

Periodontal Disease

Basics

OVERVIEW

- Inflammation of the tissues around and supporting the tooth; the tooth support structures include the gum tissue (known as “gingiva”); the cementum and periodontal ligament (the cementum and periodontal ligament attach the tooth to the bone); and the alveolar bone (the bone that surrounds the roots of the tooth); periodontitis (inflammation/infection of the tissues around and supporting the tooth) indicates some degree of periodontal attachment tissue loss (that is, some loss of the cementum, periodontal ligament, alveolar bone) that attach the tooth to the bone)

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs (toy breeds especially, include Maltese and Yorkshire terrier)
- Cats (less common)

Mean Age and Range

- More common in older pets

SIGNS/OBSERVED CHANGES IN THE PET

- Swelling of the gum tissue (known as “gingival tissue”)
- Bad breath (known as “halitosis”); face rubbing; dropping food
- Redness or fluid build-up (edema) of the gums
- Variable amounts of plaque (the thin, “sticky” film that builds up on the teeth; composed of bacteria, white-blood cells, food particles, and components of saliva) and tartar or calculus (mineralized plaque on the tooth surface)
- Gum surfaces bleed easily on contact (for example, during play or physical examination)
- Loose teeth, missing teeth, and exposure of roots of the teeth
- Different grades (stages 1-4) will be used by the veterinarian to record the status of each tooth

CAUSES

- Plaque bacteria (bacteria found in the thin, “sticky” film that builds up on the teeth)—in dogs, gingivitis primarily due to *Streptococcus*, *Actinomyces* species; periodontitis in dogs due to *Bacteroides*, *Porphyromonas*, *Prevotella*, *Fusobacterium* species —in cats, *Peptostreptococcus*, *Actinomyces*, *Porphyromonas* species

RISK FACTORS

- Toy breeds with crowded teeth
- Dogs that groom themselves—causes hair to be imbedded in the tissue around the teeth (known as the “gingival sulcus”)
- Other debilitating illnesses
- Poor nutritional status



Treatment

HEALTH CARE

- Professional cleaning
- Periodontal surgery
- The ultimate goal of periodontal therapy is to control plaque and prevent attachment loss; a willing pet and a client who can provide home care are important considerations in creating a treatment plan

DIET

- Dry food or hard, biscuit-type foods are preferable to soft, sticky foods
- Prescription dental diets—specifically indicated to control plaque (the thin, “sticky” film that builds up on the teeth; composed of bacteria, white-blood cells, food particles, and components of saliva) and tartar or calculus (mineralized plaque on the tooth surface) in dogs and cats

Medications

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive.

- Antibiotics—clindamycin and amoxicillin/clavulanic acid are approved for periodontal disease
- Tetracycline, metronidazole alternative antibiotics

Follow-Up Care

PATIENT MONITORING

- The degree of periodontal disease determines recall interval; some pets are checked monthly, while others can be evaluated every 3–6 months

PREVENTIONS AND AVOIDANCE

- Professional dental cleaning and home care are essential for prevention of periodontal disease
- Your pet's veterinarian will discuss home care such as tooth brushing, effective products, and will provide instructions for their use; Veterinary Oral Health Council-approved products are those known to significantly retard accumulation of plaque +/- tartar (look for “VOHC” seal of acceptance); many types of products such as rinses, gels, chews, wipes, water additives etc.

POSSIBLE COMPLICATIONS

- Loss of teeth; loss of bone structure in lower jaw (mandible),
- Generalized infection in the body possibly heart, liver and/or kidney disease via spread of bacteria through the bloodstream from the mouth

EXPECTED COURSE AND PROGNOSIS

- The response of the individual pet and the expected course and prognosis are highly variable
- Early assessment, diagnosis and appropriate treatment can minimize the destructive effects of this disease

Key Points

- Periodontal disease is the most common infectious disease in dogs and cats
- Periodontal disease can lead to infection in other areas of the body and may cause heart, liver, and or kidney disease
- Professional dental cleaning and home care are essential for prevention of periodontal disease
- Your pet's veterinarian will discuss home care and available products and will provide instructions for their use