<u>ALLERGY- ATOPIC DERMATITIS (POLLENS OR CONTACT)</u>

Dogs with atopic dermatitis often have concurrent allergies and are prone to relapsing skin and ear infections, which significantly contribute to their discomfort level. Atopic dermatitis is caused by inhaled or absorbed allergens and concurrent allergies include those to flea bites. Management of both secondary infections and concurrent allergies is crucial to reduce pruritis. A combination of several systemic and topical therapies may be needed to control clinical signs. Much research has been done in recent years to identify effective and safe alternative treatments.

The pathogenesis of canine atopic dermatitis has not been established completely. Dogs absorb pollens through the skin and mucous membranes of the nose. Generally treatment involves:

- 1. Frequent bathing- oatmeal based shampoos and conditioners are soothing.
- 2. Controlling parasites such as fleas with products such as Advantage, Frontline or Program.
- 3. Modifying the diet to a hypoallergenic or single source of protein and carbohydrate like fish and potato or Z/D from Science Diet.
- 4. Using food additives such as fatty acids with omega 3 & 6 like Derm Caps.
- 5. Medications
 - Short term- injections of steroids to get control, with oral antibiotics to clear up skin infections and topical ointments to ears or spray for skin.
 - Long term- antihistamines, which are better for prevention than control. There are 3 common choices; usually given orally three times a day and one may work better than another for an individual. Cortisone(pred) we try to limit to 4-5 months per year given every other day (Monday-Wednesday-Friday)

Threshold theory

It takes a combined amount of stimuli from various sources to cause red skin and itching. The threshold varies with each patient. Stimuli can include pollen, fleas, food hypersensitivity, bacterial or fungal infections and/or low essential oils. All contribute to the total

Allergies usually begin between 1 and 3 years old and progressive worsening is typical. Allergies begin by being seasonal but become year round over time. The face, feet, ears, armpits and groin are commonly affected.

Testing is done by a Veterinary Dermatologist (intradermal) or by blood test (which is questionable). Desensitization with a series of weekly injections is difficult and takes many months. Other choices in treatment include:

- > Cyclosporin works but is expensive
- > Other drugs can be used in conjunction with antihistamines such as:
 - Misoprostal
 - Phosphodiesterase
 - Leukotinene

Conclusion

Because atopic dermatitis is a life-long disease, long-term management is essential. All concurrent allergies and secondary infections should be addressed. Combination therapy is required in most cases to decrease the need for glucocorticoid therapy (steroids). Cyclosporin may represent an effective and safe alternative treatment for severe cases.