**Eosinophilic Granuloma Complex (ECG)**

This is an uncommon oral inflammatory disease, most commonly associated with cats. However, similar lesions are seen in certain dog breeds (Cavalier King Charles Spaniels and Siberian Huskies). The etiology of these lesions is unknown in most cases, however a local accumulation of eosinophils and their release of granule contents is proposed to initiate the inflammatory reaction. EGCs may result from local (food) or systemic allergies; but many cases are seen when allergic disease has been ruled out. Additional proposed causes include:

1. Response to irritation
2. Genetic predisposition
3. Insect bites
4. Infection
5. Autoallergen

Finally, there are cases in which no etiologic agent can be found.

**Clinical signs:**

*Indolent ulcers* are the most common oral manifestation. These lesions present as brownish-red lesions on the upper lip (philtrum) or around the maxillary canine teeth. (Figure 1) *Linear granulomas* can be single or multiple. The most common sites for these lesions are the lips, gingiva, palate and tongue. They are generally non-painful, but can become secondarily infected. The typical presentation is a raised, lobulated yellow-pink mass. (Figure 2) However, they can also be ulcerative, causing severe damage to the oral mucosa and underlying bone. In some cases, this may lead to severe periodontal loss, pathologic fractures, or even oronasal fistulas. (Figure 3)

*Collagenolytic granulomas* appear as a firmly swollen, but non-inflamed, lip in the rostral area of the mandible. (Figure 4) These are most commonly seen in young, female cats.

**Diagnosis:** Clinical signs and topical cytology are often sufficient for diagnosis. Cytologic evaluation will reveal significant numbers of eosinophils. However, histopathology should be performed to confirm the diagnosis (especially in questionable cases), as these lesions can mimic periodontal disease or neoplasia. In addition, dental radiographs should be performed. Following confirmation of the diagnosis, a thorough allergy evaluation should be conducted including food trial, flea treatment, +/- allergy testing. Consider referral to a veterinary dermatologist for proper diagnostic testing.

![Figure 1: Indolent ulcer on the maxillary lip of a cat](image1)

![Figure 2: Linear granulomas on the tongue of a cat](image2)
Treatment

Acute
The acute disease process is best treated with systemic corticosteroids. However, corticosteroids should NOT be used for long term disease control due to the significant systemic side effects. The typical initial protocol is prednisone 1-2 mg/kg q 12-24 hours, but higher doses may be required. Reassess the treatment protocol in 1-2 weeks and taper as soon as possible. Additional options include intralesional triamcinalone (3 mg weekly) or systemic methyl prednisone injections. Antibiotic therapy is required occasionally to induce remission and/or treat secondary infection. There are also cases that appear to respond to antibiotic therapy alone. In our practice, mild cases are treated with antibiotics alone. More severe cases are initially managed with a combination of antibiotics and corticosteroids.

Chronic
If an allergic etiology is diagnosed, therapy should be directed at resolving the inciting cause. This can take the form of food trials, flea treatment, change in environment, or hyposensitization, and in most cases, referral to a veterinary dermatologist is recommended. Many cases remain idiopathic, requiring lifelong therapy. Corticosteroids are an inexpensive and simple approach. However, chronic steroid use should be avoided as there are numerous significant side effects associated with this drug. Cyclosporine is another option for chronic therapy, and can be very effective in the treatment of the EGC at doses ranging from 3.6–13.3 mg/kg q24h. The dosage of cyclosporine should be tapered to EOD as soon as possible. Use the lowest effective dose, and perform regular therapeutic levels and routine blood testing. Again, a consult with a dermatologist may be advised.