Management of feline chronic gingivostomatitis (FCGS):

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What is feline chronic gingivostomatitis (FCGS)?

Chronic gingivostomatitis (FCGS) in cats can be a particularly painful disease. FCGS is not a breed specific condition; it can affect 0.7% to 10% of the general cat population but is mainly seen in middle to older aged cats. The disease involves marked inflammation and ulceration of the gingival tissues, which spreads to the rest of the mouth. It can include the buccal mucosa, the lip commissures and the oropharyngeal region (see inflammation lateral to the palatoglossal folds).

Chronic gingivostomatitis signifies a *syndrome* in which the amount of inflammation in the gingivae and contiguous tissues is disproportionate to the amount of plaque and tartar build-up. It has led some to question whether the disease process is more akin to an immune-mediated disease.

The exact aetiology of gingivostomatitis is not known at present, but it may be multifactorial, involving bacterial pathogens, viruses and possibly other non-infectious antigens.

Clinical symptoms are often associated with pain and inflammation. The affected cat will often be reluctant to eat or have difficulty with food, and have an unkempt coat due to lack of grooming, as well as marked halitosis and excess salivation. They often lose weight and tend not to socialise within the household.

Key points:

- 1. Chronic gingivostomatitis may be due to severe periodontal disease and periodontitis.
- 2. Other infectious agents such as *Pasteurella multocida*, Calicivirus and Herpesvirus (type 1), as well as *Bartonella henselae* have been incriminated in this disease, but, at present, the causative agent(s) has not been identified. It has been shown to be more prevalent in shared households, suggesting that stress may also play a role in the disease process, by affecting the immune system or through the awakening and multiplication of dormant viruses.
- 3. Caudal stomatitis (oropharyngeal inflammation) carries with it a poorer prognosis. It has been speculated that due to the presence of many salivary glands in this area, salivary constituents may play a role in the caudal disease process. The finding of caudal stomatitis can also lead to a refractory state. It has also been suggested that subclinical inflammation elsewhere in the gastrointestinal tract is concurrently associated with the oral disease process.

Diagnostic tests:

- 1. Examination of the oral cavity under general anaesthesia is necessary due to the level of pain in the conscious animal.
- 2. A full COHAT, including periodontal probing and dental radiographs, is essential to formulate a management plan and to rule out other diseases such as tooth resorptions.
- 3. Prior to treatment FIV/FeLV testing should be performed, as well as CBC and comprehensive biochemical profiles.
- **4.** Multiple gingival biopsies are helpful to determine the underlying disease processes and to rule out other pathology, especially if the inflammation is localised within the mouth. Real-

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- time PCR on fresh gingival biopsies or oropharyngeal mucosal swabs testing for feline calicivirus or feline herpesvirus may be used to test for viral infection.
- 5. Radiographs are required post extractions to confirm complete tooth removal and rule out any remaining bone sequestra or protrusions.

Management:

- 1. The aim of FCGS management is to control inflammation/pain to a manageable level without always achieving complete remission.
- 2. Stomatitis Disease Activity Index (SDAI) has been introduced for the assessment of pain and inflammation before and during treatment.
- 3. Remove plaque and calculus, scale and polish the teeth. If the disease is mild, based on periodontal probing and dental radiographs, introduce an intensive active homecare program, consisting either of daily toothbrushing, or the use of Chlorhexidine gluconate wiped onto the teeth daily. 3 to 6 monthly professional cleans may also be required as a part of the management of the disease.
- 4. Extract teeth with poor or hopeless prognosis (Usually stage 3 or 4 periodontally compromised teeth and teeth with stage 2 or 3 furcation involvement) or with marked inflammation associated with the teeth.
- 5. Administer a 2-3 day pre-operative course of antimicrobials followed by a 5-7 day postoperative course. Antimicrobials with good coverage against obligate anaerobes involved in periodontal disease should be considered.
- 6. Based on current evidence further treatment options for affected cats include premolar and molar tooth extractions (Partial mouth extractions or PME) or, where mucosal inflammation also involves the canine and incisor teeth, full mouth extractions (FME) are considered appropriate management.

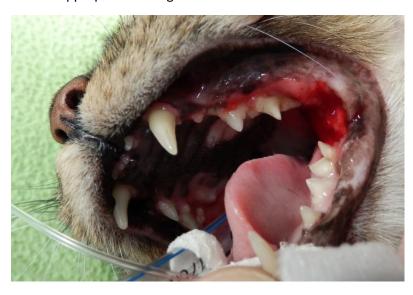


Figure 1: "Trevor" Note the inflammation extends beyond the mucogingival line onto the oral muocas (stomatitis)

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Figure 2: Caudal stomatitis. Note mildly enlarged tonsil



Figure 3:Partial/ selective extraction at right maxilla. Note all canine teeth and incisors were not extracted at this stage.



Figure 4: Post procedural intraoral radiography showing complete extractions of PMs and M.

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