Feline Juvenile Periodontitis, a case report
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This is a fairly recently described condition, affecting young feline patients. It is commonly mistaken for caudal stomatitis. Juvenile gingivitis/periodontitis is a significant inflammatory condition which occurs quickly following permanent tooth eruption. However, it can also occur during the deciduous tooth phase.

We recently treated Albus in our Las Vegas practice. He was initially referred for full mouth extractions based on the diagnosis of caudal stomatitis. However, he was free of pain and did not have caudal stomatitis (see below). Therefore, the diagnosis was made as feline juvenile periodontitis.

Etiology:
The etiology of this condition is currently unknown, in humans there is a period of increased susceptibility to gingivitis during the pubertal period (puberty gingivitis). This condition has an infectious etiology, as opposed to inflammatory as in the case of caudal stomatitis. In addition, there appears to be a genetic predisposition for this syndrome in Siamese, Somali, and Maine Coon cats.

Clinical Features:
There is a rapid proliferation of plaque (often with no to minimal calculus) and subsequent significant inflammation. (Figure 1) The periodontal inflammation results in significant early bone loss, periodontal pocket formation, and furcation exposure (Figure 2). This is generally seen to be worst around the mandibular first molars.

Figure 1: Significant inflammation of the gingiva from juvenile periodontitis.
Figure 2: Class III furcation exposure on the mandibular first molar.

**Diagnostics:**
Visual exam is generally diagnostic. Significant oral inflammation in a young patient (generally under 12 to 18 months) **without** the presence of caudal mucositis is the hallmark clinical sign. Further evidence for this diagnosis is that the patient is not painful. With this condition, clients typically report that the patient still eats normally, but will complain of halitosis.

The dental radiographs confirmed the advanced periodontal loss (figure 3), as well as tooth resorption. These are type 1 TRs, which are often associated with significant gingival inflammation. Type 1 TRs do not undergo replacement resorption and thus crown amputation is NOT an acceptable treatment for these teeth.

![Figure 3: Intraoral dental radiographs revealing early alveolar bone loss (redline) and type 1 tooth resorption (white arrows)](image)

**Management:**
Treatment requires early (9 months of age) and frequent (q 6-9 months) professional dental care combined with strict homecare. This should be performed even if only minimal dental deposits are present, as this is a **plaque** driven disease. Ideally, homecare consists of daily brushing, as this is the most effective form of homecare. Other homecare alternatives include chlorhexidine rinses\(^a\), soluble zinc salts\(^b\) as well as plaque control diets\(^c\) and treats. Finally, a fatty acid supplement \(^d\) has been shown to be helpful to decrease periodontal inflammation. As the patient matures, susceptibility appears to subside at approximately two years of age, which is the same type of pattern followed in the human disease. Ergo, if this process is treated

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\(^a\) CET® Oral Hygiene Rinse: Virbac Animal Health, Fort Worth TX.
\(^b\) Maxiguard/Orazn: Addisons Biologics
\(^c\) Feline t/d: Hills Pet Nutrition. Topeka KS.
\(^d\) 1-TDC: petwellnessacademy.com
aggressively early on, the patient may enjoy normal periodontal health in the future. However, the prognosis for hyperplastic gingivitis is much better than that of juvenile periodontitis.

This disease is commonly mistaken for caudal stomatitis. The distinguishing clinical sign is the lack of caudal inflammation (caudal mucositis) in this disease process. (Figure 4)

**Figure 4**

a) Significant gingivitis in this case without caudal stomatitis indicating periodontal disease.

b) Significant caudal mucositis (green arrow) in a different patient indicating stomatitis.

**Prognosis:** In this author’s experience, with proper care (early and regular professional cleanings and homecare) this will resolve at 2 years of in approximately 50% of cases. The other half will always have worse inflammation but is often manageable. In the most severe cases, extraction is almost always curative.

**Key Points:**

- Juvenile periodontal disease is an emerging issue in cats which is commonly misdiagnosed as stomatitis.
- This is a non-painful inflammatory disease first seen in young cats.
- The lack of caudal inflammation is the key diagnostic point when differentiating this from caudal stomatitis.
- Early and regular professional and home dental care is the key to management.

This condition is covered in detail in the textbook “Feline Dentistry for the General Practitioner”, to order visit www.dogbeachvet.com