Gingivitis, periodontitis, tooth root abscess (in dogs)

*Dental disease, tooth decay, gum disease*

**Affected Animals:**
Any sex or breed can be affected. Young dogs are more likely to have traumatic injuries to the mouth or retained baby teeth. Other dental diseases are seen in middle-aged to older dogs. However, certain breeds such as poodles and yorkshire terriers, are more likely to develop dental disease at an early age.

**Overview:**
Dogs often have problems with their teeth and gums. Unable to brush and floss, they rely on their owners and veterinarians to provide the care they need. Dogs that chew on hard objects occasionally will suffer other forms of trauma that damage teeth. Bad breath, infections, and pain severe enough to deter eating are a few of the symptoms that can occur from dental disease.

Tooth loss and other more serious complications caused by severe dental disease can be prevented. Dental assessment should be part of every dog's annual physical examination by a veterinarian. The examining veterinarian can recommend appropriate treatment and maintenance of good oral hygiene. Veterinarians who specialize in dentistry offer advanced training, equipment and treatment options for dogs with complicated dental diseases.

**Clinical Signs:**
Possible clinical signs include halitosis, plaque or calculus accumulation, gingivitis, gingival recession, mobile teeth, discolored teeth, excessive drooling, reluctance to chew hard food, abscesses, fistula formation, and facial swelling.

**Symptoms:**
Symptoms of dental disease can include bad breath, plaque or tartar attached to the teeth, red and swollen gum tissue, movement of gums away from the base of teeth, excessive drooling, refusal of the dog to eat hard food or treats due to mouth pain, pus around the gumline, a runny nose or sneezing, and swelling along the face.

**Description:**
Dogs have a lot of teeth: twenty-eight deciduous, or puppy teeth, and 42 permanent teeth. A dog's mouth needs attention and care to keep it healthy. In fact, good dental care has
become a vital part of maintaining overall health for dogs. Because the bloodstream can carry bacteria from a dental infection, other organs can be compromised, including the heart valves and kidneys. Severe dental disease can be a serious health threat.

Many diseases can occur in the oral cavity, but problems with the teeth and gums are the most common and are addressed here. The main problems noted are periodontal, endodontal and orthodontal. These descriptive terms have to do with the part of the tooth that is affected. Periodontal refers to the outer tooth, root and gingival attachments. Diseases of the internal tooth structure are endodontal. Orthodontic disease involves abnormal positioning of the teeth.

Periodontal disease is the most common oral disease of dogs and can lead to infection and tooth loss if not controlled. The problem begins with the accumulation of plaque and tartar on the surfaces of the teeth that form at the gumline and can grow to cover an entire tooth. The gum tissue reacts by becoming inflamed; this condition is called gingivitis, and can be reversed with a thorough cleaning and polishing by a veterinarian. If left untreated, deeper tissues will become inflamed and result in damage to the gum tissues that support the tooth. Tooth loss, abscess formation, and even bone infections with draining tracts into the nasal cavity can occur.

The most common endodontic problem is a fractured tooth. Dogs commonly chew rocks, catch Frisbees and perform other activities with their mouths that can cause fractures, which can result in severe pain if the fracture extends into the pulp cavity and exposes the nerves of the tooth. Dogs exhibit pain by refusing to eat, drooling, and pawing at their mouths. These dogs may need to be referred to a veterinary dental specialist if the tooth can possibly be salvaged.

Orthodontic problems commonly occur when dogs do not lose their deciduous, or puppy teeth. Puppy teeth are designed to be pushed out of their gingival attachments by the erupting permanent teeth; if they do not fall out on their own, a veterinarian may need to extract them to prevent misplacement of the adult teeth. Improper tooth alignment also can result from trauma, tumors, or genetics. Trauma and tumors require surgical correction. Cosmetic corrections are also available, but are considered illegal in the dog showing community.

**Diagnosis:**
Following a complete history, the veterinarian will perform a thorough oral examination as part of a full physical examination. Some dogs may need to be sedated to allow a veterinarian to examine the mouth adequately. A general assessment is made in an awake dog, but more indepth information is gathered with sedation or anesthesia.

**Prognosis:**
Most dental disease can be improved greatly by professional and at home care. Dogs with severe problems may require multiple procedures. An increase in the number of veterinarians with advanced training in dentistry and a board-certified specialty in veterinary dentistry has added significantly to the list of options available to owners and
their dogs.

**Transmission or Cause:**
Trauma, normal accumulation of plaque and tartar, and absence of dental care can all contribute to dental disease. Some dogs are genetically predisposed to develop dental disease because of the way their oral cavities are formed.

**Treatment:**
Good quality diets and dental care provided by the owner can help slow gingivitis and periodontal disease. Routine dental care involves brushing the dog’s teeth with a soft brush and veterinary toothpaste. Human toothpaste contains detergents that will cause gastrointestinal upset and vomiting in dogs that swallow it. Most veterinary pastes come in flavors that help make brushing more enjoyable for a dog.

When tartar has accumulated, the examining veterinarian typically will perform a professional cleaning and polishing of the teeth and gums while the dog is under anesthesia. Preanesthetic tests appropriate for each dog will be recommended prior to the procedure. One of the most important parts of the process is cleaning off the tartar that collects below the gumline. This cannot be accomplished when a dog is awake, even if it is extremely tolerant.

Severe dental disease may require aggressive procedures and dedicated at home dental care if teeth are to be salvaged. If extractions are necessary, the dog will have the benefit of both anesthesia and postoperative pain medications. Retained deciduous teeth should be extracted before misalignment of the permanent teeth has occurred. Some dogs may need treatment by a dental specialist for root canals or orthodontic procedures.

**Prevention:**
Owners should train puppies to allow them to check teeth and gums for problems, and oral hygiene should be practiced consistently. Dog dental cleaning kits are available from veterinarians. Watch for a double row of teeth, indicating retained puppy teeth, as well as redness or foul odors. Any abnormalities should be checked by a veterinarian.

Feeding a good quality dry dog food and treats that control tartar also may slow tartar buildup. Annual veterinary exams and professional cleanings are vital in keeping the oral cavity healthy.