

STEP 1: Look for these common cutaneous reaction patterns in cats.

Head, Neck, and Pinnal Pruritus (Cervicofacial Pruritic Dermatitis)

Lesions are mainly restricted to the front portion of the cat.

Self-Induced Alopecia

- On close inspection, hairs will often appear broken (barbered) where the cat has chewed them off. The skin in the alopecic areas may or may not be erythematous and may or may not have concurrent excoriations.
- Excessive hairball production may be a symptom.
- May be a sign of other health issues, e.g., if centered on the ventral abdomen, this may indicate bladder discomfort, abdominal pain, or radiating spinal pain.

Miliary Dermatitis

- Termed after "millet seeds" (small grains), small, erythematous crusted papules may be easier to feel than to see. Check the preauricular skin (in front of the ears) lesions are easier to see there with no clipping required. This pattern is present commonly in the flea-allergic cat (especially when distributed along the dorsal topline).
- If lesions do not respond to appropriate antibiotic therapy, antiparasitics, and/or anti-pruritic interventions, consider mastocytosis or Bowenoid in situ carcinoma.

Eosinophilic Lesions (Granuloma, Plaque, Indolent/Rodent Ulcer)

- Granulomas will often present on the caudal thigh with or without concurrent alopecia. They may or may not be associated with pruritus.
 - Granulomas may also be noted on the ventral chin; these may be referred to as "fat chin" or "pouty cat" lesions.
 - Oral granulomas may cause dysphagia, drooling, decreased appetite, or even dyspnea depending on the size of the lesion present.
- Eosinophilic plaques are typically SEVERELY pruritic, with a glistening and often moist surface, and will commonly be seen concurrently with self-induced alopecia.
 - Plaques are often noted on the ventral abdomen; occasionally, multiple lesions will coalesce to form a large eosinophilic plaque.
- Indolent/rodent ulcers are often present in the absence of any other clinical signs. Lesions may be unilaterally or bilaterally present on the lips; extension up the philtrum to the nasal planum is not uncommon.



STEP 2: Rule out infectious and parasitic causes.

Core dermatologic diagnostics for cats:

- flea combing
- skin scrapings (superficial, deep)
- impression cytology/acetate tape preparations
- Woods lamp evaluation
- DTM fungal culture/dermatophyte PCR
- anti-mite/anti-parasitic treatment trial

With certain mite species (e.g., *Demodex gatoi*), a negative skin scraping does not rule out the external parasite; treatment trials may be indicated.

Consider most dermatologic abnormalities in cats as possible dermatophytosis until proven otherwise given the sheer commonness of this disease (especially in Persians and other long-haired breeds); this is particularly true for alopecic lesions.

STEP 3: Consider flea allergy dermatitis.

Flea allergy dermatitis is the most common allergic skin disease in cats worldwide.

Any of the cutaneous reaction patterns (head, neck and pinnal pruritus; self-induced alopecia; miliary dermatitis; eosinophilic skin lesions) can be manifestations of flea allergy dermatitis.

This possibility should be critically evaluated and appropriate therapy instituted—even for indoor-only cats who do not go outside.

STEP 4: If all else has been ruled out, do a hypoallergenic diet trial.

Try a novel protein/hydrolyzed diet for at least six to eight weeks to evaluate efficacy for controlling pruritic skin disease.

The most common food allergens in cats are fish, chicken, and milk. Ideally, the cat should be fed something which it has never eaten before.

Home-cooked diets are generally not recommended for feline patients due to their dietary need for taurine.

Cats' discerning nature when it comes to food can make an elimination diet trial challenging. Avoid all other types of cat food, treats, table scraps, and flavored medications.

STEP 5: Consider feline atopic skin syndrome (environmental allergies).

Remember that allergy tests (e.g., serum IgE testing, intradermal testing) do not diagnose allergy; rather this is a clinical diagnosis of exclusion.

Many conditions can be managed but not cured. Referral to a veterinary dermatologist is ideal.



Some of the **leave-on formulations** (e.g., mousse, spot-on) can at least have adjunct benefit for managing allergies.

There is not yet a targeted monoclonal antibody (e.g., Cytopoint* (lokivetmab)) for managing allergic skin disease in the feline patient. Due to the highly species-specific nature of the molecule, **this therapeutic should NOT be used in cats** due to the potential for severe or even fatal reactions.

Apoquel* (oclacitinib) is not a good option in cats with allergies for a number of reasons.

- There is a higher potential for side effects (especially with long-term administration)
- Cats metabolize the drug more rapidly than dogs (often necessitating twice daily administration)
- Dosing frequently needs to be higher than what is labeled for dogs.

Atopica* (cyclosporine modified) is a great option for managing allergic skin disease in cats given the ability to decrease frequency of administration over time and the efficacy of therapy in most allergic patients. Palatability can make it hard to deliver.

Steroids, while effective, come with the higher chance of side effects, especially in obese patients (e.g., development of diabetes) or cats with underlying cardiac disease (congestive heart failure). This is especially true with injectable formulations.

Allergen-specific immunotherapy (either allergy injections or oral allergy drops) can be highly effective and safe in cats with environmental allergies.

STEP 6: If the pattern isn't one of the classics, you may want to order a biopsy.

Choose lesions for the biopsy which are representative of the disease state and submit them to a **dermatopathologist** for evaluation.

A thorough physical examination and history will help a pathologist determine what differentials can be more likely ruled in/out.

When neoplasia and autoimmune diseases are considered differentials, specifically note this on a submission form; this will alert the pathologist to pay special attention and remark on the presence/absence of these supporting characteristics.

