

Cutaneous adverse food reactions in the canine patient



DR. MICHAEL A. ROSSI, DVM, MNS
DIP. AMERICAN COLLEGE OF VETERINARY DERMATOLOGY
COASTAL VETERINARY DERMATOLOGY & EAR CLINIC
HOUSTON, TEXAS

Canine atopic dermatitis (cAD)



- Inflammatory and pruritic
- Typical clinical signs
- Immunoglobulin E (IgE)
- Multifaceted
- Genetic
- Frequent diagnosis



Nonenvironmental allergens and cAD



- Relationship of nonenvironmental allergens and cAD
 - Primarily food
- Hillier *et al.* (2001)
 - ACVD Task Force on canine atopic dermatitis
 - Is there a relationship between canine atopic dermatitis and cutaneous adverse food reactions?

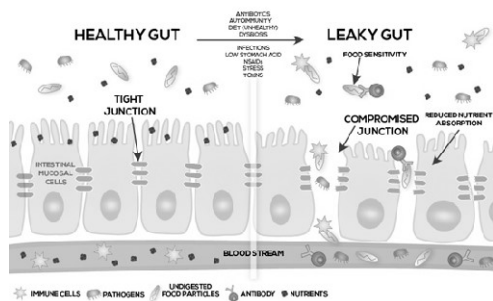
FIAD/AFR



- Food can trigger clinical cAD lesions
 - Canine AD *sensu lato*
- Indistinguishable from environmental disease
 - Pruritus (glucocorticoid responsive)
 - Distal limbs, face, ventrum, pinnae
 - Young age of onset
 - Pruritus of facial mucous membranes
- **May** have signs not typical of environmental
 - Poor response to glucocorticoids
 - Perianal pruritus
 - Atypical age of onset
 - GI issues

AFR....simplified!?

- Common cause of nonseasonal pruritus due to immunological and nonimmunological reactions
- Recent study with 259 dogs
 - 70.7% aeroallergen-induced
 - 25.1% food-induced
 - 4.2% combination
- Clinical signs between aeroallergen-induced and food-induced can be identical
 - Some evidence supports seasonal AFR



AFR clinical signs

- Clinical signs can mimic aeroallergen-induced atopic disease
- No known breed, sex, or age predilection
 - Labradors, miniature schnauzers, poodles, wheaten terriers, dalmations
 - 33-50% < 1 year of age
- No pathognomonic clinical signs for AFR

AFR clinical signs

- Primary lesions
 - Papules, macules, erythema, wheals, plaques
- Secondary lesions
 - Due to pruritus and self trauma
 - Ulcerations, excoriations, alopecia, etc, etc
- May have only one area affected or multiple areas
- Secondary infections are common



AFR clinical signs

- Systemic signs
 - GI disturbance in 10-15% of affected individuals
 - Vomiting
 - Diarrhea
 - Increased bowel movements
 - Increased flatulence
 - Tenesmus
 - Fecal mucus and blood

Diagnosing AFR



- Difficult and frustrating for owners!
- Long list of differentials
- Gold standard
 - 8-12 week elimination diet
 - Provocative exposure testing
- Why so long?!?
 - Rosser EJ (1993) - Diagnosis of food allergies in dogs
 - × 1-3 weeks for 13 dogs
 - × 4-6 weeks for 25 dogs
 - × 7-8 weeks for 10 dogs
 - × 9-10 weeks for 3 dogs

Diagnosing AFR

- Pay attention to dietary history when prescribing diet trial
- Novel is key!
- Commercially prepared “hypoallergenic” diets
- Home-cooked diets can be very beneficial
- None of the diets are 100% effective

Managing AFR

- Do we leave patients on novel protein diets long-term?
 - www.balanceit.com
 - www.petdiets.com



- Diet challenges
 - Old, maintenance diet challenge
 - Individual ingredient challenges



- Probiotics can be very useful in some patients
- Heart worm and flea preventatives?

Managing AFR

- Avoid offending allergens
 - Balanced diet is important!
- Use antipruritic and antimicrobial therapy when relapses occur
 - May or may not be glucocorticoid responsive
 - May respond to Atopica, but poor choice
 - Apoquel may be beneficial
 - Cytopoint may also be a poor choice

Summary

- AFR is a relatively common cause of nonseasonal pruritus in canine patients
- Good data supporting a specific immunological basis for the disease is lacking
- Proteins are the most likely culprits
- Novel protein diet trial of appropriate length
- Control acute flares and secondary infections
- There **will** be bumps in the road!

Questions?