

Feline Atopy

Features

With feline atopy, a type 1 hypersensitivity reaction to environmental antigens (allergens), a genetic or heritable predisposition is suspected. It is uncommon in cats and less common than flea hypersensitivity and food allergy.

The primary symptom is pruritus (chewing, scratching, excessive grooming), which may be seasonal or nonseasonal, depending on the offending allergens. This pruritus may concentrate around the head, neck, and ears, or it may involve other areas such as the ventral abdomen, caudal thighs, forelegs, or lateral thorax. Self-trauma usually results in alopecia that can be bilaterally symmetrical. Remaining hairs are broken off and do not epilate easily. The alopecic skin may appear otherwise normal or may be secondarily excoriated. Miliary dermatitis, ceruminous otitis externa, and eosinophilic granuloma complex lesions are common. With chronicity, secondary pyoderma or peripheral lymphadenomegaly may develop. Atopy may be linked with chronic bronchitis or asthma in some cats.

Top Differentials

Differentials include other hypersensitivities (food, flea bite, mosquito bite), dermatophytosis, ectoparasites (cheyletiellosis, ear mites, feline scabies, demodicosis), psychogenic alopecia, pemphigus, and cutaneous lymphoma.

Diagnosis

1. Rule out other differentials
2. Allergy testing (intradermal, serologic): allergy testing can be highly variable according to the method used. Positive reactions to grass, tree, mold, weed, insect, dander, feathers, or indoor environmental allergens are seen. False-negative reactions are common. False-positive reactions can occur. Systemic fluorescein administration may improve the diagnostic accuracy of intradermal skin testing in cats.
3. Dermatohistopathology (nondiagnostic): variably mild to marked perivascular or diffuse inflammation with lymphocytes, mast cell hyperplasia, and eosinophils. Epidermal hyperplasia, spongiosis, erosions, ulcers, and serocellular crusts may be present.

Treatment and Prognosis

1. The caregiver can reduce exposure to offending allergens by removing them from the environment, if possible. HEPA air and charcoal filters can be used to reduce pollens, molds, and dust in the home. For house dust mite-sensitive cats, household treatments of carpets, mattresses, and upholstery with the acaricide benzyl benzoate once a month for approximately 3 months, then every 3 months thereafter, may effectively eliminate house dust mites from the environment. Old cat beds should be discarded as these may accumulate house dust mite antigens. Dehumidifying the house to below 40% relative humidity decreases house dust mite, mold, and flea antigen loads. To achieve this, high-efficiency dehumidifiers that are capable of pulling several liters of water per day from the air are required.
2. Any secondary pyoderma or otitis should be treated with appropriate therapies for 2 to 4 weeks.
3. A flea control program should be instituted to prevent flea bites from aggravating the pruritus.
4. Pruritus can be controlled with systemic cyclosporine, glucocorticoids, antihistamines, essential fatty acid supplements, or immunotherapy (see numbers 5 to 9 below).
5. Systemic antihistamines may reduce clinical symptoms in 40% to 70% of atopic cats. These can be used alone or in combination with glucocorticoids and essential fatty acids. A beneficial effect should occur within 1 to 2 weeks of initiation of therapy (Table 7-3).
6. Oral essential fatty acid supplements may help control pruritus in 20% to 50% of cats. A beneficial effect should occur within 8 to 12 weeks of initiation of therapy. A synergistic effect may be seen when essential fatty acid supplements are administered in combination with glucocorticoids or antihistamines.
7. Immunotherapy (allergy vaccine) is indicated if medical therapy is ineffective, unacceptable to the owner, or results in undesirable adverse effects. Overall, 50% to 70% of atopic cats show favorable responses to immunotherapy. Clinical improvement is usually noted within 3 to 8 months but can take up to 1 year in some cats.
8. Systemic glucocorticoids control pruritus in most cases. Effective therapies include the following:
 - Repositol methylprednisolone acetate 20 mg/cat or 4 mg/kg SC or IM q 2-3 months as needed