**Feline Dermatology and Pruritus**

Feline pruritus is one of the most common dermatologic problems affecting cats. Mild cases often respond to empiric antipruritic treatments. Severe or chronic cases need a thorough workup to identify and control the primary etiology for long-term success. Since many etiologies can cause the 3 common clinical patterns (alopecia, miliary dermatitis, and eosinophilic granuloma complex) a prioritized differential list should be used to systematically work through the different etiologies. Flea allergy, insect hypersensitivity, Demodicosis, and food allergy are the most common pruritic diseases: however, dermatophytosis and other infectious causes of alopecia and miliary dermatitis should be eliminated.

Clinical Features:

Regardless of the underlying cause, cats seem to react with 3 distinct clinical patterns. Alopecia is one of the most common presentations, especially on the abdomen and inner thighs. Often there are no skin lesions just alopecia. Miliary dermatitis and eosinophilic granuloma complex (eosinophilic plaque, linear granuloma, indolent ulcer, oral granuloma) are also common feline dermatologic patterns. Regardless of the clinical pattern, the differential list is similar.

TH**E NEW ERA: 5 Steps to success WITH OUT steroids**

1. **Rule out Flea allergy** is the most common allergy in cats and most pruritic cats respond to an aggressive flea control trial. Cats commonly present with pruritic miliary dermatitis with secondary excoriations, crusting, and alopecia of the neck, dorsal lumbosacral area, caudomedial thighs and/or ventral abdomen. Other symptoms include symmetrical alopecia secondary to excessive grooming, and eosinophilic granuloma complex lesions. Many cats are extremely effective at removing fleas and flea dirt by grooming making it difficult to prove the existence of a flea infestation. Therefore, all pruritic cats should be treated aggressively for possible flea allergy dermatitis. Capstar administered every other day for 1 month effectively prevents flea feeding and eliminates the pets exposure to flea salivia. If the patient is better after 12-15 every other day doses of Capstar, FLEA exposure and FLEA ALLERGY has been confirmed.
2. **Culture for RING WORM: Dermatophyte** is the most common infectious skin disease in cats. The most common clinical lesion pattern is miliary dermatitis. Diagnosis is usually based on Woods lamp examination and cultures. Since ringworm can mimic so many other diseases, it should be considered and ruled out in all cats with skin lesions.
3. **Eliminate Mites:** Demodex gatoi may be the more common Demodex species (especially in the Southern states) and causes pruritic symptoms similar to allergic dermatitis. D. gatoi is the short bodied mite that inhabits the superficial skin structures and may be contagious to other cats. Generalized disease is characterized by variably pruritic, multifocal, patchy, regional, or symmetric alopecia with or without erythema, scaling, crusts, macules, and hyperpigmentation. Lesions usually involve the head, neck, limbs, flanks, and/or the ventrum. Ceruminous otitis externa and secondary pyoderma may be present. Notoedres cati is rare. Cheyletiella mites live on hair and fur and are usually fnadableo with tape preps, skin scrapes, flea comb surf examination, or fecal.
4. **Consider a food trial if the Patient will comply:**  Food allergy is a nonseasonal pruritic dermatitis that may respond to steroids. The distribution of the pruritus and lesions may be localized to the head and neck, or it may be generalized and involve the trunk, ventrum, and limbs. Skin lesions are variable and may include alopecia, erythema, miliary dermatitis, eosinophilic granuloma complex lesions, excoriations, crusts, and scales. Ceruminous otitis externa is often present. Concurrent gastrointestinal symptoms may be present.
5. **Cyclosporine Therapy** controls almost all other allergies or other caused of immune mediated dermatosis in cats. Insect hypersensitivity (Mosquitoes, moth, cockroach, ants, etc) is possibly the second most common cause of allergy in cats. Atopy symptoms may be seasonal or non-seasonal depending on the offending allergens. The pruritus may occur on the head, neck, and ears, or it may be in other areas such as the ventral abdomen, caudal thighs, forelegs, and/or the lateral thorax. Pemphigus is usually a nonpruritic disease with lesions that include superficial erosions, crusts, scales, epidermal collarettes, and alopecia. Occasionally, the cat grooms excessively which can be interpreted as pruritus. Lesions around the nail beds and nipples are common.
6. **IF OVER 10 years of age at Onset:** Paraneoplastic pruritus is a rare disorder but can be observed in older cats with certain tumors. Pruritus associated with systemic and cutaneous tumors is more common in aged cats. Too often, the diagnosis is only made after prolonged attempts to identify more common causes of pruritus.

**Diagnostics: Perform appropriate diagnostics based on prioritized differential list.**

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| Trichogram | The microscopic examination of the hair (both the root and tip) may provide evidence of pruritus (fractured hair tips) or dermatophytosis (frayed root end). |
|  | Many cats are reluctant to groom in front of the pet owner; therefore, owners may not be aware of the pruritus. Fractured hair tips can provide crucial evidence to confirm pruritus and convince the owner to proceed with diagnostic testing and treatment. |
| Fungal culture | Dermatophytosis is rarely pruritic; however, cats with miliary lesions may groom excessively. |
| Flea Combing | This should be one of the first diagnostic tests employed. |
|  | The identification of fleas or flea dirt will confirm this common cause of feline skin disease. |
|  |  The flea comb material may also be used for microscopic identification of other ectoparasites (Cheyletiella, ticks, and other mites) |
| Cytology | The identification of bacterial (folliculitis), yeast, or acantholytic cells (pemphigus) will help guide additional diagnostics and treatments. |
|  | Eosinophils are commonly found regardless of the primary etiology. |
| Skin Scrapes | The identification of Demodex (common), Cheyletiella, and Notoedres mites (uncommon) would confirm these diagnoses. |
| Fecal floatation  | Examination will occasionally reveal ectoparasites (mites) that were not found on routine skin scrapings. |
| Flea Control Trial | Capstar administered every other day for 1 months effectively prevents flea feeding and the pets exposure to flea saliva. Aggressive Flea control on all pets in the home. Often, cats will have no evidence of flea infestation but respond to aggressive flea control. |
| Therapeutic trial for Demodex | Since skin scrapes for *Demodex gatoi* can be falsely negative in infected cats, a therapeutic trial consisting of 6 weeks of lime sulfur dips may be needed to confirm or rule out this differential. |
| Skin biopsy | This is often the quickest way to collect the most information regarding a dermatosis. Even if not diagnostic, enough information can be gathered to guide additional diagnostic tests or therapeutic trials (allergic dermatitis compared to folliculitis compared to paraneoplastic dermatitis). |
| Food Trial | Currently, a dietary food trial is the only way to confirm or eliminate food allergy dermatitis as a cause of pruritus. There are no in vitro testing methodologies that correlate with clinical disease. |
|  | The most allergen restricted yet palatable diets should be used for a 10-week trial. |
|  | Home-prepared diets provide better allergen restriction and are often more palatable than commercial diets, but are not balanced or complete. |
|  | Following the 10-week elimination food trial, a dietary challenge should be used to confirm the diagnosis of food allergy. Often other treatments are initialed during the 10-week period. A food challenge will confirm or eliminate the restricted diet as the cause of improvement and thus substantiate the diagnosis of food allergy. |
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Summary:

**Since flea allergy is the most common cause of skin lesions in cats, it is imperative to rule out flea allergy dermatitis through an aggressive flea control trial**. The key to success is a thorough dermatologic workup. By considering and ruling out the more common or more easily treatable causes of feline dermatitis, success is easily achievable with out the need for steroids.