

10 Common Characteristics of Highly Successful Practices

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Who am I to decide:

I am a veterinary dermatologist currently enrolled in an MBA program. During the last year, I have had the wonderful opportunity to visit dozens of great practices (through the Novartis LEAD and Pfizer's Partners for Success programs). During these visits, I was able to learn many lessons from successful practices. In addition, I have listened to many practice managers, sales reps, and business people much smarter than myself. What I have learned is that there are common behaviors that are found in most of the truly great clinics: THIS is THAT list.

Immutable Lessons from the Road:

1. All staff members are motivated to solve specific client problems with practice specific protocols formulated to implement the "Best in Class" treatment options.
2. The mission statement includes a commitment to the highest quality of practice (not the cheapest).
3. Staff rounds are conducted to educate everyone in the clinic on the most common diseases and the practice's protocols treatment.
4. All staff provides consistent client education and treatment recommendations: the same message from the front to the back of the practice.
5. The doctors are removed from all treatment cost discussions: decisions are made based on medical appropriateness not negotiated based on cost.
6. Follow up counts.
7. Technicians are used to their full potential: great knowledge, tremendous ability, and enthusiasm produce an effective patient advocate that functions like a physician's assistant.
8. The receptions are recognized as the store front window of the practice.
9. Great emphasis is placed on disease prevention not just finding and fixing problems.
10. All employees play and hug the patients.

Practice Considerations

Some of the simplest issues can have dramatic impact.
The following are a few estimations of your client's experience.

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### Sight:

|                        |   |   |   |   |   |            |
|------------------------|---|---|---|---|---|------------|
| Initial impression:    | 1 | 2 | 3 | 4 | 5 | wow        |
| Educational materials: | 1 | 2 | 3 | 4 | 5 | impressive |
| Clutter:               | 1 | 2 | 3 | 4 | 5 | contained  |
| Cleanliness:           | 1 | 2 | 3 | 4 | 5 | immaculate |

### Sounds:

|                       |   |   |   |   |   |         |
|-----------------------|---|---|---|---|---|---------|
| Noise level:          | 1 | 2 | 3 | 4 | 5 | quite   |
| Phones:               | 1 | 2 | 3 | 4 | 5 | absent  |
| Ability to eavesdrop: | 1 | 2 | 3 | 4 | 5 | limited |

### Smell:

|                  |   |   |   |   |   |          |
|------------------|---|---|---|---|---|----------|
| Animal odor:     | 1 | 2 | 3 | 4 | 5 | none     |
| Fragrance level: | 1 | 2 | 3 | 4 | 5 | pleasant |

### Confidence Inspiring:

|             |   |   |   |   |   |              |
|-------------|---|---|---|---|---|--------------|
| Attire:     | 1 | 2 | 3 | 4 | 5 | professional |
| Lobby:      | 1 | 2 | 3 | 4 | 5 | impressive   |
| Exam rooms: | 1 | 2 | 3 | 4 | 5 | functional   |

## Dermatology Fact Sheet

What are the Infections and Why are they there?

The 10 most common skin patterns in dogs with skin disease are:

Folliculitis, Pododermatitis, Otitis, Yeast/Malassezia dermatitis  
Pruritus, Non-pruritic alopecia,  
Autoimmune disease, keratinization defects, lump/bumps/draining tracts,  
Weirdopathies.

All secondary infections of the skin and ears are triggered by allergies or endocrine disease causing changes in the normal structure and function of the skin (glands, thickness, turnover time, secretions, acidity, saltiness, dryness, IgA levels, temperature, etc)

The infectious causes of folliculitis are bacterial pyoderma, dermatophyte, and demodicosis.

Folliculitis looks like a mosquito bite rash (papular rash) with hair loss and crusting.

Severe folliculitis may result in ruptured follicles (furunculosis) and cellulitis.

Chin pyoderma and chin acne in dogs are usually caused by ingrown hairs.

Yeast dermatitis is caused by malassezia sp. and triggered by allergies or endocrine disease.

Yeast dermatitis looks like thickened lichenified skin - elephant skin in large plaques and smells like Fritos.

Yeast infections are usually in moist areas - arm pits, ventral neck, interdigital, inguinal skin and ears.

Eye margin dermatitis (blepharitis) is usually caused by yeast dermatitis.

Simple uninfected allergy patients will typically be below a 5 on the 0 - 10 itch scale.

Secondary infections cause the itch level to increase above 5 on the 0 - 10 itch scale.

Dogs with a 10 on the 0 - 10 itch scale often have yeast, scabies, or insect/flea infections.

Skin infection treatment duration is based on the typical epidermal turn-over time which is 21-28 days.

Most good skin antibiotics start with a "c" - cephalexin, Clavamoc, clindamycin, cefpodoxime.

The most common risk factor leading to MRStaph (multi-drug resistant Staph) is the use of fluoroquinolone antibiotics.

Cephalexin administered with ketoconazole makes dogs vomit.

Ketoconazole is the longest lasting anti-fungal drug in the glands and skin.

Terbinafine is the best anti-fungal drug for dermatophytes.

*Microsporum canis* is usually from cats: *M. gypsum* and *Trichophyton mentagrophytes* are from soil or rodents.

General body pruritus is caused by atopy, food allergy or scabies.

Allergies are associated with increased IL-4 which increases Th2 lymphocytes and thus increases in IgE, mast cells, eosinophils and the chemicals these cells release.

The immune response is predominantly either Th1 cells (IgG, IgM, Neutrophils, macrophages) or Th2 cells (IgE, mast cells, eosinophils).

Foot licking is usually associated by atopy.

Lumbar dermatitis is usually caused by insect (mosquito) and flea allergy.

Perianal dermatitis and butt scooting are usually associated by food allergy.

Hot spots (pyotraumatic dermatitis) are caused by insect bites (fleas or mosquitoes usually).

50% of allergic dogs do not sleep through the night and itch.

Acral lick granulomas are usually caused by a neuropathy and not allergy.

Atopy should be treated with pollen avoidance, antihistamines, Cytopoint and Allergy vaccine.

Food allergic dogs should avoid all beef, dairy and chicken.

Cytopoint blocks only IL-31 while Apoquel blocks IL-31 and IL-2, TNF, EPO and more.

Steroids and Apoquel are the only drugs that can cause Demodicosis.

Apoquel has a 10% tumor risk in dogs.

Isoxazolines are the safest and best class of parasiticides and are the treatment of choice for Demodicosis and Insect allergies.

Sarcoptiform mites have round bodies and stubby legs and are often contagious and have a 21 day life cycle.

The only disease that causes a pinal-pedal reflex is scabies.

Lumps Bumps and Draining tracts are caused by infections, neoplasia, or immune mediated granulomas.

The best way to diagnose the cause of Lumps Bumps and Draining tracts is to perform cytology, DNA PCR or cultures, and biopsies.

Common infectious causes of Lumps Bumps and Draining tracts are staph, demodex, nocardia, mycobacterium, actinomyces, and deep fungal infections.

Big dogs usually get hypothyroidism (20%) and small dogs get Cushing's (50%).

Melatonin is the only safe treatment for Cushing's and follicular dysplasia/arrest.

Otitis is usually triggered by allergies or endocrine disease and NOT swimming or conformation.

Ear cleaning and flushes should be used in the clinic and not sent home.

Otitis should be treated with multimodal medications either every 1-3 days with short acting meds or every 1-2 weeks with long-acting medications.

Most allergic otitis starts as a sterile inflamed ear and over time developed a staph or yeast infection with a waxy exudate.

A purulent ear exudate (pus) is associated with mixed infection with Pseudomonas, proteus, staph and possible yeast. Pseudomonas otitis is caused by recurrent-episodic otitis when the treatment is started and stopped multiple times.

Otitis should be prevented by controlling the triggering primary disease and multimodal medications used every 3-7 days with short acting meds or every 2-3 weeks with long-acting medications.

Long-term otitis prevention does not lead to Pseudomonas otitis.

Ototoxicity (hearing loss or neuro signs) are extremely rare (1 in 10,000) and happen regardless of the tympanic membrane being intact or ruptured. Thus the treatment for otitis is the same regardless of the ear-drum status.

Autoimmune skin disease (Pemphigus and Lupus) usually (90%) cause lesions on the nasal planet, ear pinna, and foot pads (PPP) due to the velcro like proteins that hold the skin together being targeted by the immune system.

Autoimmune diseases are diagnoses based on clinical pattern, acantholytic cells on cytology, and skin biopsies.

Skin diseases associated with oral erosions or ulcers are BAD and usually caused by Pemphigus vulgarism, Lupus, drug reactions, or Cutaneous lymphoma (mycosis fungoides)

The treatment for autoimmune skin diseases consist of normalizing the skin and glands and immune modulating and suppressing therapies: baths, Vit A, Omega 3 FA, doxy/tetracycline, niacinamide, UV light, tacrolimus, topical steroids, Atopica, Apoquel, oral steroids, azathiaprine, chlorambucil, lomustine, dapsone, mycophenolate mofetil, steroid IV infusions.

Follicular casts are always associated with keratinization defects like sebaceous adenitis and Cocker seborrhea and Vitamin A is the best safest therapy.

Vitamin A therapy helps normalize the skin and ear glands and the epidermal turn-over time.

The most common skin tumors are sebaceous adenomas, follicular cysts, skin tags (acrocodons) apocrine cysts, lipoma, fibroma, hemangioma, melanocytoma, and mast cell tumors.

The 5 most common causes of round-cell tumors are lymphoma, mast cell, melanoma, histiocytoma, and TVT.

Acantholytic associated with pemphigus and look like round-cell tumor cytology but are from surface samples and not fine-needle aspirates.

# SMALL ANIMAL DERMATOLOGY

A COLOR ATLAS AND THERAPEUTIC GUIDE

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# Differential Diagnoses

- Essential Questions
- Ten Clinical Patterns
- What Are the Infections?
- Why Are They There?
- Differentials Based on Body Region
- Diseases Primarily Limited to the Face
- Diseases of Nasal Depigmentation
- Diseases with Oral Lesions
- Ear Margin Dermatitis
- Nasodigital Hyperkeratosis
- Interdigital Pododermatitis
- Diseases of the Claw
- Diseases of the Footpads
- Differentials Based on Primary and Secondary Lesions
- Vesicular and Pustular Diseases
- Erosive and Ulcerative Diseases
- Papules
- Miliary Dermatitis
- Plaques
- Follicular Casts
- Epidermal Collarettes
- Comedones
- Lichenification
- Inflammatory or Pruritic Alopecic Diseases
- Noninflammatory or Nonpruritic Alopecic Diseases
- Cellulitis and Draining Lesions
- Nodular Diseases
- Pruritic Diseases
- Seborrheic Diseases
- Hyperpigmentation
- Hypopigmentation
- Breed Predispositions to Select Skin Conditions in Dog and Cats

Almost all dermatology patients have a primary or underlying disease that causes secondary infections. These infections must be eliminated and prevented but will recur rapidly unless the primary disease is identified and controlled.

Most skin cases seen in a veterinary practice can be successfully managed if two essential questions can be answered: (1) What are the secondary infections? and (2) Why are these secondary infections there?

## Essential Questions

1. What are the infections?
  - Folliculitis
    - Pyoderma
    - *Demodex*
    - Dermatophyte
  - Pododermatitis
    - Bacterial
    - Yeast
  - Otitis
    - Bacterial
    - Yeast
  - *Malassezia* yeast dermatitis
2. Why are they there?
  - Allergies
    - Atopy
    - Food allergy
    - Scabies
  - Endocrinopathy
    - Hypothyroidism
    - Cushing's

After the origin of a patient's dermatosis is known, it is a simple matter of therapeutic follow-through to resolve the problem.

Recognition of basic patterns allows a practical approach to most of the common skin diseases.

## Ten Clinical Patterns

What are the secondary infections? (always secondary)

1. **Folliculitis:** Folliculitis is the most common "pattern" of disease mimicking other patterns. However, it is common for it to be concurrent with other disease patterns (e.g., yeast dermatitis). The *major* differentials to consider for folliculitis are superficial staphylococcal pyoderma or bacterial folliculitis, demodicosis, and dermatophytosis. Pyoderma is the mostly likely cause in the dog, with demodicosis a close second if not a concurrent factor. Juvenile-onset demodicosis may affect the patient in a symmetric fashion. A good rule of thumb is to consider all dermatologic patients to have folliculitis until proven otherwise and then search for predisposing underlying diseases (e.g., allergy, endocrinopathy, cornification disorder or defect).
2. **Pododermatitis:** Always scrape the dorsal pedal surface when it is alopecic because both demodicosis and allergic skin disease may cause pododermatitis; steroids are not appropriate for the former. Hemorrhagic bullae are manifestations of deep pyoderma; therefore, they should be cultured. A lesion on the paw pads is usually an indication to biopsy. P3 digit amputation is rarely needed to make a diagnosis of symmetric lupoid onychodystrophy because the history with typical clinical findings is sufficient for a firm tentative diagnosis.

- *Single paw*: trauma, foreign body, infection (e.g., bacteria, yeast), localized demodicosis, cutaneous horn, neoplasia, arteriovenous pedal fistula
  - *Multiple paws*: infection (e.g., bacteria, yeast, hookworms, distemper, leishmaniasis), generalized demodicosis, allergic skin disease, split paw pad disease, palmar or plantar interdigital comedones and follicular cysts, autoimmune- or immune-mediated dermatosis (e.g., pemphigus foliaceus, vasculitis, symmetric lupoid onychodystrophy or onychomadesis), dermatomyositis, metabolic dermatosis (e.g., hepatocutaneous syndrome, zinc-responsive dermatosis, nasodigital hyperkeratosis), and sometimes neoplasia (e.g., cutaneous lymphoma, subungual small cell carcinoma or melanoma in heavily pigmented dogs)
3. **Otitis**: Because the ear is just an extension of the skin, a good dermatologic examination of the skin may provide clues (other “patterns”) about potential causes of ear disease. Resolution of otitis externa is achievable if primary causes are identified and managed. Similarly, otic cytology should be used on every case to initially determine the infection(s) present, as well as monitor response to therapy during reexaminations. By and large, correctly administered topical antimicrobial treatments (volume and duration) are more effective for infected canals than systemic therapy. Rigid palpable canals (ossified) are usually beyond medical resolution and would be better removed (total ear canal ablation and bulla osteotomy).

#### Is the pinna or canal affected?

- *Pinnae*: trauma, aural hematoma, sarcoptic mange, fly bite or strike hypersensitivity, allergic skin or ear disease, ear margin seborrhea or dermatosis, vasculitis or other autoimmune dermatoses, neoplasia
  - *Otitis externa*: facets and differentials (chart below)
4. **Malassezia yeast dermatitis**: The pattern is characteristic of *Malassezia* yeast, but any chronic pruritic skin disorder may resemble it, including folliculitis (superficial pyoderma, demodicosis, dermatophytosis), ectoparasitism, and allergic skin disease. Yeast dermatitis is often overlooked as a cause of pruritic skin disease. The author’s favorite way to find yeast is with the use of acetate tape cytology. Just the finding of a single yeast from representative lesions is significant (yeast hypersensitivity?) and warrants topical or systemic (or both) treatment based on the severity of pruritus. However, if cytology is “negative” for yeast when confronted with this pattern, assume they are there, treat accordingly, and search for predisposing underlying diseases (e.g., allergy, endocrinopathy, cornification defect).

#### Why are they there? (the key to preventing relapse of infections)

5. **Pruritus (allergies, mites, fleas)**: When confronted with pruritus, *always* exclude infection and parasites first! Many times pruritus is reassessed after controlling for microorganisms before determining the “next step.” Atopic dermatitis (AD) is a clinical diagnosis based on the exclusion of other causes of pruritus; “allergy tests” *do not* diagnosis it. If you see pruritic erythroderma,

exfoliative dermatitis, plaques, nodules, depigmentation, +/- lesions affecting nonhaired skin, consider cutaneous T-cell lymphoma (CTCL) and biopsy.

#### Distribution patterns and differential diagnoses for pruritus:

- *Dorsum*: pediculosis, cheyletiellosis, flea allergy dermatitis (FAD), +/- AD in terriers
  - *Face, ears, paws, axillae, inguinum, and perineum*: cutaneous adverse food reaction (CAFR), AD
  - *Pinnal margins, elbows, hocks, and ventral trunk*: sarcoptic mange
  - *Rear or perineum*: anal sacculitis, trichuriasis, FAD, CAFR, AD, psychocutaneous disorder
  - *Sparsely haired body regions*: allergic contact dermatitis (rare)
6. **Nonpruritic alopecia (endocrine)**: *Always* exclude folliculitis when confronted with alopecia (especially when other typical lesions are present) because it is the most common reason for it and often a resultant feature of other diseases within the pattern of “nonpruritic symmetrical alopecia.” Consider an endocrinopathy as a cause of recurring infection when pruritus resolves with infection control. Exclude castration- or neuter-responsive dermatosis, hypothyroidism, and hyperadrenocorticism before considering alopecia X. Many alopecic conditions have breed predilections, so consult a text for a listing of these associations.
- *Endocrinopathy*: hypothyroidism, hyperadrenocorticism, sex hormone–related dermatoses
  - *Follicular dysplasias*: color dilution alopecia, black hair follicular alopecia, canine recurrent flank alopecia (CRFA), breed-related follicular alopecia
  - *Hair cycle arrest*: Alopecia X, CRFA, defluxions, canine pattern alopecia or baldness
7. **Autoimmune- or immune-mediated skin disease**: Hepatocutaneous syndrome, zinc-responsive dermatosis, dermatomyositis, eosinophilic dermatitis with edema (Well’s syndrome), mucocutaneous pyoderma, and some forms of dermatophytosis may mimic this pattern of disease. Skin biopsy is useful to correctly diagnose the disease so a reasonable prognosis can be offered to the client and a treatment plan tailored to the patient can be developed (some autoimmune- or immune-mediated diseases do not require systemic glucocorticoids).

#### Distribution patterns and differential diagnoses for autoimmune- or immune-mediated dermatoses:

- *Face, pinnae, or nasal planum*: pemphigus foliaceus, pemphigus erythematosus, discoid lupus erythematosus, vasculitis, uveodermatologic syndrome, drug reaction, vitiligo
  - *Oral cavity +/- other body areas*: pemphigus vulgaris, subepidermal blistering dermatosis, systemic lupus erythematosus, vasculitis, erythema multiforme, drug reaction
  - *Pads and elsewhere on the body*: basically any of the aforementioned diseases
8. **Keratinization defects**: Exclude *secondary* reasons for a scaling disorder before considering *primary* ones. Some hereditary cornification defects are tardive, not being



recognized until the dog is 2 to 5 years old. Follicular casts are typical of a cornification defect.

- **Primary scaling disorders:** primary seborrhea (usually of spaniels and terriers), ichthyosis, Schnauzer comedo syndrome, ear margin seborrhea or dermatosis, nasal parakeratosis of Labrador retrievers, tail gland hyperplasia, nasodigital hyperkeratosis
  - **Secondary scaling disorders:** environmental, nutritional, folliculitis, *Malassezia* dermatitis or otitis, ectoparasitism, leishmaniasis, allergic skin disease, endocrinopathy, follicular dysplasias, hair cycle arrest, sebaceous adenitis, autoimmune- or immune-mediated dermatoses, metabolic dermatoses (e.g., hepatocutaneous syndrome, zinc-responsive dermatosis, vitamin A-responsive dermatosis), neoplasia
- 9. Lumps, bumps, and draining tracts:** Wear gloves when confronted with this pattern of disease because some infectious agents are transmissible to people. Infectious etiologies must be excluded when these lesions are present. Acral lick dermatitis (lick granuloma) is a form of deep pyoderma; tissue culture (deep dermis with epidermis removed) is helpful.
- **Infectious inflammatory:** bacterial, atypical bacterial, mycobacterial, fungal, oomycete, parasite
  - **Noninfectious inflammatory:** cyst, xanthoma, hygroma, cutaneous histiocytosis, pyogranuloma or granuloma syndrome, sterile nodular panniculitis, perianal fistula
  - **Neoplasia:** benign, malignant
  - **Mineral deposition:** calcinosis circumscripta, calcinosis cutis
- 10. Weirdopathies:** Commonly, this pattern is an unusual manifestation of an aforementioned “pattern” or is formed by several overlapping ones. After “folliculitis” has been excluded, skin biopsy ( $\pm$  culture) is usually warranted when confronted with an “oddopathy.” Several skin biopsies of representative lesions will help better categorize the disease process—infectious, allergic, autoimmune- or immune-mediated, endocrine or follicular abnormality, cornification defect, congenital, or neoplasia—assuming the proper technique is used and the pathologist is provided a detailed history with clinical findings. Ideally, a dermatopathologist should be sought. Calcinosis cutis often appears as an oddopathy. A patient with an oddopathy might be best examined by a dermatologist.

## So, What Is the Solution?

A vast majority of dogs with allergy or endocrine disease have or will have a secondary bacterial or yeast infection. Yeast dermatitis is the most commonly missed diagnosis in general practice dermatology. Bacterial pyoderma is often identified but is usually mistreated with too low doses of antibiotics administered for too short a time. Otitis is now recognized and treated better than it was in years past; however, treatment for otitis that is based on actual documented organism types and relative counts on follow-up evaluations is a rare occurrence.

## What Are the Infections?

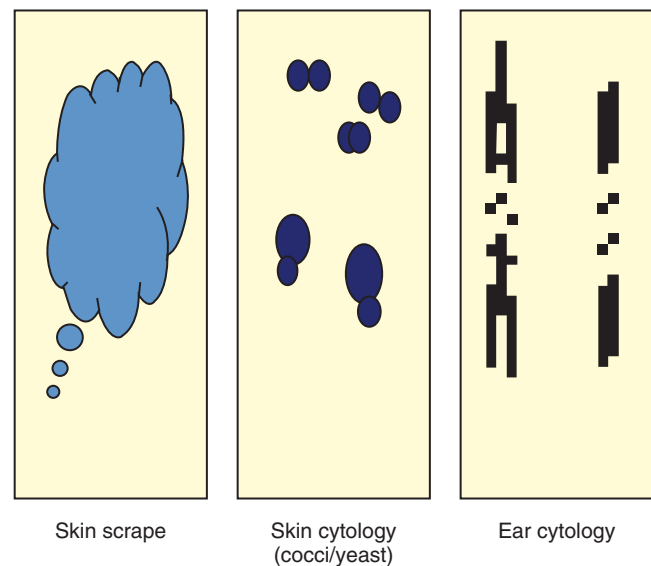
For every dermatitis case every time you evaluate the patient, ask yourself, “What are the infections?”

Unless you have microscopic vision, answering this question will require the use of cytology. Unfortunately, most general practices do not routinely perform skin and ear cytology for dermatitis; instead they rely on the doctor’s best guess. Sometimes this can be successful (even a broken clock is correct twice a day); however, a more precise method is available. Use of diarrhea and the fecal examination as a comparison and as a model for improvement works well because both skin cytology and fecal examinations involve the use of a microscope, can easily identify the type of infection, and can be performed by trained technical staff.

- So why does your clinic perform fecal examinations?
- When is a fecal examination performed (before the doctor’s examination or during)?
- Who performs the fecal examination?
- Does the clinic charge for the fecal examination?

The answers to these questions should be the same for skin cytology: The minimum dermatologic database (skin scrapings, impression smears, tape preps, and otic swabs).

The practical solution for determining the best method by which to answer the question, “What are the infections?” is to implement a minimum database infection screening procedure to be performed by the technician before the veterinarian examines the patient. Every dermatology patient should undergo otic cytology, skin cytology (an impression smear or a tape prep), and a skin scrape at every examination (initially and at every recheck visit). The **three-slide technique** (Figure 1-1) can be performed easily and interpreted by a technician before the doctor completes an evaluation, which is exactly how diarrhea and fecal examinations are handled in most clinics. Moving the cytologic evaluation to the beginning of the dermatology appointment and thereby empowering the technical staff to accomplish the evaluation optimizes the



**FIGURE 1-1 The Three-Slide Technique.** Skin scrapings, cutaneous cytology, and otic swabs.

dermatology appointment and provides essential information in the most efficient manner.

When an owner brings a pet into the clinic for a small hairless spot, it would be appropriate to question the necessity for an otic cytology even when there is no sign of otitis and when the hairless spot is the problem. However, the three-slide technique is most helpful in these exact types of cases. If focal pruritus occurs in a dog and the patient has a secondary otitis (which the technician identified during the infection screen), the veterinarian should more aggressively discuss this and work up the patient for possible allergy. If the patient did not have otitis, the pruritus could be minimized in the hope that it was a short-term problem that is likely to self-resolve.

Similarly, there is no excuse for mistreating a patient who has demodicosis. Lesions caused by demodicosis can look identical to folliculitis lesions caused by bacterial pyoderma and dermatophytosis. Clinical appearance is not an acceptable criterion for ruling in or ruling out demodicosis. When the technician performs a skin scrape as part of the infection screen, demodicosis can be identified and treated easily and accurately.

## Why Are They There?

Infections are always secondary to a primary disease; however, all too often, the patient is not evaluated or treated for the primary disease for three main reasons: (1) only the secondary infections are treated over and over again, (2) the nature of the allergy is confusing, and (3) cheap steroids that have delayed repercussions are accessible.

Why are the infections there? This question should be asked and answered for every dermatology patient if successful outcomes are to be achieved.

Most dermatology patients have allergy or endocrine disease. Through signalment, a good patient history, and recognition of unique patterns of lesions, a prioritized differential list can be formulated quickly.

By knowing the most unique and frequent symptoms associated with each allergic disease, an astute clinician can determine the most likely allergy with approximately 85% accuracy; this rate rivals many other diagnostic testing results for some of the most common assays.

For example, a dog that is foot licking is likely atopic. If the owner reports a seasonal pattern to the podopruiritus, then you have a reasonably accurate diagnosis—EASY.

**Atopy:** foot licking; seasonal; when pruritus first started, typically between 1 and 3 years of age

**Food allergy:** perianal dermatitis (erythema, alopecia, lichenification); gastrointestinal disease; younger than 1 year old or older than 5 years of age when started; German breeds

**Flea allergy:** dermatitis predominantly affecting the lumbar region (caudal to the last rib)

**Scabies:** positive pinnal-pedal reflex (ear scratch test)

**Hypothyroidism:** large-breed dog that is disproportionately obese for food intake and has a poor hair coat with areas of alopecia over areas of friction

**Cushing's disease:** patient with a long history of steroid abuse, or small-breed dog with polyphagia, polyuria (PU), and polydipsia (PD), and symmetrical alopecia



## AUTHOR'S NOTE

Could clinical dermatology really be this easy?

**Yes.** Unfortunately, most of us were taught dermatology from the perspective of a NASA engineer who is determined to address and eliminate every possible scenario regardless of how rare its occurrence. Based on any standard of logic, statistics, or common sense, the most likely disease should be addressed first. It is illogical to perform diagnostic tests or therapeutic trials for rare or unlikely diseases as part of the initial dermatologic workup, yet this is exactly how most veterinarians are taught to diagnose atopy: “a diagnosis of exclusion.” If a patient is seasonally foot licking, the most likely diagnosis is atopy.

**Optimizing owner understanding and compliance:** Much of the problem that veterinarians face when treating an allergic patient is the pet owner's lack of understanding and ability to adhere to long-term prevention and treatment protocols. There is great information available regarding cognitive psychology that can optimize the human factors that limit successful outcomes. Here are some suggestions:

1. Have the pet owner complete a patient history form. This allows the client to focus on the details of the skin disease and symptoms and primes the client to listen better and accept the diagnosis and information that will be provided by the veterinarian.
2. Try to avoid a rambling, stream-of-consciousness approach to the discussion of allergy. Many of us have an “automatic” allergy spiel that only confuses the client and does not focus on the specific problems of the individual patient.
3. Use simplified charts and handouts to organize the diagnosis and treatment phases of the allergy education discussion. These focus the educational message and improve the understanding of the client. Additionally, draw and write on these handouts and give them to the client to review later. This increases acceptance of the message and improves compliance with therapy.
4. Organize the diagnostic testing and treatment options into groups based on the severity of the patient and response to previous treatments (mild patients need a, b, c; moderately severe patients need d, e, f; and severe patients need g, h, i).
5. Assess the risk to the patient and family members for methicillin-resistant *Staphylococcus aureus* (MRS) infections. Families at risk for MRS contagion and zoonosis must be willing to accept aggressive medical management to reduce the risk. All three species of MRS can be transmitted from dogs to people and from people to dogs. If family members have a history of MRS, consider aggressively monitoring the patient with

cultures because dogs can acquire MRS from humans. If family members are immunosuppressed, monitor the patient for MRS *pseudintermedius* and MRS *schleiferi*, which can be a source of contagious infection to at-risk, immunosuppressed people. These patients

need the most aggressive diagnostic workup and treatments achievable to protect the entire family from contagion and zoonosis. In these families, avoid the use of steroids or fluoroquinolone antibiotics, which can increase the risk of MRS.

*Text continued on p. 12*

# Dermatology 101: A Pattern Approach to Clinical Dermatology

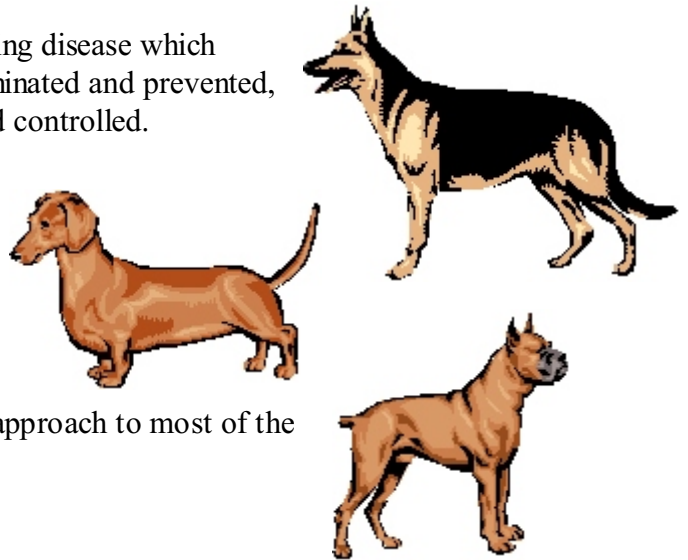
## What are the infections? and Why are they there?

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Almost all dermatology patients have a primary/underlying disease which causes secondary infections. The infections must be eliminated and prevented, but will recur unless the primary disease is identified and controlled.

Most skin cases seen in practice can be successfully managed if these 2 question can be answered. Once the etiology of a patients dermatosis is known, it is a simple matter of therapeutic followthrough to resolve the problem.

The recognition of the basic patterns allows a practical approach to most of the common skin diseases.



### 10 Clinical Patterns

**What are the infections?** *(Always secondary)*

1. Folliculitis
2. Pododermatitis
3. Otitis
4. Yeast Dermatitis

**Why are they there?** *(The key to preventing relapse of infections)*

5. Pruritus
6. Nonpruritic Alopecia (endocrine)
7. Autoimmune Skin Disease
8. Keratinization Defects

9. Lumps, Bumps, and Draining Tracts

10. Weirdopathies

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Case example: 2 year old male Labrador that has seasonal pruritus (foot licking) and a moth-eaten hair coat.

#### **What are the Infections?**

Folliculitis

*pyoderma, demodex, dermatophyte*

Pododermatitis

*bacterial, yeast*

Otitis

*bacterial, yeast*

Yeast dermatitis

#### **Why are they there?**

Allergies

Atopy

Food allergy

Scabies

Endocrinopathy

Hypothyroidism

Cushing's

require biopsy for identification of mites within the hair follicles. Hair plucks from an area of lesional skin may be used to help find follicular mites. This technique is especially helpful in areas or situations when a skin scrape would be difficult: around the eyes or excited puppies.

Regardless of the collection technique used, the entire slide should be searched for mites with the use of low power (usually

a 10× objective). A search of the entire slide ensures that if only one or two mites are present (as is typical of scabies infection), the user will likely find them. It may be helpful to lower the microscope condenser; this provides greater contrast to the mites, thereby enhancing their visibility. (One must be sure to raise the condenser before looking for cells or bacteria on stained slides.)

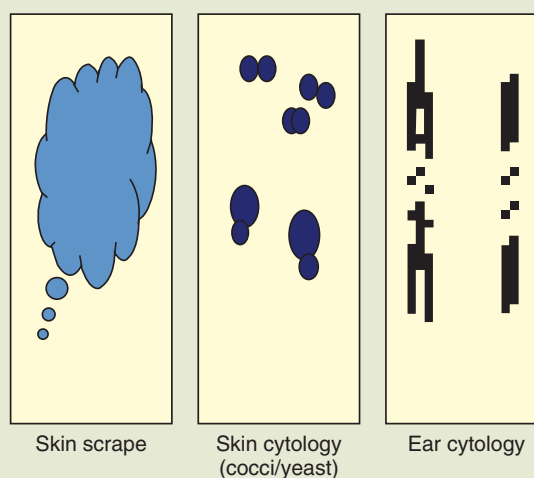
**BOX 2-1 What Are the Infections?**

For every dermatitis case, every time you evaluate the patient, ask yourself, “What are the infections?”

Using diarrhea and the microscopic fecal examination as a comparison works well because both skin cytology and fecal examinations involve the use of a microscope, can easily identify the type of infection, and can be performed by trained technical staff. So why does your clinic perform fecal examinations? When is a fecal examination performed (before the doctor’s examination)? Who performed the fecal examination? Does the clinic charge for the fecal examination? The answers to these questions should be the same for skin cytology (skin scrapings, impression smears, tape preps, and otic swabs).

The practical solution for determining the best method by which to answer the question, “What are the infections?” is to implement a minimum database “infection screening” procedure to be performed by the technician before the veterinarian examines the patient. Every dermatology patient should undergo otic cytology, skin cytology (an impression smear or a tape prep), and a skin scrape at every examination (initially and at every recheck visit). This three-slide technique can be performed easily

and interpreted by a technician before the doctor completes an evaluation, which is exactly how diarrhea cases and fecal examinations are handled in most clinics.



**FIGURE 2-1 The Three-Slide Technique.** Skin scrapes, cutaneous cytology, and otic swabs.

| TABLE 2-1 Diagnosing Common Cutaneous Parasites |                                                  |                                       |                                                                  |                                                     |
|-------------------------------------------------|--------------------------------------------------|---------------------------------------|------------------------------------------------------------------|-----------------------------------------------------|
| Mite                                            | Diagnostic Test                                  | Accuracy                              | Other Tests                                                      | Additional Tests                                    |
| <i>Demodex canis</i>                            | Deep scrape                                      | High                                  | Biopsies may be needed with extremely thickened lesions          |                                                     |
| <i>Demodex cati</i>                             | Deep scrape                                      | High                                  |                                                                  |                                                     |
| <i>Demodex gatoi</i>                            | Superficial scrape                               | Low<br>Mites may be difficult to find | Lime sulfur dip trial, response to treatment                     |                                                     |
| <i>Sarcoptes</i>                                | Superficial scrape                               | Low (only 20%)                        | Response to treatment                                            | Pinnal-pedal reflex (80%)                           |
| <i>Otodectes</i>                                | Otic mineral oil prep, superficial scrape        | High                                  |                                                                  |                                                     |
| <i>Cheyletiella</i>                             | Flea comb, tape prep, superficial scrape, vacuum | Moderate                              | Vacuum collection techniques are preferred by some veterinarians | Possible identification of mites by fecal flotation |
| Lice                                            | Tape prep (usually grossly visible)              | High                                  |                                                                  |                                                     |
| <i>Notoedres cati</i>                           | Superficial scrape                               | High                                  |                                                                  |                                                     |
| <i>Trombicula</i>                               | Targeted scrape on focal lesion                  | Moderate                              |                                                                  |                                                     |

# WHAT IS MAKING MY DOG SO ITCHY?

## Evaluation Form

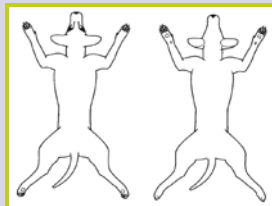
A thorough history can help us find the source of your dog's itching more quickly. Please answer the following questions to help guide the diagnostic process.

Date \_\_\_\_\_ Pet owner name \_\_\_\_\_  
Name of dog \_\_\_\_\_ Age \_\_\_\_\_ Breed \_\_\_\_\_ Weight \_\_\_\_\_

## PHYSICAL EVALUATION

Please check any that describe your dog and circle problem areas on the drawing.

- Hair loss
- Foul odor
- Inflammation or redness
- Itching/Scratching
- Otitis (ear infections)
- Licking/Chewing
- Skin lesions (sores)
- Changes in skin (reddish brown stains, discolorations and/or areas that are thick and leathery)
- Other \_\_\_\_\_



**CIRCLE PROBLEM AREAS**  
(Itching, hair loss, lesions, etc.)

- Has your dog ever had ear problems?  Yes  No
- Does your dog have any chronic gastrointestinal signs like diarrhea or vomiting?  Yes  No

## SEVERITY EVALUATION

On a scale of 0 to 10 rank the severity of your dog's symptoms.

### SEVERITY OF CONDITION OVERALL

0 1 2 3 4 5 6 7 8 9 10  
No symptoms Severe

### SEVERITY OF SKIN LESIONS

0 1 2 3 4 5 6 7 8 9 10  
No lesions Severe

### SEVERITY OF SCRATCHING/LICKING/CHEWING

0 1 2 3 4 5 6 7 8 9 10  
No signs Severe

## ONSET AND SEASONALITY EVALUATION

- Is this the first time your dog has experienced these symptoms?  Yes  No
  - If no, at what age did the symptoms first occur?  <1 yr  1-3 yrs  4-7 yrs  7+ yrs
  - If no, has it occurred around the same time of year each time?  Yes  No
  - If no, approximate time of year symptoms occur. \_\_\_\_\_
- How long have the current symptoms been going on? \_\_\_\_\_
- Did the itch start gradually and over time become worse?  Yes  No
- Did the itch come on suddenly without warning?  Yes  No
- Was there a "rash" first or itching first? Or simultaneous?  Rash first  Itch first  Simultaneous

## PARASITE CONTROL

- Is your dog on a flea/heartworm preventative?  Yes  No
  - If yes, what product(s)? \_\_\_\_\_
- What months do you administer the preventative? \_\_\_\_\_
- When was the last time you administered the parasite control? \_\_\_\_\_

# WHAT IS MAKING MY DOG SO ITCHY?

## Evaluation Form

A thorough history can help us find the source of your dog's itching more quickly.

Please answer the following questions to help guide the diagnostic process.

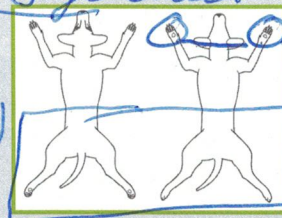
Date \_\_\_\_\_ Pet owner name \_\_\_\_\_

Name of dog \_\_\_\_\_ Age \_\_\_\_\_ Breed \_\_\_\_\_ Weight \_\_\_\_\_

### PHYSICAL EVALUATION

Please check any that describe your dog and circle problem areas on the drawing.

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No symptoms Severe

#### SEVERITY OF SKIN LESIONS

0 1 2 3 4 5 6 7 8 9 10  
No lesions Severe

#### SEVERITY OF SCRATCHING/LICKING/CHEWING

0 1 2 3 4 5 6 7 8 9 10  
No signs Severe

*Food Allergy*  
*Secondary Infection Present*  
*Yeast, Scabies, Insect*

### ONSET AND SEASONALITY EVALUATION

- Is this the first time your dog has experienced these symptoms?  Yes  No
  - If no, at what age did the symptoms first occur?  <1 yr  1-3 yrs  4-7 yrs  7+ yrs
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  - If no, approximate time of year symptoms occur. \_\_\_\_\_
- How long have the current symptoms been going on? \_\_\_\_\_
- Did the itch start gradually and over time become worse?  Yes  No
- Did the itch come on suddenly without warning?  Yes  No
- Was there a "rash" first or itching first? Or simultaneous?  Rash first  Itch first  Simultaneous

*Insect Food*      *Atopy*

*Endocrine*      *Allergy*

### PARASITE CONTROL

- Is your dog on a flea/heartworm preventative?  Yes  No
  - If yes, what product(s)? \_\_\_\_\_
- What months do you administer the preventative? \_\_\_\_\_
- When was the last time you administered the parasite control? \_\_\_\_\_

## Five Question Approach to Dermatology

### 1. Are they Itchy?

#### a. No

- i. Is there hair loss?
  1. Big dogs – hypothyroidism
  2. Small dogs Cushing's
  3. Blue or Grey - Color dilution alopecia
- ii. Planum/Pinnae/Pads = pemphigus/Lupus
- iii. Lumps/Bumps/Draining Tracts
  1. infection – bacterial, fungal, parasitic
  2. neoplasia- Round cell tumors (L/M/M/H)
  3. sterile
- iv. Keratinization defects = Vit A def, Sebaceous Adenitis, dysplasia

#### b. Yes – ask Q 2-5

### 2. Are most of the symptoms on the front half or back-half of the body?

1. Front-half = Atopy
2. Back-half = Insect or food

### 3. Do they lick their feet?

1. Yes = 90% Atopy

### 4. Is there a crusting rash?

- a. Rash with red papules or crusts = folliculitis
  - i. Bacterial Infection – MRSA Risk?
  - ii. Demodex
  - iii. Dermatophyte
- b. Lichenification/Leathery-Elephant skin – yeast infection

### 5. Do they stink?

- a. Fritos/Beer – yeast
- b. Rot – bacterial

### 6. Are the ears infected?

- a. Yes = must have Atopy/Food Allergy or Endocrine Dz





# The Itch Clinic

*Allergy, Dermatology, and Otolaryngology*

*Dr. Keith A Hnilica DVM, MS, DACVD*

Patient's Name: \_\_\_\_\_

Age: \_\_\_\_\_ Breed: \_\_\_\_\_

Reason for Visit: \_\_\_\_\_

Diet:

Chronic: 1 2 3 4 5 6 7 8 9 10

Itch: 1 2 3 4 5 6 7 8 9 10

Odor: 1 2 3 4 5 6 7 8 9 10

Skin: 1 2 3 4 5 6 7 8 9 10

Lichen: 1 2 3 4 5 6 7 8 9 10

Crusts: 1 2 3 4 5 6 7 8 9 10

Rash: 1 2 3 4 5 6 7 8 9 10

Ears: 1 2 3 4 5 6 7 8 9 10

Feet: 1 2 3 4 5 6 7 8 9 10

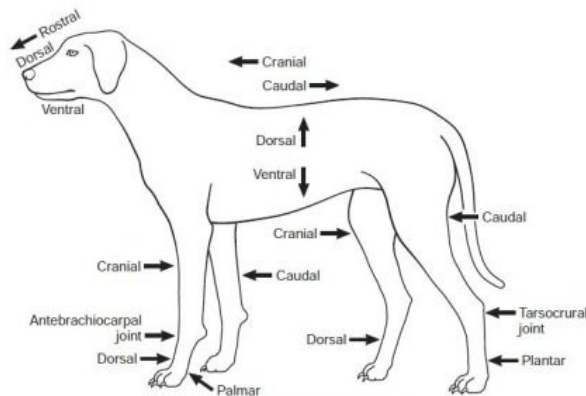
Lumbar: 1 2 3 4 5 6 7 8 9 10

GI: 1 2 3 4 5 6 7 8 9 10

Sleeping at Night: Yes No

Separation/Thunder Anxiety: Yes No

Nodules: Yes No



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*4 locations in East Tennessee*

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[TheItchClinic.com](http://TheItchClinic.com)



# The Itch Clinic

*Allergy, Dermatology, and Otolaryngology*

*Dr. Keith A Hnilica DVM, MS, DACVD*

|                                 |                      |          |              |        |         |
|---------------------------------|----------------------|----------|--------------|--------|---------|
| <b><u>Cytology Results:</u></b> | <b><u>Skin</u></b>   | yeast    | cocci        | pollen | A-cells |
|                                 | <b><u>Ears</u></b>   | yeast    | cocci        | rods   |         |
|                                 | <b><u>Scrape</u></b> | negative | mites: _____ |        |         |

## **Secondary Infections:**

|           |          |          |          |          |          |          |          |          |          |           |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Pyoderma: | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Demodex:  | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Yeast:    | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Otitis:   | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |

## **Primary Disease:**

|                 |          |          |          |          |          |          |          |          |          |           |
|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Atopy:          | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Food Allergy:   | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Scabies:        | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Insect/Flea:    | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Hypothyroidism: | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Cushing's:      | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Lupus/PF:       | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| MRSA/MRSP:      | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |
| Dermatophyte:   | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | <u>9</u> | <u>10</u> |

**Diagnosis:**

**Treatment:**

**Next Step:**

**The Itch Clinic**

*4 locations in East Tennessee*

**(800) 621-1370**

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# The Itch Clinic

*Allergy, Dermatology, and Otolaryngology*

*Dr. Keith A Hnilica DVM, MS, DACVD*



## **ALLERGY PREVENTION**

### **1. POLLEN ALLERGIES** – remove pollens

**BATHE every 3-7 days with a disinfecting shampoo** to wash off pollens and kill bacteria and yeast.

After shampoo apply a **OATMEAL conditioner** (Torb-D) to restore the epidermal barrier.

**Apply** the disinfecting **Torb-D lotion** to red itchy spots in-between the baths to prevent infection.

**Treat the EARS** with prevention therapy after every bath (warmed LETK or EpiOtic Flush)

**WIPE the feet, chin, and face folds with baby wipes at bedtime.**

Always wipe in the direction of hair growth to remove any ingrown hairs.

### **2. FOOD ALLERGENS**

**REMOVE ALL BEEF, DAIRY, CHICKEN in the food and treats forever. (READ THE INGREDIENT LIST!!)**

**Select Lamb, Rabbit, Duck, lean Pork or FISH/SALMON diet (see email list)**

*OTC diets like Wellness Simple, Canidae, Natural Balance, Blue Basics, Natural Planet, Merrick, and Zignature work well. (email Food list available)*

### **3. INSECTS ALLERGIES** PLEASE make sure **ALL** pets are treated with a NEW generation (**nonBeef/nonChicken**)

**Flavor Tabs: Sentinel or Interceptor** (old formula) milbemycin - heart-worm and intestinal parasite control

**SIMPARICA or BRAVECTO** every 30 days to prevent mites, chiggers, mosquitoes, fleas, and ticks.

**Revolution Plus or Bravecto** every 30 days for cats.

### **4. BLOCK HISTAMINE:** Antihistamines help reduce the skin irritation and have few side effects.

In the **MORNING** (and up to every 12 hours for severe itching) give \_\_\_\_\_ generic **Zyrtec**, Allegra, or Claritin

At **BEDTIME** (and up to 3 times each day for severe itching) give \_\_\_\_\_ generic Benadryl (25mg).

### **5. PROMOTE SKIN AND GLAND HEALTH**

**Essential Fatty Acid (EPA)** (fish, flax, **SALMON**, krill oil) every day for allergies,

Skin health, joint health, and general improved aging (1000mg EPA per 25 lbs weight).

**Vitamin A** daily to prevent “Old Dog Warts” skin tumors and improve gland health (2,000 IU per 25 lbs).

**Melatonin** for hair growth and rejuvenate geriatric conditions and behaviors (5mg or 10mg every 12 hours).

**Human Probiotic** daily to prevent **tear staining** or for **puppies** to prevent allergies.

**The Itch Clinic**

*3 locations in East Tennessee*

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# The Itch Clinic

*Allergy, Dermatology, and Otolaryngology*

*Dr. Keith A Hnilica DVM, MS, DACVD*

TREATING ATOPY (ENVIRONMENTAL ALLERGIES) **CAN BE VERY SUCCESSFUL**  
BUT DOES INVOLVE WORK AND LONG-TERM TREATMENT.

## 1. ALLERGY PREVENTION THERAPY

**REMOVE POLLEN** WITH FREQUENT BATHS AND WIPES

**AVOID FOOD ALLERGENS** WITH A RESTRICTED DIET – NO BEEF, DAIRY, CHICKEN

**PREVENT INSECTS** WITH MONTHLY SIMPARICA or BRAVECTO

**BLOCK HISTAMINE** WITH DAILY GENERIC ANTIHISTAMINES

**PROMOTE SKIN/ GLAND HEALTH** WITH OMEGA 3 FATTY ACID and VITAMIN A

## 2. AGGRESSIVE TREATMENT OPTIONS

MOST SIDE EFFECTS

A. **STEROIDS**  
MOST SIDE EFFECTS ON THE LIVER AND OTHER ORGANS  
MRSTAPH RISK AND URINARY INFECTIONS

B. **APOQUEL** – 80% EFFECTIVE IN 3 DAYS but NO CURE  
10% RISK OF TUMORS, PNEUMONIA, DEMODEX MITES

**PLEASE READ THE COMPLETE LABEL**

## TREATMENT FOR POLLEN ALLERGIES

**40 lb DOG**

C. **ATOPICA** – 80% EFFECTIVE IN 6 WEEKS  
NO ADVERSE EFFECTS EXCEPT RARE GI UPSET 5%

**\$80-160/MO**

D. **ALLERGY SKIN TESTING AND VACCINE**  
85% EFFECTIVE IN 4-6 WEEKS

**\$39/MO**

**60% CURE AFTER 2 YEARS**

\$300 ALLERGY TEST

1% SIDE EFFECTS

E. **MONOCLONAL ANTIBODY THERAPY INJECTION (AMAT/CYTOPOINT)**

90% EFFECTIVE IN 48 HOURS

REPEATED EVERY 2-3-6 MONTH

**\$80/INJ**

Injection stings but otherwise NO SIDE EFFECTS

SAFE

**The Itch Clinic**

*3 locations in East Tennessee*































**(800) 621-1370**

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**DAILY ITCH REPORT CARD**

**PATIENT:** \_\_\_\_\_































**DATE:** \_\_\_\_\_

|               |                                                                                     |   |   |   |   |   |   |   |   |   |   |    |                                                                                       |
|---------------|-------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------------------------------------------------------------------------|
| <b>DAY 1</b>  |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| <b>DAY 2</b>  |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| <b>DAY 3</b>  |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| <b>DAY 4</b>  |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| <b>DAY 5</b>  |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| <b>DAY 6</b>  |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| <b>DAY 7</b>  |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| <b>DAY 8</b>  |   | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |   |
| <b>DAY 9</b>  |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| <b>DAY 10</b> |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| <b>DAY 11</b> |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| <b>DAY 12</b> |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| <b>DAY 13</b> |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| <b>DAY 14</b> |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| <b>DAY 15</b> |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |

**DAILY ITCH REPORT CARD**

**PATIENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

|        |                                                                                     |   |   |   |   |   |   |   |   |   |   |    |                                                                                       |
|--------|-------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------------------------------------------------------------------------|
| DAY 16 |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| DAY 17 |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| DAY 18 |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| DAY 19 |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| DAY 20 |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| DAY 21 |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |    |
| DAY 22 |    | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |   |
| DAY 23 |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| DAY 24 |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| DAY 25 |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| DAY 26 |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| DAY 27 |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| DAY 28 |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| DAY 29 |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| DAY 30 |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |