



What is involved in a dentistry?

Oral health is an important part of the overall health of your pet. Plaque is the active biofilm in the mouth that produces the smell of “doggie or kitty breath” and takes only a few hours to start forming. Tartar is plaque after it hardens with calcification and only takes 3 days to begin to form. After only 2 weeks the gums become inflamed, causing gingivitis that is painful and may bleed. This is known as periodontal disease.

Much of the active disease in the mouth takes place at the gum line and below where we cannot see, which is why it is important to have a proper comprehensive oral and radiographic evaluation dental procedure and treatment performed for your pet.

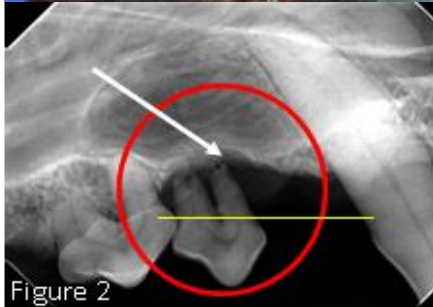
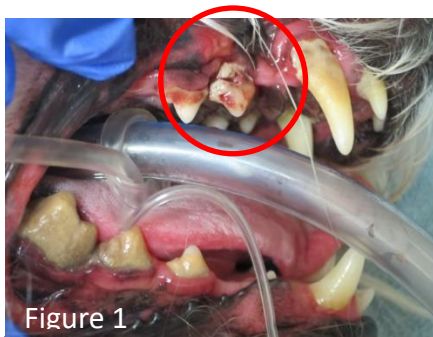


Figure 1 and figure 2: periodontal disease and associated radiograph. The arrow indicates the current bone level. The yellow line indicates the normal bone level.

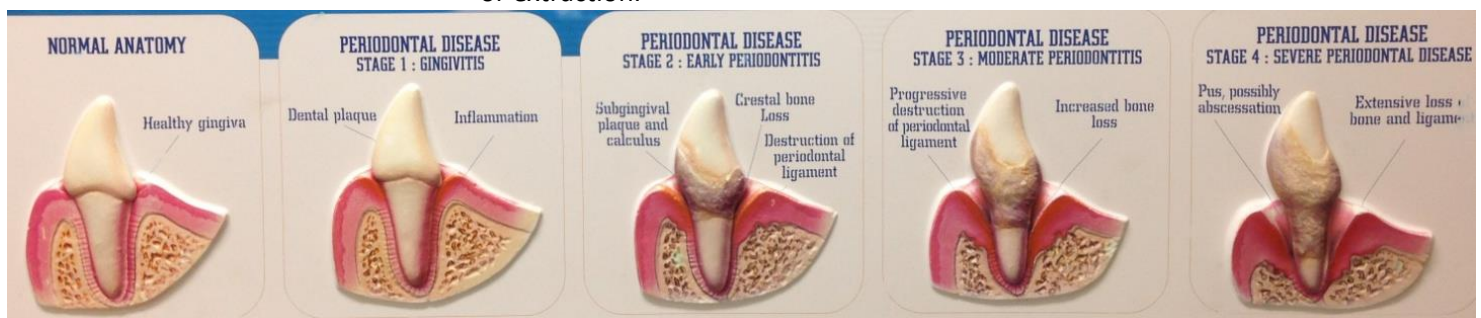
How is a Dentistry performed in dogs and cats?

Comprehensive oral evaluation and intra-oral radiographs (x-rays) cannot be properly performed in an awake pet. In order to do a proper job, the dog or cat must be under general anesthesia. (See “Preparing for a surgical or dental procedure” for more information about anesthesia and your pet)

The first step to a comprehensive oral exam is a full oral charting of the mouth, including documenting all teeth that are present and absent. The gums, tongue and palate are assessed for defects or masses. Each individual tooth is assessed for mobility, fractures, enamel defects, staining, amounts of tartar present and periodontal pockets. Periodontal pockets are determined by using an indicator probe and “walked” all the way around the tooth. Normal depths in dogs are 0-3mm and 0-1mm in cats. Deeper pockets indicate periodontal disease and a treatment plan must be made for the affected tooth.

Radiographs, or x-rays, are the standard of care in veterinary dentistry and are needed to assess the bone health, level of boney attachment with the tooth, dental lesions and dental root abscesses. Radiographs are needed to see what is below the gumline, otherwise disease will be missed and painful teeth left in the mouth.

Teeth that have experienced bone loss of 50% or more from periodontal disease require extraction. Abscessed teeth are infected and painful and require extraction. Fractured teeth that have involvement of the pulp cavity require either root canal or extraction.





When extraction of a tooth is part of your pet's treatment plan, a multi-modal pain control plan is created. This will involve blocking the pain during the procedure using dental nerve blocks or "freezing" of the nerve, pain medications appropriate for your pet are administered during the procedure, as well as an individualized pain control protocol for your pet to go home with to prevent discomfort after the oral surgery.



Figure 3 and 4: A complicated crown fracture and its associated radiograph showing involvement of the pulp cavity.

Oral surgery of the diseased tooth will require creating a gingival flap by making an incision and then lifting the gum. This gum will be needed to cover the empty sockets afterwards. Cats and dogs have single-rooted, two-rooted and three-rooted teeth. Multi-rooted teeth must be sectioned between all the roots with a high-speed burr to allow each root to be extracted individually using proper instruments and



Figure 5 and 6: Tooth resorptive lesion and associated radiograph showing crown defect and root resorption.

techniques. Once the tooth is removed from the bone, the sockets are curetted and flushed of any debris and infected material. The bone is smoothed and the gum is carefully sutured back together to allow for a more rapid healing and decreased chance of infection. The sutures will dissolve on their own in about 2 weeks time.

All teeth that have been assessed to be healthy will be scaled, including the crown and more importantly, below the gumline and then polished and rinsed.

After Care

At the discharge appointment, our registered veterinary technicians will go over a report of the entire procedure including a dental chart or map of your pets' mouth, which teeth had disease and required treatment or extraction, photos of the mouth before and after the treatment and immediate post operative care instructions and medications.

After the mouth has had a chance to heal for 7-14 days, we will reassess the mouth and ensure complete healing. Now we can begin brushing and caring for the mouth at home!





Questions to ask your veterinarian

- 1) Has your veterinarian attended continuing education in veterinary dentistry?
 - a. Many Veterinary schools do not teach about veterinary dentistry or have very few lectures and it is therefore important to attend continuing education in veterinary dentistry.
- 2) Does your veterinarian perform full mouth intra-oral radiographs?
 - a. Much of dental disease is located below the gumline and invisible to the naked eye, therefore x-rays are needed to ensure disease is not missed.
- 3) Does your veterinarian perform dental nerve blocks when extractions are performed?
 - a. Pain control is very important for your pet and dental nerve blocks are important in a proper pain management protocol.
- 4) Will pain control be sent home with my pet after the dentistry if extractions are performed?
 - a. Pain control is very important for your pet's recovery.
- 5) Is a Registered Veterinary Technician monitoring my pet's anesthesia?
 - a. A registered veterinary technician has taken 2 years of university or college education in veterinary medicine and is qualified in making important potentially life-saving decisions in anesthesia. Registered Veterinary Technicians are equivalent to nurses in the human medicine world.
- 6) After dental extractions, are the gums sutured closed to speed up healing and prevent infection?
 - a. Suturing the gums after a dental extraction is the standard of care and needs to be performed to ensure proper healing of the gums and bone.
- 7) Is a follow up included to ensure proper healing of the gums and to go over ongoing dental hygiene and home care options?
 - a. Follow up care is very important to ensure proper healing and learning how to properly care for the teeth at home.



Resources

American Veterinary Dental College, avdc.org

The Veterinary Oral Health Council, vohc.org

American Animal Hospital Association, aaha.org

American College of Veterinary Anesthesia and Analgesia, acvaa.org