FELINE DERMATOLOGY UPDATES

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Facial Pruritus

- Food allergies
- Viral/mycoplasma infections
- Environmental allergies
- Otodectes
- Demodicosis
- Notedres



Feline Viral and Mycoplasma Induced Facial Pruritus

- PCR testing now readily available
- Recent vaccination may cause "false" positive—
 I treat and retest



Feline Viral and Mycoplasma Induced Facial Pruritus

- Viral: alpha-interferon 1000
 IU/day
- Viral: famciclovir 62.5 mg/cat (1/2 of 125 mg tablet) for 3 weeks
- Mycoplasma: pradofloxacin 7.5 mg/kg (monitor CBC q 7 days)
- Mycoplasma: doxycycline 2.5-5 mg/kg q 12 h with water chaser



Allergies



Flea allergy



Food allergy

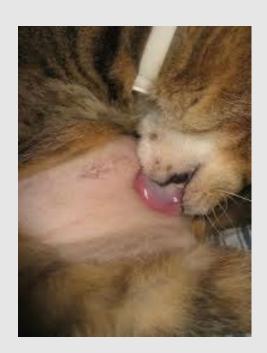


Feline Atopy

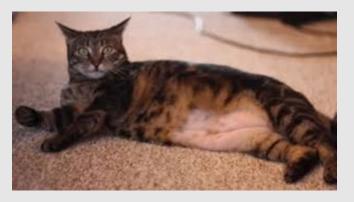
Allergies







Most common clinical sign is "overgrooming"



Allergies





Atopic dermatitis

Allergies in Cats

- Common manifestations include:
 - Pruritus +/- crusts/scales
 - Feline Miliary Dermatitis
 - Eosinophilic Granuloma Complex
 - Feline Symmetrical Alopecia



Allergies in Cats

- Atopic Dermatitis- Diagnosis
 - R/O ectoparasites
 - R/O food allergies
 - R/O infections
 - Investigate for "offending" allergens
 - Serum IgE testing
 - Intradermal testing



Pitfalls which Limit Usefulness of Serum IgE testing

- Poor reproducibility
- Poor specificity for IgE
- Many false positives
 - non-specific binding
- Little distinction between positive tests in normal and allergic cats
- Great seasonal variability
 - half-life of serum IgE = 2.5 days
- Not all reactions are IgE mediated

Intradermal allergy testing

- Evaluates antigen-specific IgE and/or IgGd bound to mast cells in skin but not a perfect test (still have false + and false -)
- Cat reactions can be more difficult to read (0.2 ml/kg of 2% Evans blue dye IV prior to test)



Treatment Options for Feline Atopy

- Control secondary infections
- Eliminate ectoparasites
 - Lime Sulfur dips
 - Seresto collar
 - Revolution
 - Advantage Multi
 - Bravecto for cats
- Allergen-specific immunotherapy
 - Subcutaneous
 - oral

- Skin barrier repair
- Omega 3 fatty acids
- Antihistamines
- Corticosteroids
- Cyclosporine
 - Oral
 - Injectable?
- Oclacitinib?
- Maropitant?
- Gabapentin?

Skin Barrier Repair

- Defects in skin barrier allow increased percutaneous absorption of allergens
- Apply once a week for 4-8 weeks then q 14 days for maintenance



Omega 3 fatty acids for cats

- Reduce production of inflammatory mediators
- May take 8-12 weeks for full effect
- May be synergistic with other treatments to enable use of lower doses of steroids, antihistamines and CsA



Antihistamines for cats

- Chlorpheniramine
 - 2 mg/cat q 12-24 h
- Cetirizine (Zyrtec)
 - 2.5-5 mg/cat q 24 h
- Hydroxyzine
 - 5 mg/cat q 12 h
- Loratidine
 - 5 mg/cat q 12 h
- Amitriptyline
 - 2.5-5 mg/cat q 24 h



Corticosteroids for cats

- Prednisolone
 - 1.1-2.2 mg/kg q 24 h for first 2 wks then q 48 h and taper to 0.5 mg/kg
- Dexamethasone
 - 0.1-0.2 mg/kg q 24 h for first 2 wks then q 48-72 h and taper to 0.05 mg/kg
- If use for > 2 months monitor serum fructosamine



Cyclosporine in Cats

- Calcinurin inhibitor
- Precautions
 - Do not use in FeLV or FIV + cats
 - Indoor cats only and avoid feeding raw meats
- Feline dose for treatment of pruritus is 7 mg/kg PO once daily until itching is controlled and then q 48 h
- ?? 2.5 mg/kg SQ once daily (?? q 48 h)
- May want to monitor serum concentrations, trough level of 250-500 ng/mL recommended



Oclacitinib in Cats

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- Janus kinase inhibitor
 - Decreases production of IL-31
 - At higher doses may cause bone marrow suppression
- Precautions
 - Do not use in FeLV or FIV + cats
 - Indoor cats only and avoid feeding raw meats
- Half-life is shorter in cats than dogs may require long-term q 12 hour dosing
- Published study following K9 protocol
 - 5/12 non-flea, non-food allergic cats had good response

Maropitant

- Recommended dose for treatment of pruritus in cats is 1-2 mg/kg PO q 24 h
- May have increased efficacy when combined with chlorpheniramine 2 mg/cat q 12-24 h



Gabapentin for cats

- 10-15 mg/kg q 12 h
- ½ 100 mg capsule mixed with canned food
- ½ 100 mg capsule opened mix with dry food in ziploc bag "shake and feed"
- Reduce dose if too sleepy



Feline Demodicosis

- Demodex cati
- Demodex gatoi







Demodex gatoi

- Short bodied
- Found in the stratum corneum
- Contagious
- Pruritic
- May find mites on skin scrapings or fecal flotation



Demodex gatoi

- Distribution
 - Head, neck, elbows
 - Ventral abdomen
- Clinical signs
 - Alopecia
 - Scale, erythema
 - Excessive grooming



Demodex gatoi



Therapy

- Stop any glucocorticoid or progesterone tx
- Treat all in-contact animals
- Lime sulfur is traditional treatment of choice
 - improve in 3 weeks
 - treat for 4-6 weeks minimum
- Bravecto for cats: one treatment may be curative
- Ivermectin: 300 mcg/kg once weekly, variable response
- Advantage Multi (q 7-14 days, variable response)
- Amitraz: 125 ppm (1/2 normal strength)

Demodex cati

Localized follicular demodicosis

- Rare condition
- Eyelids, periocular, head, neck
- Differential for feline acne
- Usually responsive to lime sulfur or other mild parasiticides
- Often self-limiting



Demodex cati



Generalized follicular demodicosis

- Very rare
- Siamese and Burmese at risk
- Usually have an underlying condition
 - FIV, FeLV, Diabetes Mellitus, Bowen's disease

Demodex cati



Treatment: generally much easier than K9

- Manage pyoderma
- Lime sulfur dip weekly
- Ivermectin 300 mcg/kg wkly + Lime sulfur dips
- Bravecto for cats should be curative
- Amitraz at 125 ppm (1/2 strength)

Feline Symmetrical Alopecia







Feline Symmetrical Alopecia and Dermatitis

Differential Diagnoses

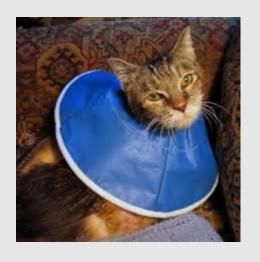
- Psychogenic alopecia
- Allergies food, flea, environmental (atopy)
- Ectoparasites fleas, Demodex gatoi
- Dermatophytes
- Endocrinopathies
- Telogen /Anagen defluxion
- Feline paraneoplastic alopecia (pancreatic, hepatic or thymic tumor)
- Cutaneous T-cell lymphoma

Feline Symmetric Alopecia Management

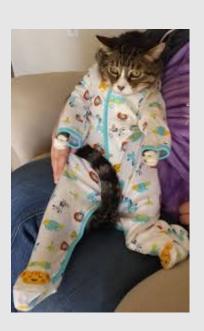
Identify and treat cause

- Skin scrapings & fecal examination
- Flea control trial
- Lime sulfur or Bravecto treatment trial
- Hypoallergenic Food trial
- Intradermal allergy test or serum IgE testing
- Cone or bodysuit trial
- Skin biopsies
- Thoracic radiographs + abdominal ultrasound









- Associated with pancreatic adenocarcinoma and less often bile duct or hepatic carcinoma
- Older cats
- Sudden onset of malaise and hair loss
- Marked exfoliation of hair
- Shiny appearance to skin and footpads















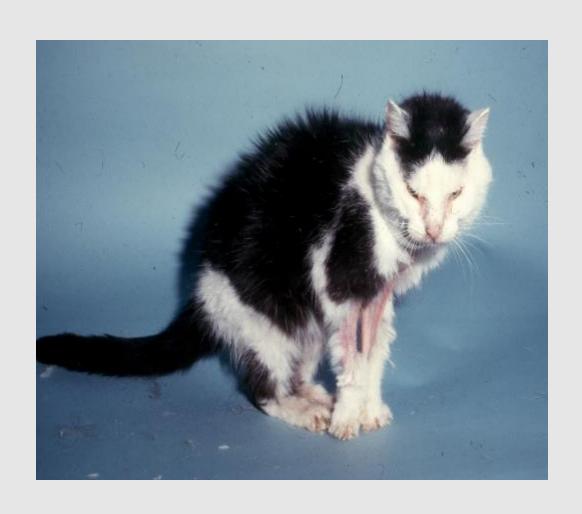
Neoplastic/paraneoplastic disorders with scaling



Feline paraneoplastic alopecia

















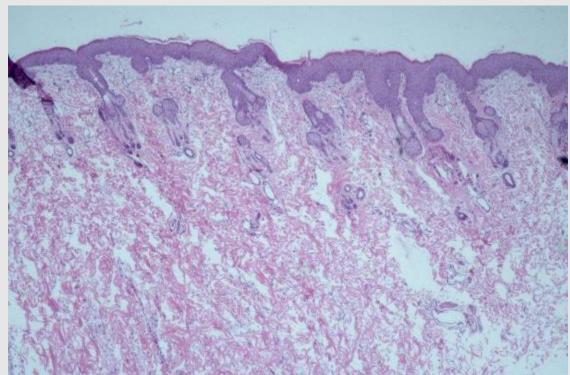




- Differential diagnosis
 - Feline hyperadrenocorticism
 - Feline skin fragility syndrome
 - Feline hyperthyroidism
 - Telogen/anagen defluxion
 - Feline thymoma
 - Metabolic epidermal necrosis
 - Alopecia areata
 - Telogen effluvium
 - Self-induced alopecia (feline symmetric alopecia)

- Diagnosis
 - Rule out other diseases (thyroid and adrenal function tests)
 - Skin biopsies: miniaturization of hair follicles

 Abdominal ultrasonography—may find pancreatic or hepatic tumors



Exfoliative dermatitis associated with thymoma

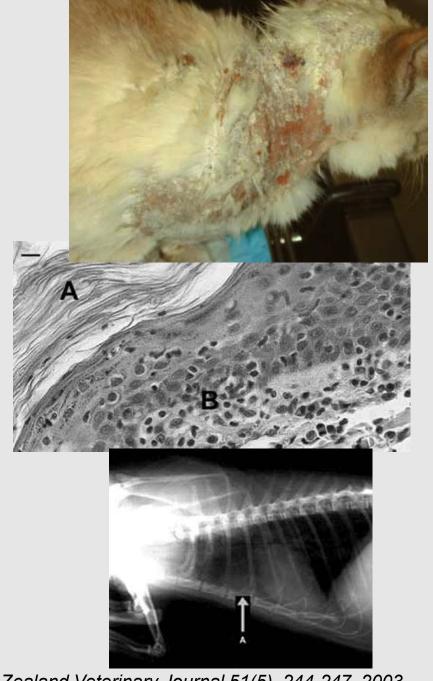






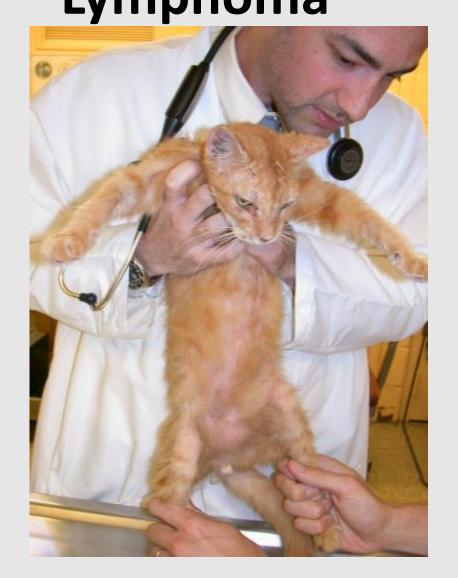
Feline Thymoma

- Reported cases have had generalized erythematous dermatitis
- Skin is thickened with cracks and fissures
- Hair coat is scurfy and scaly
- Skin biopsies show lymphocytic interface dermatitis
- Thoracic radiographs consistent with thymoma
- Surgical removal usually curative



New Zealand Veterinary Journal 51(5), 244-247, 2003

Feline Cutaneous T-cell Lymphoma



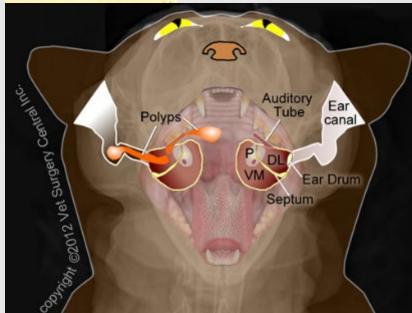




Ear disease in cats

- Otodectes
- Nasopharyngeal polyps
- Apocrine gland cystadenomatosis
- Otitis secondary to allergies
- Immune-mediated otitis
- Proliferative necrotizing otitis
- Feline solar dermatitis





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