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

- 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
Feline Paraneoplastic Alopecia

- 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
Feline Paraneoplastic Alopecia
Feline Paraneoplastic Alopecia
Neoplastic/paraneoplastic disorders with scaling

Feline paraneoplastic alopecia
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- 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)
Feline Paraneoplastic 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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Questions?
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