“Itch” is one of the most commonly encountered dermatological problems in feline dermatology. The most helpful prospective study published was by “Clinical characteristics and causes of pruritus in cats; a multicentre study on feline hypersensitivity associated dermatoses” (Hobi, et al. 2011, Veterinary Dermatology 2011). In that study, 588 cats with chronic itch defined as itching for more than 2 months all underwent a systematic work up. The findings from this study provide the best evidence based information available about the causes of itch in cats.

The information in Hobi’s study is directly applicable to feline practice. The study found that the most common cause of chronic itch in cats was parasites. This included fleas, *Demodex cati*, *Demodex gatoi*, *Otodectes*, fur mites (many species), and ticks. Interestingly the study found that adverse reactions to food, i.e. food allergy were the least common cause of chronic itching in cats. These findings are particularly important because adverse food reactions were confirmed by provocative challenge and not just the ‘owner impression’. This study also found that the food trial step was the most problematic response to treatment trial for owners and the part most likely to be subject to sabotage by cats. Another important finding was that about one out of four cats has a non-hypersensitivity disease causing the itch. This included but was not limited to bacterial and yeast skin infections, autoimmune skin diseases, metabolic skin diseases, in cats that went out doors dermatophytosis, etc. In addition, many cats had more than one cause of their chronic itch. For example, many cats had parasite control responsive itch complicated by secondary skin infections. Finally, about one out of five cats had a non-parasite responsive, non-food responsive itch or “feline allergic skin disease, “feline atopic dermatitis”.

The owners of "crazy itchy cats" are often frustrated and typically report having “done everything but nothing seems to work”. What is most helpful is to explain that many of these diagnostic tests and treatment trials have spanned a long period of time and a compact dedicated work up is needed.

Day 0

Step 1: Use a Visual Analog scale to assess the severity of the cat’s itch. This uses descriptors instead of subjective numbers. There are many on line just “google” Pruritus and visual analog scale for cats. Use the same scale to record that cat’s response to treatment at each visit.

Step 2: Perform all of the following core diagnostic tests at intake: ear swabs for routine cytology (do not heat fix glass slides or skip any of the dips), ear swabs in mineral oil for adults and kittens, hair plucking and skin scrapings in mineral oil using a skin scraping spatula (cost effective method to look for hair shaft abnormalities associated with dermatophytes and for mites), skin cytology using clear acetate tape and glass slides, nail bed cytology collecting specimens using a skin scraping spatula. Do not use a scalpel blade for collecting samples. When processing clear acetate tape and glass slides, nail bed cytology collecting specimens using a skin scraping spatula. Do not use a scalpel blade for collecting samples. When processing clear acetate tape samples, skip the fixative and stain routinely. Be sure to let the tape strip dry thoroughly before mounting it over a drop of immersion oil. DO NOT stick the tape to a glass slide and then stain it. This produces poor staining. Wood's lamp tools and fungal culture are only indicated in cats that are considered high risk for dermatophytosis (outdoor cats, kittens). Contrary to popular belief, dermatophytosis is not common and the statement “it is ringworm until proven otherwise” is false.

Step 3: Perform aggressive parasite and infection control. Owners often are reluctant to “do flea control” because they do not see fleas. It is hugely helpful to use the term “parasite control” and inform them that parasite control includes not just fleas but mites that are often difficult to find or treat. The speaker prefers to use spot on fluralaner (Bravecto) because it is an isoxazoline which is a class of drugs with a wide spectrum of activity against parasites, including demodicosis. The three month duration of action ensures there is parasite treatment and control for the duration of the compact work up trial. Use of this product
also removes the necessity of doing lime sulphur rinses to rule out demodicosis. In almost all cases of 'crazy itchy cats' there is microbial overgrowth-bacterial and/or yeast. We now recognize that bacterial pyoderma and *Malassezia* overgrowth are common in cats. Cats can and will tolerate topical therapy and the drug combination recommended includes chlorhexidine/miconazole in a spray or mousse formation. Systemic antibiotics should be administered only based upon culture and susceptibility testing. If *Malassezia* is suspected, oral liquid itraconazole 5 mg/kg can be administered on a week on/week off basis. This treatment trial should be continued for at least 4 weeks.

Recheck 1: At or around Day 30

Step 4: If the cat is not itchy, continue with year round flea preventative and watch for a relapse. If the cat IS STILL ITCHY, the only causes left are: food allergy (rare), environmental allergies, or undiagnosed hypersensitivity dermatitis. The next step is to proceed with a food trial. Although adverse food reactions were rare in Hobi's study (12% of 588 cats), in a private practice setting this would be the next step prior to referral for an allergen specific work up. Hobi did report in another study that although cats with adverse food reactions were indistinguishable from cats with environmental allergies, one finding was that cats with adverse food reactions had a trend toward more gastro-intestinal signs (soft stools, frequent stools, etc.). Be sure to use a complete and balanced commercial diet: hydrolysed protein diet or limited ingredient diet. Over the counter ‘hypoallergenic diets’ are not suitable as studies have found cross contamination in these diets.

Contrary to popular belief, the food trial does not need to be 12 weeks in length. Most cats with food allergies can be diagnosed in 4-6 weeks. It is important to ask if a food trial is possible in the home and determine if the cat will eat the diet. The details of how to perform and interpret a food trial in cats are discussed in detail in the seminar.

Recheck 2: At or around 4-6 weeks after starting the food trial

If the cat has responded to the food trial, relapsed with a provocative challenge then an adverse reaction to food has been documented. It goes without saying, but worth mentioning the target clinical sign is itch and this should have resolved with the diet trial and relapsed upon challenge. If this is the finding then the options are to pursue finding the cause or plan to feed the cat the complete and balanced diet used for the food trial.

If the cat has not responded to the food trial, then the diagnosis is allergic dermatitis. The following points are important to stress to clients:

1. Parasite control needs to continue year round as any infestation can cause a flare of secondary infections and the allergies.
2. Grooming and topical therapy to minimize pruritic secondary infections need to be continued.
3. Allergy testing is indicated only if the client wishes to pursue allergen specific immunotherapy. However some form of humane relief of pruritus is needed.
4. Humane relief of pruritus includes:
   a. Induction of itch remission using methylprednisolone 1.4 mg/kg OR triamcinolone 0.18 mg/kg orally once daily until itching is in remission, then dose taper by administering every 48 hours, if there is still a good response every 48 hours, further decrease the dose by 25% every week until the lowest possible dose is administered.
   b. Induction of itch remission using feline liquid cyclosporine 7 mg/kg once daily for 30 days and then dose taper to q 48 hours for another 30 days, afterwards attempt to administer twice a week
   c. Off label use of oclacitinib. This would not be a first choice drug but one for cats that cannot receive steroids or tolerate cyclosporine.
   d. Off label use of maropitant 2.2 mg/kg orally once daily. This was found to be helpful in a small group of cats during a 30 days study.