

Eosinophilic Granuloma Complex in Cats

Emily Rothstein, DVM, DACVD

BASIC INFORMATION

Description

Eosinophilic granuloma complex derives its name from the classic finding of white blood cells called *eosinophils* in these skin lesions. A granuloma is a firm nodule of inflammation. The word “complex” was added to the name when it was discovered that flat lesions and ulcerated lesions may also occur. The flat lesions are often called *eosinophilic plaques*, and the ulcerated lesions have been called *indolent*, *rodent*, or *eosinophilic ulcers*. Although eosinophilic granulomas can occur in other species, this particular complex of lesions occurs only in the cat.

Causes

The underlying cause of this condition is believed to be a form of an allergic reaction; that is, the immune system overreacts to something to which the cat is exposed. Possible inciting agents include the following:

- Environmental allergens
- Foods
- External skin parasites, such as fleas, mites, or lice
- Bacterial skin infections
- Fungal infections of the skin, such as ringworm
- Viral infections, such as feline leukemia virus or feline immunodeficiency virus

Clinical Signs

The three types of lesions of this complex cannot always be differentiated based on their appearance, but some features are classic for each:

- *Eosinophilic granulomas* may be round or linear (oblong). The lesions are typically red, hairless, and raw (ulcerated). Most granulomas are not itchy. The most common lesion is a swelling of the chin area (“pouty chin”). Linear red, raised lesions may be found on the backs of the legs. The foot pads may also be affected.
- *Eosinophilic plaques* are often hairless, raised, raw sores within the skin. Lesions are commonly located on the belly, the insides of the thighs and armpits, and on the neck and back. Itchiness is a common feature of the plaques.
- An *indolent eosinophilic ulcer* occurs as a raw depression or erosion in the skin of the lips. It is typically found on the upper lip, but the roof of the mouth or back of throat may be involved.

These lesions are not usually itchy or painful. Nearby glands (lymph nodes) may be enlarged.

Diagnostic Tests

The general appearance of these lesions is frequently suggestive of the diagnosis, but testing is often needed to confirm the diagnosis. Sometimes eosinophils are found when smears of the lesions are examined under the microscope. Eosinophil numbers are occasionally elevated in a blood count. A skin biopsy usually confirms the diagnosis.

TREATMENT AND FOLLOW-UP

Treatment Options

Treatment involves several different steps. It is important to decrease exposure to and control any underlying allergies. Antibiotics may be administered in some cases for 2-4 weeks. Steroid medications are needed to shrink the lesions, and several different types of steroids are available.

If the lesions do not respond to the steroids or if steroids become less effective over time, other drugs may be tried that modify the immune response. Small unresponsive lesions may also be treated by surgical removal, laser therapy, cryotherapy (freezing of the tissue), or radiation therapy.

Follow-up Care

It may take your pet 2, 4, or 6 weeks to show a response to therapy. It is very important that the underlying allergy be managed, as well as the actual lesions. Therapy is needed as long as allergy control is inadequate; when allergy control is good, recurrences are uncommon. If immune-suppressive drugs are given, monitoring of body weight, appetite, and certain blood values is required.

Prognosis

With adequate control of the underlying allergy, the prognosis is good; however, some allergies are difficult to identify and control. If the lesions are a result of food allergy or flea allergy, changing the food to a special diet or eliminating fleas usually prevents a recurrence. Since environmental allergies are more difficult to control, lesions associated with them are more likely to recur.