **cats** is tooth resorption (also called resorptive lesions, cavities, or caries). This condition is common in cats and research has yet to discover what exactly causes it. The cat's body seems to attack the tooth and start to re-absorb it. The teeth develop holes in them, exposing the nerves in the pulp cavity, and gradually the tooth is eaten away. This is also a very painful process and requires extraction.



#### How many teeth can be pulled? How many teeth does my pet need?

Dogs start their lives with 42 teeth, and cats with 30. Remarkably, there are many pets in the world that are getting by just fine despite having NO teeth remaining in their mouths. Some pets need to switch to soft or canned food, but many go right on eating their dry food (many animals don't actually chew their kibble anyway). Although we would all be disturbed to lose any number of teeth in our own mouths, our pets have no aesthetic concerns about tooth loss, and are only happy to have pain free mouths. So whether your pet needs 1 tooth pulled or 20, you can rest assured that once they heal up the only after-affect they will notice is no longer being in pain.

# What is involved in extracting teeth?

If a tooth is visibly diseased or suspicious looking, an x-ray will be taken to evaluate the roots of the tooth. If the doctor determines that the tooth needs to be extracted a nerve block is used to numb the area (which makes recovery less painful). Extracting a single tooth can be quick (less than a few minutes) or prolonged (over several hours) depending on the size/ number of the roots, as well as the severity and type of disease process. X-rays are always taken after the tooth is removed to verify that all the roots were completely removed. In some instances dissolvable sutures are placed to help speed healing. Pain medication and antibiotics are sent home with the pet. It is usually recommended to soften the food for a few days and avoid hard chewing for 2 weeks afterwards.

#### Is extraction the only answer?

In many cases, yes, if the tooth is severely diseased extraction is the only way to cure it. However, there are select circumstances when advanced procedures can be used to save a key tooth. These procedures are performed by board certified veterinary dentists. If your pet would benefit from one of these procedures we will talk to you about referral to a veterinary dentist.

# How often are professional cleanings needed?

Frequency of dental cleanings varies greatly. Some dogs can go their whole lives without requiring a cleaning. Others need cleanings every 6-12 months. Regular home care can help extend the time between cleanings. The more often cleanings are performed, the less likely extractions will be necessary.



### Home care products:

There are many home care products available to help keep your pets teeth clean.

- **Daily tooth brushing** (with pet toothpaste) is by far the most effective and economical method to control dental disease.
- Maxiguard Gel is an antibacterial liquid that helps control bacteria in the mouth.
   It is used daily with or without brushing.
- **Oravet** is a waxy sealant that is applied to the teeth weekly; this product is most effective when used in addition to daily brushing.
- **Dental foods, treats, and chews** help to keep the teeth clean. But remember that chewing on objects that are harder than the teeth (like bones or hoofs) can cause tooth fractures.
- **Sprays to remove calculus** will only work on the surface of the tooth, but it's the infection and disease on the roots that is causing your pet discomfort.

# More information on Brushing:

- How to brush your pet's teeth: Dental disease us the most common disease process seen in our pet population today. More than 85% of all dogs and cats presented to veterinarians are affected by dental disease. Periodontal disease is what causes bad breath, potential tooth loss, and potential damage to other internal organs. We recommend daily dental care at home for your pets, just like the rest of the family. It is best to begin home care at an early age (8-12 weeks) during puppy or kittenhood, but it is never too late to begin.
- Supplies Needed: washcloth or toothbrush and toothpaste made for pets
- Procedure:
  - Week 1: Slowly acquainting your pet with mouth care. Using your hand, gently open the pet's mouth and run your finger around his/her lips, lifting the lips, etc. This should be done for just 10-30 seconds the first day, progressing to a minute or 2 by the end of the week. Reward your pet with a small treat at the end of each session.
  - Week 2: Introducing the toothbrush or washcloth. This week use either a wet washcloth wrapped around your index finger or a wet toothbrush on the teeth. Lift the lips. Massage the outer surfaces of the upper and lower teeth using a back and forth motion. Start for just a few seconds, and gradually increase the time until you can do the outer surfaces on all the teeth.



e. This week use your dental cleaning instrume

 Week 3: Add Toothpaste. This week use your dental cleaning instrument and now add a pea sized amount of toothpaste to brush the outer surfaces of the upper and lower teeth in a back and forth motion.

# A few pointers:

- Do not rush the process or else the pet may become resistant.
- Always give a treat at the end of each session to make it enjoyable (some pets enjoy just licking the flavored toothpaste off the brush when you're done). Praise highly!
- If your pet shows any indication of aggression (growling, bearing its teeth, biting, scratching, etc.) stop immediately! Call the clinic for further professional advice.
- Do not worry too much if your pet wants to chew on the toothbrush this is kind
  of like brushing! Just don't let them take it from you or swallow pieces of it. You
  can hold your pet's mouth closed to try to minimize chewing
- Never use human toothpaste. This can cause vomiting and is very high in sodium.
- Cleaning at home will reduce the frequency of professional care needed.
- Daily brushing is the only effective means of controlling dental plaque and tartar. Hard treats or food or toys are not sufficient. And remember, just like in humans, even with regular brushing, routine cleanings are still usually necessary.

For more information, or to schedule an appointment, visit us at www.chaskavalleyvetcinic.com