

Feline Allergic Skin Disease and Inflammatory Pretenders



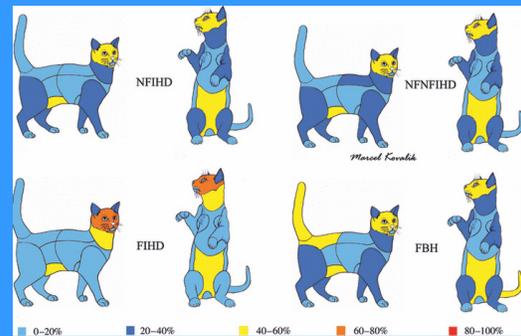
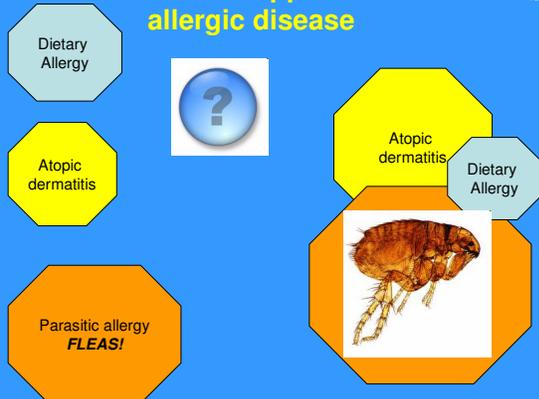
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Bottom line approach to the itchy cat

1. Determine if the disease is allergic or non-allergic. **Other stuff!**
2. If it is allergic, and can I find and eliminate the cause?
 1. Parasitic allergy-fleas, mites, mosquitoes.
 2. Dietary allergy and reactions.
3. If atopic dermatitis by logical clinical exclusion, manage for life.

Clinical approach to allergic disease



NFIHD non food induced hypersensitivity dermatitis;
 NFNFIHD, non flea, non food induced hypersensitivity dermatitis;
 FIHD, food induced hypersensitivity dermatitis;
 FBH, flea bite hypersensitivity. Hobi et al (2011)

Reaction patterns to allergy



- Miliary Dermatitis
- Allergic Alopecia – Pruritus
- Eosinophilic plaque
- Eosinophilic Granuloma
- "Head and Neck Pruritus"
- Linear Granuloma
- Uricaria Pigmentosa

**All have similar etiologies
Similar diagnostic strategy
Similar therapeutics**

Hnilica 2009

Other Parasitic Diseases-mites

Notoedres
Regional
incidence



D. gatoi pruritic.
Incidence in Australia very low but elsewhere more widespread. Not easy to find

D. cati most commonly associated with FIV infection but exclusively.

Mosquito bite hypersensitivity

- Papules plus or minus necrosis
- Nose, ears, footpads
- Steroid responsive
- Diagnose by confinement



Vetbook.org

Head and Neck Self-mutilation

- Claws are weapons
- Severe secondary infections
- In acute cases will need:
 - Antibiotics (topical and systemic)
 - Elizabethan collar or bandages
 - Corticosteroids (topical and systemic)



Eosinophilic plaque



- Raised red areas with eroded surface



Linear Granuloma



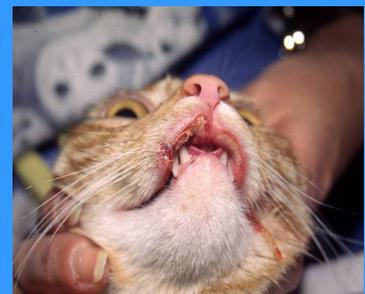
Eosinophilic Granuloma complex



- All are dermatology cases
- Need to be differentiated from:
 - Tumours
 - Infectious granulomas

Rodent Ulcer

- Starts over canine teeth
- Some cases respond well to antibiotics
- Doxycycline is immunomodulatory



Urticaria pigmentosa

- Rex and Sphinx cats
- Nodular mast cell and eosinophil rich
- Breed specific reaction pattern



Malassezia in cats

- Rex and Sphinx predisposed
- Primary disease or secondary to allergy

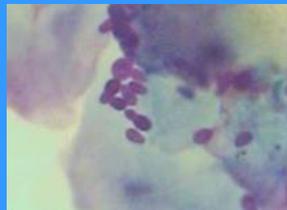
Photos Dr S. Ahman



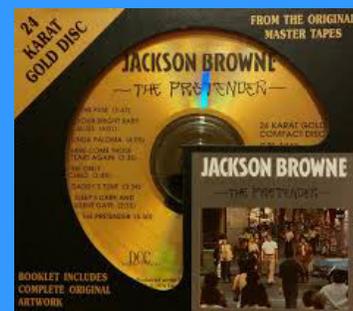
Host	Host	Host
Serial Port Profile	Serial Port Profile	GATT
RFCOMM Protocol	RFCOMM Protocol	ATT
L2CAP	L2CAP	L2CAP
HCI	HCI	HCI
Link Manager	Link Manager	Link Layer

Options for Malassezia treatment and control

- Chlorhexidine and miconazole shampoos
- Topical miconazole (Daktarin ®), daily to treat, 2-3x week to hold
- Hydrozole ® Clotrimazole and hydrocortisone
- Nystatin topically if azole resistance suspected
- Itraconazole (Sporonox ®) 5-7mg/kg daily or 7 days on/7 days off for 6 weeks
- 2% acetic acid wipes or footbaths
- NO ketaconazole



Pretenders- Diseases mimicking allergy in cats



Dermatophytes

Caution

- In cats, dermatophytosis may present as a pruritic dermatitis. Only 50% of *M. canis* strains are Wood's Light positive.



Don't get caught
Toothbrush test
all suspect cats

Dermatophyte mimicking allergy



Psychogenic self-mutilation



- Vastly over diagnosed
- All cats have some stress
- Detailed history
- Refractory to high-dose prednisolone
- Parasite free
- No response to diet trial

Feline idiopathic ulcerative dermatitis/dermatosis



- Most common site dorsal neck
- Ulcerative and pruritic
- Distinctive histopathology
- Poorly understood disease

Wide variety of described treatments

- Oral cyclosporine, oclacitinib, topical tacrolimus
- Glucocorticoids including dexamethasone, maropitant
- Amitriptyline, topiramate, gabapentin
- Antibiotics, silver sulfadiazine).

Lesions resembling eosinophilic granuloma



Feline mast cell tumours



Alternaria infection-deep fungal

Nasal squamous cell carcinoma



Feline Herpes Virus Dermatitis

- The virus lies dormant in the ganglia of the trigeminal nerve
- Activated by stress

Clinical picture

- The history may include episodes of upper respiratory or conjunctival disease
- Corticosteroid use => a marked exacerbation
- Ulceration** and scar formation mainly of the head and nose but in a few cases may involve other regions of the body



Feline Herpes Virus Dermatitis Diagnosis and Treatment

- Differentiate from:
 - Eosinophilic granuloma
 - Neoplastic disease
 - Infectious disease (fungal, mycobacterial)
 - Mosquito bite hypersensitivity
- Histopathology may show eosinophils and no inclusion bodies. Choose non-ulcerated skin to biopsy.
- Tissue PCR has variable sensitivity and specificity.
- Immunohistochemistry is more reliable
- Response to famcyclovir. Doses reported 40-90mg/kg 2-3x day. High doses may show more rapid response
- L-lysine (?)

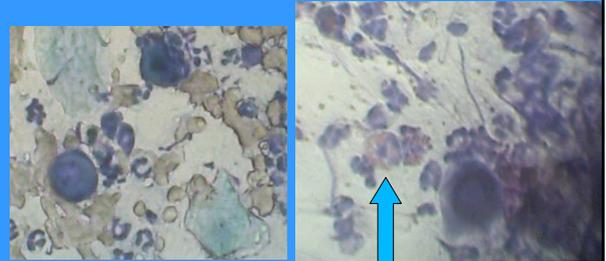
Pemphigus Foliaceus



- Yellow crusts
- Pustules
- “Weird” symmetrical lesions
- Cheesy paronychia



Pemphigus Cytology Confirmation Histopathology



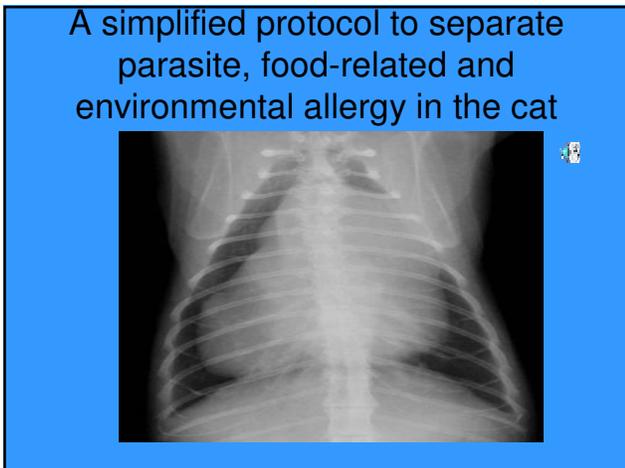
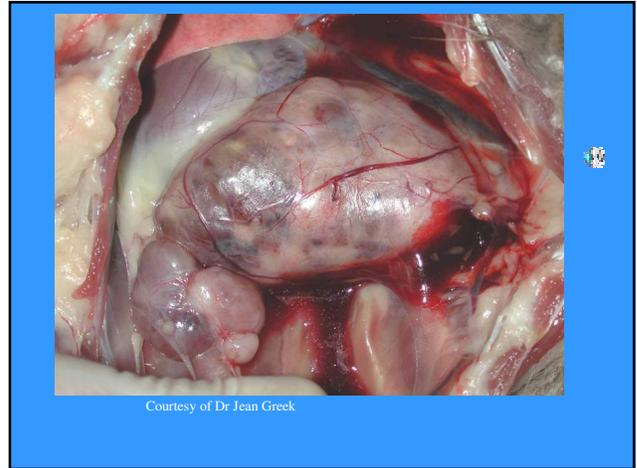
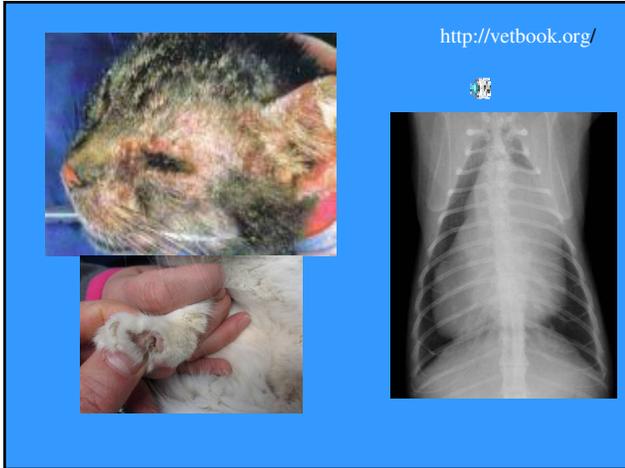
Eosinophils

FIV dermatitis, Demodex cati and squamous cell carcinoma of the nose



Feline (thymoma-associated) exfoliative dermatitis

- Scaling disorders in the cat are uncommon
- Older cats. Mechanism is unknown.
- Hydropic degeneration of basal keratinocytes, lymphocytic mural folliculitis and drastic decrease in sebaceous glands. Severe scaling and alopecia with nonpruritic erythema
- Waxy debris between digits, in nail beds, ears and on face
- Pruritus may develop if secondary bacteria or Malassezia
- Diagnosis is by skin biopsy and identification of a thymic mass.
- Cure if benign thymoma is completely removed
- Non thymoma associated exfoliative dermatitis recognised with identical lesions. Steroid/cyclosporine responsive



- ### First Visit 45-60mins
- ✓ Full history, examination, scrapings, tapes, Wood's light
 - ✓ Make sure you are not dealing with non-allergic disease
 - ✓ Stop severe self-mutilation
 - ✓ Treat active infections
 - ✓ Fungal toothbrush culture
 - ✓ Parasite control trial **Fluralaner** Bravecto spot on
 - ✓ Begin diet elimination trial if NON Seasonal

Hydrolysed diets and dietary elimination trials

- The degree of hydrolysis cannot guarantee an absence of intact allergens.
- Significant proportion of cats sensitized to the base proteins will still react adversely to the hydrolysed diet.
- The limited number of studies to date point to reduced, but not eliminated allergenicity of many hydrolysate-based commercial diets.
- **The optimal elimination diet remains a home cooked novel protein / carbohydrate diet fed for a period of 6-10 weeks or Royal Canin ANALERGENIC.**

Time Lines for diagnosis

Topical fluralaner (Bravecto R)

Manage infections

Diet elimination trial **6-8 weeks**

Pred 5-10mg in pulses as needed for self mutilation

10-14 days

Pred dependent at 7 weeks **ATOPIC**

Pred free at 7 weeks **PARASITIC FOOD**

SEPARATE BY RECHALLENGE

Thank you

PART 2

LONG TERM
MANAGEMENT
OF THE
ENVIRONMENTALLY
ALLERGIC CAT

