

Eosinophilic Granuloma Complex

The eosinophilic granuloma complex is a group of diseases that appear to be related. They are distinct lesions on the skin that respond to the same treatment; this is one of the reasons that they are grouped together as a "complex." The name is somewhat misleading because not all variations of the lesions contain eosinophils (a type of white blood cell).

Eosinophils are normal blood cells that are part of the body's immune system. Their numbers increase in certain diseases, including allergies and parasites. They are also found in high numbers in a few other diseases but are typically not related to cancer.

Prevalence

Lesions of the eosinophilic granuloma complex are relatively common in the cat.

Clinical Signs

There are three rather distinct types of lesions in the eosinophilic granuloma complex: 1) rodent (indolent) ulcer, 2) eosinophilic plaque, and 3) linear (collagenolytic) granuloma.

A rodent ulcer (indolent ulcer) begins as an ulcerated area on the upper lip between the large canine teeth. As it increases in size, the upper lip may become swollen and very painful. It is named a "rodent" ulcer because there was a belief that mice and rats were biting the cat's upper lip as they were being attacked. However, this problem has nothing to do with rodents.

The eosinophilic plaque is a round to oval area on the skin that is very red and inflamed. These lesions are characterized by intense itching. Hair is often lost over the area possibly due to licking by the cat. These lesions may be 1" to 4" across and usually occur on the ventral abdomen (belly). They are sometimes accompanied by smaller lesions on the bottom of the feet or in the mouth.

The linear (collagenolytic) granuloma is usually a raised, rope-like lesion along the rear aspect of the upper part of the back legs; however, it may occur in other locations as well. It may be 1/4" to 1/2" across and several inches long. In some cats, it presents as a swollen or "fat" chin. It is non-painful, and the hair usually does not fall out around or over it. Owners often find it as they pet or hold their cat.

Causes/Transmission

Animal dermatologists believe that, in most cases, these lesions are rooted in an allergic reaction. In particular, the lesions may be a response to food allergy, fleabite allergy, or inhalant (hayfever-type) allergy.

Diagnosis

Each of the three diseases has a characteristic appearance and can often be diagnosed just from that. If the diagnosis is not certain, a biopsy may be performed. A biopsy of the eosinophilic plaque reveals a large number of eosinophils. The other two forms may or may not have eosinophils present, but the pathologist can identify other characteristics that make the diagnosis.

Blood tests can also be done to determine what allergen could be causing the problem. If an allergy is identified, a vaccine can be given to help resolve the lesion and prevent it from returning.

Treatment

Each of these diseases responds well to corticosteroids ("steroids" or "cortisone"). The steroids can be given orally or by an injection. With the injection, response should begin within one day and near-recovery should occur within one week. The steroid injection may need to be repeated in 3-4 weeks for a complete response.

Some of these lesions are infected with skin bacteria. Therefore, antibiotics may be part of the treatment.

A cat with a rodent ulcer may be having a contact allergy to the food bowl. There are anecdotal reports of cure just by changing from plastic bowls to glass, porcelain, or stainless steel bowls. Since this is a simple thing to do, it probably should be tried if your cat eats or drinks out of a plastic bowl.

Prognosis

Unfortunately, most of these diseases recur when the injection of steroids has dissipated; this usually takes 3-4 weeks. Repeated injections may be needed, although some occur just in certain parts of the year. Many cats can be controlled long-term with oral steroids.