

Comprehensive Oral Health Assessment and Treatment (COHAT)

Periodontal disease is a serious infection in the mouth. There are two stages of periodontal disease: gingivitis and periodontitis. Gingivitis is the inflammation of the gums caused by the microorganisms in the plaque (the slime produced by normal bacteria in the mouth). This condition is reversible once we debride the teeth of plaque and continue to remove plaque daily with dental home care. Unfortunately if left untreated, the bacteria invade under the gum line causing periodontitis, inflammation of the tooth's supporting structures, which is irreversible and leads to tooth loss.

There are several serious consequences to not treating periodontal disease.

1) *Pain.* Most animals simply deal with the pain and continue to eat as normal. It's extremely rare for an animal to stop eating because of mouth pain. Some patients may rub their faces or paw at their mouth.

2) *Bone loss.* Bacteria from plaque can get to the skull or jaw bone that forms the tooth socket by undermining the gingiva (gums) and "chewing" their way down. With time the bacteria destroy this bone, resulting in bone loss parallel and perpendicular to the tooth, which we can see on x-rays. As more bone is lost, teeth can become loose or even fall out.

3) *Tooth root "abscess".* These are not technically abscesses, but instead are areas of bone loss around the tip of the tooth root. This is caused by bacteria eating away of the bone around the root tip after chewing their way down from the gingiva. The other way for bacteria to get there is if the pulp chamber is exposed due to a fracture or severe tooth wear. The only way to see these is to take x-rays of each tooth.

4) *Oro-nasal fistula (ONF).* These are passages connecting the tooth socket to the nasal cavity, and are basically bacterial super-highways. They are caused by tooth root "abscesses" in the upper teeth. Clinical signs are chronic nasal discharge and chronic sneezing. The only treatment is to close that highway by extracting the tooth and closing the gap.

4) *Pathologic fracture.* This can occur when a lower tooth root "abscess" gets so severe, the jaw breaks.

5) *Blindness.* Infection of the upper molars and premolars can lead to blindness, as the roots of these teeth are very close to the eyes.

6) *Oral cancer.* Chronic inflammation, such as that associated with periodontal disease, is a risk factor for cancer.

7) *Osteomyelitis.* This is an infection that spreads to the bone and can cause large sections of bone to die.

8) *Effects on other organs.* Periodontal bacteria can negatively affect the liver and kidneys as well as increase the risk of diabetes and worsen the condition in patients that are already diabetic. In human studies, chronic periodontal disease also increases the incidence of chronic respiratory disease and pneumonia.

Our plan for your pet is to perform a COHAT. To do this, your pet must be under general anesthesia.

The steps taken for your pet's COHAT are:

- 1) Remove the calculus (mineralized plaque, also known as tartar) by both gross debridement and ultrasonic scaling above and below the gumline to allow for a thorough tooth-by-tooth examination.
- 2) Perform a tooth-by-tooth exam to assess the amount of plaque and calculus, periodontal pocket depth, attachment loss and mobility. During this stage we also look for fractured and missing teeth.
- 3) Intra-oral x-rays of every single tooth and the areas where teeth are missing
- 4) Treatment of the oral pathology found. We treat all of the problems we can without extraction, however in many cases, teeth are too diseased to stay in the mouth. Pets don't actually need teeth, but they do need a healthy mouth free of pain. We cannot know all of the problems that we'll be getting into until after we do intra-oral x-rays; that is why we have broken down the costs into broad range estimates (see below).
- 5) Polish all the remaining teeth.
- 6) Apply OraVet dental sealant to help prevent plaque buildup during the healing process

Prior to any procedure, we require a complete exam of the patient. This allows us to grade your pet's disease and provide an estimate of the costs.

The basic COHAT is \$720-900, depending on the size and age of your dog. This includes:

- Pre-operative examination
- Pre-emptive pain injection and sedative
- IV catheter and heated IV fluids
- Induction of anesthesia
- Endotracheal tube placement and isoflurane gas maintenance of anesthesia
- Patient warming blanket
- Monitoring of temperature, pulse, respiratory rate, blood oxygen concentration, blood pressure and ECG by a registered veterinary technician
- Scaling and polishing of all teeth by a registered veterinary technician
- Full mouth digital intra-oral x-rays
- Complete dental exam and charting
- Assessment of exam along with dental x-rays by Dr. Schatzle or Dr. Meisner
- Updated treatment plan
- Hospitalization for the day
- Post-op monitoring by our technicians

If tooth extractions are needed, the cost is based on time of the procedure along with the additional anesthesia time. There will be post-op pain medication dispensed with any extractions, the cost of which depends upon your pet's expected level of pain, results of lab work, and size. As a guide, below is a rough estimate for additional costs depending on the grade of your pet's dental disease:

Grade I: No extractions or very few extractions expected. \$0-300 additional

Grade II: Several teeth have to be extracted. \$300-500 additional

Grade III: Multiple to many extractions. \$500-1,000 additional

Grade IV: Serious oral pathology present requiring extensive surgery. \$1,000-2,500 additional

We recognize there are hospitals and laypeople offering less comprehensive dental services. They may not have intra-oral radiology, or may not even put your pet under anesthesia to perform the procedure. Let us state clearly and frankly: *these procedures are a complete and utter waste of your hard-earned money and do absolutely nothing to address the source of the periodontal disease, which is under the gumline.* It's like putting a band-aid over a cancer and calling it cured. All you did is save yourself from having to look at the problem, but it is definitely still there. It is much better save up the money and delay a proper COHAT than to waste money on these purely cosmetic procedures. Furthermore, in the state of California against the law for a non-veterinarian to perform dentistry. This is an issue we care very deeply about, and we do not want any of our clients duped into spending money on a worthless procedure. Please ask us if you have any further questions regarding our COHAT. Your pet's wellbeing is our only concern.