



A case of cutaneous adverse food reaction in a cat

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Case History

The cat, a 6 year old male neutered Domestic Short Hair, was acquired from a rescue centre and had been in the owner's possession for 1 year. Since this time the cat had suffered from recurrent episodes of otitis externa and was observed to overgroom his ventral abdomen. The cat's ears had been examined and flushed several times under general anaesthesia. Swabs submitted for bacterial and fungal cultures from the ears had failed to isolate any micro organisms. Treatment with acaricidal products, antibiotics and topical ear treatments had failed to resolve the aural irritation. The owner also reported that the cat frequently suffered from diarrhoea. He was an indoor cat. There was another cat in the household, but it was not displaying any clinical signs of dermatological or gastrointestinal disease. Both cats in the household received ectoparasite control every 4 weeks.

Physical examination

The cat was in good body condition and only dermatological abnormalities were noted.

Dermatological examination

The cat was observed to scratch his ears and shake his head throughout the consultation. The cat would also vocalize whilst scratching his ears. The pinnae were moderately erythematous and a small amount of brown exudate was present in the external ear canals. Otoscopic examination revealed moderately erythematous external ear canals containing some brown exudate, both tympanic membranes were seen. There was moderate dorsal scaling. The ventral abdomen and medial thighs were alopecic and mildly erythematous (see figure 1).



Figure 1: Dermatologic signs on the abdomen.

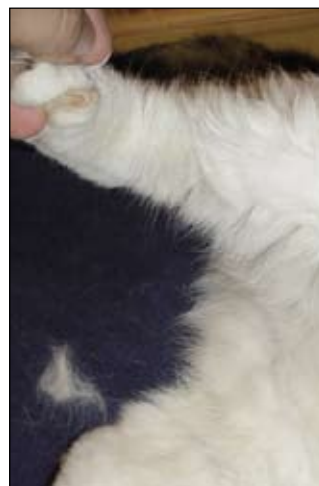


Figure 2: After 4 weeks of dietary trial.

Differential Diagnosis

Ectoparasite infestation (fleas, otodectes, cynotis), otitis externa, allergic skin disease (flea allergy, adverse food reaction, atopic dermatitis).

Test procedures

- Hair plucks from the ventral abdomen – revealed broken and chewed hairs
- Fungal culture - negative
- Coat brushing – unremarkable
- Cytology from both ears – occasional coccoid bacteria, cerumen, otherwise unremarkable.

Plan and investigation

With no evidence of microbial infection or ectoparasites to explain the cat's clinical signs, an underlying allergic skin disease was suspected. A home cooked dietary trial was performed with coley (white fish) for 8 weeks. It was felt in this case especially with his concurrent gastrointestinal signs that adverse food reaction needed to be excluded. During this time the rigorous flea control programme was maintained for both cats in the household. In view of the cat's severe aural discomfort a 7 day course of prednisolone (0.5mg/kg once daily) was prescribed to give the cat some relief from its clinical signs.

Re-examination

When the cat was re-examined 4 weeks later the owner reported that the cat had not suffered from any further episodes of diarrhoea. His otitis had resolved and he was no longer observed to overgroom. New hair growth was evident on his medial thighs and ventral abdomen (see figure 2).

Follow-up

The dietary trial was continued for a further 4 weeks, during which time the cat maintained asymptomatic. In order to prove that the resolution of clinical signs was attributable to the dietary trial the cat was then re-challenged with his original diet. The owner reported that within 24 hours of eating his normal cat food, the cat had diarrhoea, scratching at his ears continuously and was also observed to overgroom his ventral abdomen. When he was placed back onto the exclusion diet the cat dramatically improved and became asymptomatic again.

Discussion

The patient's improvement on the dietary trial, relapse with dietary re-challenge and resolution of signs following re-institution of the

exclusion diet enable a diagnosis of adverse food reaction to be made. A home cooked diet is not nutritionally complete and so a complete diet that did not cause a flare in clinical signs needed to be found. It was decided to feed the cat Purina Veterinary Diets HypoAllergenic HA Feline formula. This is a complete diet that would satisfy all the nutritional requirements of the patient. As the diet is a hydrolysed soy diet it should not cause any adverse reactions. The cat was a very fussy eater and so palatability also had to be considered. The cat was placed exclusively onto this diet which was gradually introduced over 2-3 days. The patients' skin and gastrointestinal signs remained well-controlled. To date the cat's skin disease has been successfully controlled with dietary management alone using the Purina Veterinary Diets HypoAllergenic HA Feline formula.

Conclusion

Cutaneous adverse food reaction is a potential cause for pruritic skin disease in cats and can be excluded by assessing the response to a dietary trial. The dietary trial can be performed using a home cooked diet or a hydrolysed protein diet. Although not used in this case for diagnosis a palatable hydrolysed protein diet, such as Purina Veterinary Diets HypoAllergenic HA Feline formula, is an acceptable way to diagnose cutaneous adverse food reaction in cats. The benefits of using a hydrolysed diet for diagnosis is that it can then also be used for long term management avoiding the need to then search for an alternative complete food after a home cooked dietary trial. Owner compliance is also better achieved using a hydrolysed diet compared to a home cooked dietary trial. ■



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