


Selected Cases  
of Rare  
Diseases in  
Cats

Brett Wildermuth  
DVM, BS (USA)  
Diplomate ACVD, ECVD

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Chilli-Pepper-Jones



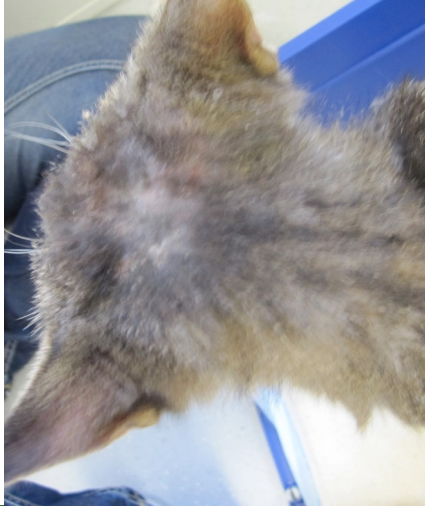
## Chilli-Pepper-Jones

- Signalment: 4 year old MC DSH
  - Adopted about 3 months ago
  - Lives in Germany, 100% Indoors
    - No travel outside of Germany
    - 2 other cats in the house with no pruritus
- Pruritus for years, non-seasonal
  - At least partially steroid responsive
    - Owner wants to avoid steroids
  - Did not improve with Ivermectin trial two times
- Novel ingredient diet trial Kangaroo for 3 months did not help
- Stool is normal, no vomiting or diarrhea
- PU/PD, appetite normal

## Day 1



Day 1



Day 1





## Chilli-Pepper-Jones

- Body Condition Score
  - 3/9
  - Questionable renomegaly
  - Bowel loops palpate normally
- Pruritus 8-9/10



## Chilli Day 1 Plan

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Differential Diagnosis               <ul style="list-style-type: none"> <li>○ Atopic Dermatitis</li> <li>○ Food Allergy</li> <li>○ PU/PD                   <ul style="list-style-type: none"> <li>○ Hyperthyroidism</li> <li>○ Renal Disease</li> </ul> </li> </ul> </li> <li>• Diagnostic Plan               <ul style="list-style-type: none"> <li>○ CBC, Chem Panel</li> <li>○ Thyroid Evaluation                   <ul style="list-style-type: none"> <li>○ Total T4, T4ED</li> </ul> </li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Therapy               <ul style="list-style-type: none"> <li>○ Atopica 7.5mg/kg once daily</li> <li>○ Marbofloxacin 4mg/kg once daily</li> <li>○ Repeat Diet trial with Horse</li> <li>○ Recheck in 2 weeks</li> </ul> </li> </ul> |
|--|---|

## Chilli Day 2 Results

- Thyroid results normal
  - Total T4 & T4 ED
- Chemistry Panel unremarkable
- CBC
  - Severe eosinophilia= 19,000
  - Lymphocytosis= 5,000
  - Neutrophilia= 5,000

## Day 15 Recheck 1 Chilli

- Taking the Atopica 7.5mg/kg once daily fine
- Pruritus is slightly improved
  - Pruritus 7/10
- Abdomen is much more erythematous
- Does not like to Horse wet food

Day 15



Day 15



## Day 15 New Finding

- Generalized Lymphadenopathy
  - Submandibular
  - Prescapular
  - Axillary
  - Inguinal
  - Popliteal



## Chilli Day 15

- Problem List?
- Differential Diagnoses?
- Diagnostic Plan?
- Therapeutic Plan?





## Chilli Day 15 Plan

- Repeat CBC
- Abdominal Ultrasound +/- aspiration if organomegaly is found
- Stop Atopica since lymphadenopathy is present
  - Infection, Neoplasia?
- Begin Prednisolon 1mg/kg once daily for 5 days, then every other day
- Recheck in 1 month, sooner if worsening



## Feline Eosinophilia

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• CBC               <ul style="list-style-type: none"> <li>○ Severe eosinophilia= 19,000</li> <li>○ Lymphocytosis= 5,000</li> <li>○ Neutrophilia= 5,000</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• 1. Internal/external parasites</li> <li>• 2. Allergic Dermatitis               <ul style="list-style-type: none"> <li>○ Flea: 13% to 20%</li> <li>○ Food: 20% to 50% of cats with food allergies</li> </ul> </li> <li>• 3. Feline Asthma</li> <li>• 4. Eosinophilic GI disease</li> <li>• 5. Hypereosinophilic syndrome/Leukemia?               <ul style="list-style-type: none"> <li>○ 3500-130 000/<math>\mu</math>L</li> </ul> </li> </ul> |
|---|---|



## Day 15 Lab Results

- CBC
  - Severe eosinophilia= 9,000
  - Lymphocytosis= 8,000
  - Neutrophilia= 7,000
- Telephone consultation
  - Restart Atopica 7.5mg/kg once daily since the eosinophils are substantially lower

## Day 20 lab Findings

- Abdominal Ultrasound
  - Renomegaly
  - Hepatomegaly
  - Intestinal lymphadenopathy
  - Splenomegaly
- Fine needle aspirate
  - Kidney, Intestinal lymph nodes, spleen:
    - Infiltrated with eosinophils
- Diagnosis?

**Hypereosinophilic Syndrome**


## Hypereosinophilic Syndrome

- Idiopathic syndrome in cats where excessive eosinophils are produced and infiltrate many organs
  - Skin
  - Intestine, Liver, Spleen, Kidneys, Heart
  - Circulation with eosinophils >5,000
- Clinical Signs depend on organs infiltrated
  - Pruritus, dermatitis, heart failure, GI signs, lethargy
- Differential diagnoses:
  - Eosinophilic Leukemia
  - All causes of eosinophilia especially internal/external parasites
  - Can be associated/triggered by with Lymphoma

## Hypereosinophilic Syndrome

- Therapy
  - No known effective long-term therapy
  - **Glucocorticoids**
  - **Atopica?**
  - **Chlorambucil?**
  - **Imatinib**
    - Tyrosine Kinase inhibitor (Gleevac)
      - Treatment of choice in human medicine
  - Anti IL-5 monoclonal antibody (Mepolizumab)
- Prognosis= guarded





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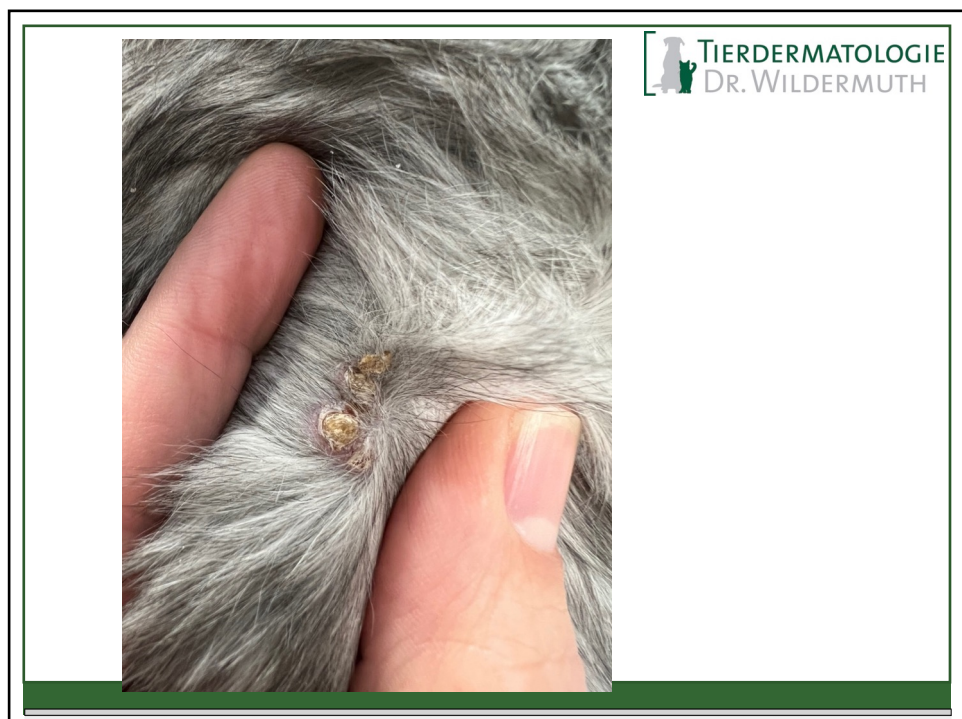
- Signalment: 4 year old FC Turkish Angora
  - Lives in Germany, 100% Indoors
  - No travel outside of Germany
- Crusts with licking (only these spots) for 1.5 years
  - Left side, shoulder abdomen, same lesions for longtime
  - Lives in an Elizabethan collar
  - No response to antibiotics, Elimination Diet



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## Plan?

- Biopsy – GD Deventer Holland
  - Dr. Nadine Meertens ECVD
- Therapy:
  - Betagalen Salbe 0,1% 2x daily
  - Decreases collagen production-> thin skin

## Feline Aquired Perforating Dermatitis

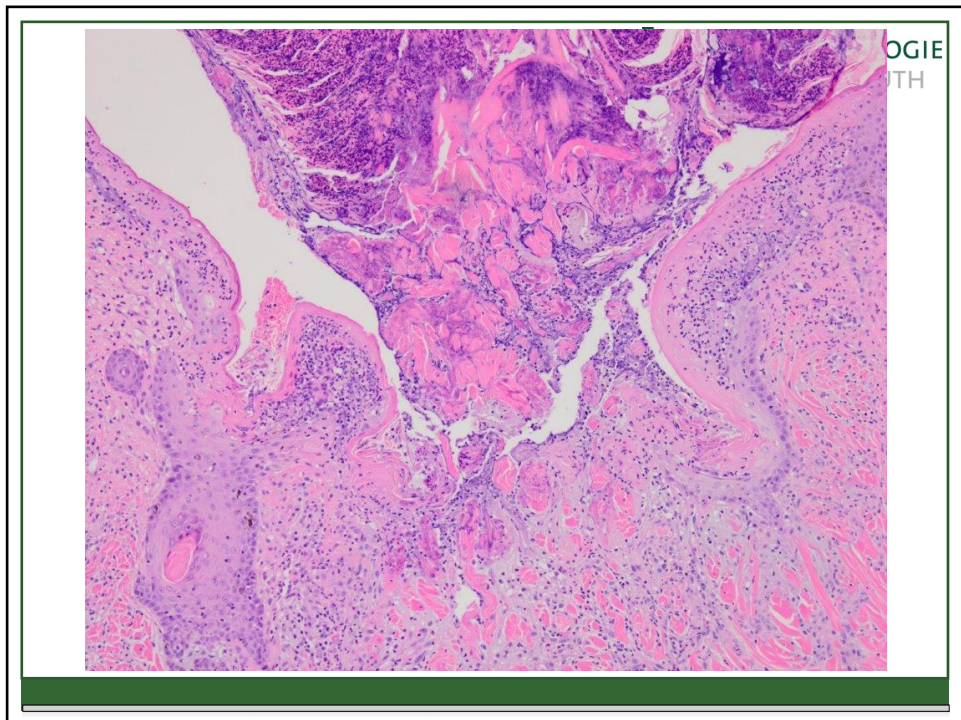
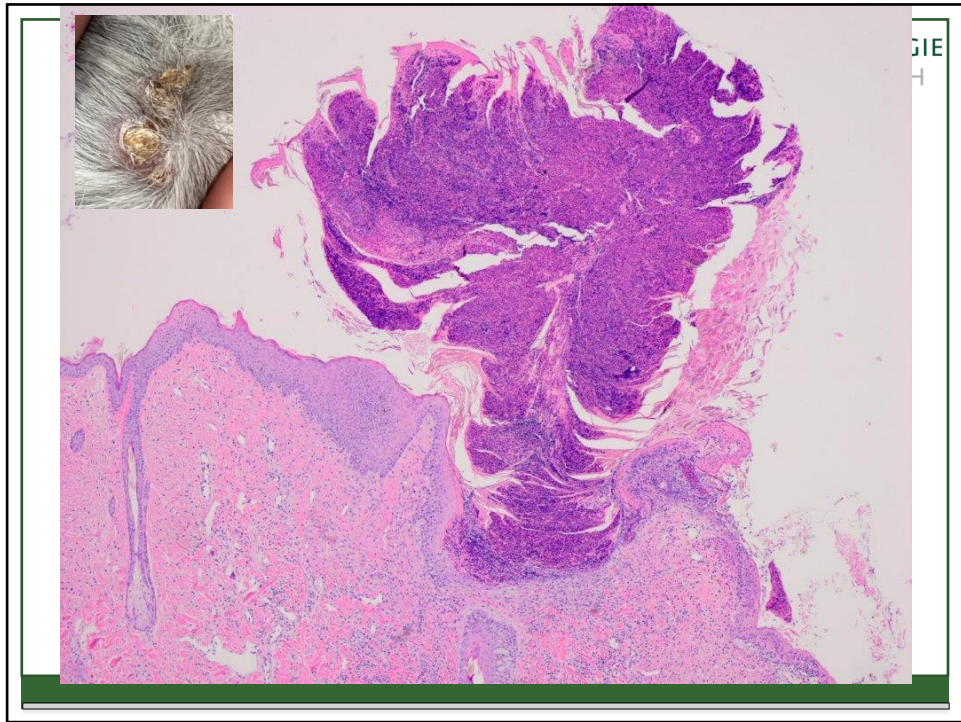
### Microscopical characteristics

Multifocal protruding massive columnar to conical crusts are confluent with the underlying dermis. They consist of nuclear debris, with variable numbers of degenerate-appearing collagen fibers often perpendicularly oriented to the epidermal surface ("vertical"). The epidermis is hyperplastic, with exocytosis of both neutrophils and eosinophils. The dermis shows superficial horizontal fibrosis especially adjacent to the protruding crusts. A focal extensive to perivascular-interstitial inflammatory infiltrate is present, consisting of mast cells, eosinophils, lymphocytes, plasma cells, macrophages and neutrophils. Locally, the infiltrate is dominated by eosinophils and eosinophilic furunculosis is present. The other hair follicles and adnexa are normally present, surrounded by variable numbers of perivascular inflammatory cells as described above. The eosinophils extend interstitially into the underlying subcutaneous fat tissue. No indications of fungi, yeast or mites in the routine HE stain.

PAS stain: negative.

### Conclusion

Skin biopsies: the findings are indeed consistent with feline acquired perforating dermatitis. An underlying (or additional) allergic dermatitis cannot be excluded as the findings overlap with those of allergic dermatitis.







*Demodex gatoi: 8 weeks Stronghold Plus (Selamectin, Sarolaner)*

