

Holistic and Integrative Methods for Diagnosing and Treating the Underlying Causes of Inflammatory Skin Diseases

Alan M. Dattner MD FAAD
HolisticDermatology.com, Sarasota, FL

INTRODUCTION

While the majority of patients are helped by current dermatologic therapy, there are a number of patients who find no relief, or are afraid of the side effects of powerful immunosuppressants that do not address the underlying causes of their disorder. It has taken me a lifetime of exploration to understand why, and to develop a method to help some of those people who were told that there were no more options left to treat their skin condition. This is the story of how I pieced together a way to discover a gut-centered approach to treat the underlying etiology of T-cell mediated skin disorders, and our laboratory discoveries that clarified the scientific validity of the concepts involved.

For the last 40 years, I have been one of the pioneers progressively integrating holistic, complementary, and alternative medicine in my dermatology practice. 25 years ago, I limited my practice to integrative and holistic dermatology. My chapter, "Alternative and Complementary Medicine in Dermatology" in Fitzpatrick's textbook,¹ is likely the first such chapter in a major dermatology textbook on that topic. My website, HolisticDermatology.com includes my philosophy, methods, advice, and achievements. Being a founding member of the AAD Task force on Evaluation of Complementary and Alternative Medicine headed by Ken Neldner in the late 1990's, I participated in the presentation by that group at the AAD annual meeting. I then contributed chapters to the Archives of Dermatology issue devoted to CAM dermatology, and following that to the AAD CAM Workgroup, to develop an evidence-based report on complementary and alternative medicine in dermatology. I have written articles in the JAAD and other journals on my work, and chapters in books such as 4 editions of Rakel's "Integrative Medicine." I have lectured, spoken up, and informed residents and dermatologists on Holistic and Integrative Dermatology at the AAD and other dermatology and integrative medicine meetings, nationally, especially in the Northeast, and in California, over the past 40 years. I have presented my work internationally at conferences in 3 other continents, in Paris, Europe, Buenos Aires, South America, Jerusalem in Israel, Manipal and Kasaragod in India, and in Asia.

There was no training in integrative dermatology when I started practicing medicine, so I began studying with a seminal group of integrative physicians for 17 years, beginning in 1981. Over

the past 4 decades, I attended herbal seminars with some of the leaders of the herbal world. The American Botanical Council chose me to be on their Advisory Board for Dermatology. For more than 40 years, I have attended progressively more forefront science-based meetings on alternative/integrative medicine including seminars with the founder of Functional Medicine, Jeff Bland. From the NIH I went to work at one of the first Holistic Clinics in the North East, under the auspices of the Integral Yoga Institute, and since then worked in several cutting-edge integrative clinics besides my own practice. I translated all of these experiences into helping patients with skin diseases who had either failed or refused conventional treatment. Other dermatologists have contributed to the knowledge on alternative treatments in dermatology over the past several decades, notably Dr Haines Ely. In the recent past, numerous other dermatologists have written or spoken about the field of Integrative Dermatology. I salute all of those practitioners who are advancing the field.

Early on, the AAD referred me to lay press magazine authors as an expert in this field to answer questions on herbs, food, and supplements.^{2,3} Over a 22-year period, I revised and rewrote the book, "Radiant Skin from the Inside Out,"⁴ describing my methods of treating skin disease holistically for both the lay public and as a primer for physicians. Having laid a foundation with my work, lectures, and publications, Learn Skin has developed and brought Integrative Dermatology closer to the mainstream, bringing their information and Integrative Dermatology teaching program to the AAD meetings. When Dr Levis asked about me at the Summer AAD Conference, the founder and CEO of LearnSkin, Venita Sivamani, said Dr Dattner was the one who started all this (Holistic and Integrative Dermatology).

I started my quest searching for emotional, psychological, psychosomatic, and later for spiritual factors that led to disease. In the late 1960's at the time of my internship in San Francisco, I heard that diet could cause or cure disease, but that did not fit well in the medical logic of the day. Eight years later, in my 6th cellular immunology lab at the Dermatology Branch of the NCI at the NIH as a Visiting Scientist, with Dr. William Levis, we studied the human in vitro cellular immune cross-reactive response, discovering for ourselves the HLA (Human Leukocyte

Antigen, or self-transplantation antigen) requirement for response and reaction. Discovering that, we added individual molecular specificity needed for immune attack, which brought me the great revelation that specific foods and antigens could cause T-cell mediated diseases in individuals only if they had the required tissue type. The unique antigen recognized by lymphocytes for cross-reactive attack was a complex of unique self-characteristics in conjunction with the food derived, chemical, or microbial epitope component. And that, by classical immunologic thinking, was also modified by tissue type, route, and dose of exposure, presenter cell activity, tertiary folding, and chemical modification. That opened up a new understanding of how specific food, environment, and microorganisms could cause, for example, psoriasis in one individual, but not another. It opened my thinking to the viability and potential scientific validity of using alternative treatments, such as diet and supplements, for inflammatory skin disorders, and searching patient history for food, and environmental, microbial exposures that could stimulate attacks on specific tissues and cells involved in the skin disease. I also searched for and treated such factors as digestive and eliminative impairment, and emotional tagging that could be contributing to the inflammatory component of the disorder.

Searching for cross-reactive stimuli and targets is still a useful but under-applied conceptual approach today, not only for inflammatory skin and systemic disease, but also for new diseases such as the likely cross-reactive autoimmune sequelae of Covid known as "long Covid," and has been part of my often-successful work with skin disease patients who also present with chronic fatigue syndrome. More funding and scientific attention should be paid to the work of the integrative medical community's complex successes in this area. Many other modalities including metabolic, genetic, epigenetic, and microbiologic analysis have been added by this community.

Searching for causal factors, and using herbal, topical, and dietary measures were among the main methods of treating skin disorders before the advent of antibiotics and corticosteroids, in Western medical practice. The time has come for also including a holistic and integrative approach for evaluating and treating the underlying causes of inflammatory skin disorders. This approach has matured with greater understanding of the mechanisms of immunology and physiology, the influx of perspectives from other healing systems, and the integration of these methods into dermatology and holistic/integrative medicine in general.

Inflammation mediated by reactive T-lymphocytes is a major causal factor in many skin disorders that involve redness, including eczema, acne, psoriasis, and auto immune conditions including lupus alopecia areata (AA).⁵ Dermatology has advanced dramatically in my lifetime with the advent of corticosteroids and other drugs to suppress inflammation,

and antibiotics to control infections causing inflammation. More detailed understanding of the particular immune mechanisms underlying specific immune conditions has led to the development of immune process-inhibitory drugs such as the biologics, targeting key steps that lead to the inflammatory manifestations of these conditions.

Some of these drugs are so effective in initially eliminating the altered appearance caused by these conditions that addressing the underlying issues to prevent drug tolerance causing breakthrough of the condition is not even considered. This article argues that integrative and holistic parameters should be considered in evaluation of overall therapy for any inflammatory skin condition, offering more effective care to the population as well as to the individuals who either fail or refuse to use current dermatologic therapy. Just as we would not omit diet counselling to diabetics on antidiabetic drugs, or identifying and removing specific allergens in contact hypersensitivity, we should explore and include more complex integrative methods for treating the underlying causes of autoimmune and inflammatory skin conditions. Referrals should be made to specialists in this evolving field of dermatology, just as we refer to specialists for Mohs surgery or evaluating industrial contact dermatitis.

The article "A Global eDelphi Exercise to Identify Core Domains and Domain Items for the Development of a Global Registry of Alopecia Areata (AA) Disease Severity and Treatment Safety (GRASS)"⁶ presents a well thought out structure for comparison of AA evaluation variables in an attempt to standardize evaluation of causes, treatments, and results, compiled by an illustrious mix of stakeholders. It is important that this core list be expanded holistically, as it will be reused as a guiding template for other evaluative inflammatory skin disease frameworks such as TREAT for atopic dermatitis. While it mentions psychologic stress, limited environmental triggers, and diagnostically proven gluten sensitivity, and other triggers, as core domains, the registry is typical of conventional guidelines in that it leaves out important core integrative and holistic medicine domains involving the two crucial areas: etiopathogenesis and treatment.

Two different methodologies need to be properly represented in this approach to dermatologic evaluation and treatment. They offer a bridgeable dichotomy in the philosophic understanding and treatment of AA and other inflammatory skin disorders.

The first and predominant mainstream methodology, based on the premise that AA patients have similar causes because they have the same disease, is treatment that inhibits the inflammatory process that is involved in AA or other autoimmune or allergic skin disorders. It is based on the premise that we can determine the final mechanistic pathway,

but are unlikely to be able to determine and treat the underlying causal factors for each individual patient. The success of Biologics in treating psoriasis and atopic dermatitis is based on understanding the mechanistic fine points of the immune responses causing those skin conditions.

The second is an integrative approach that identifies a probable concert of etiologic factors that lead to attack of cross-reactive epitopes in the target areas such as the follicle structure in this disorder. Likely antigens would come from diet, the gut, the microbiome, and the environment, fostered by inability to prevent their leakage across the gut barrier into the lymphatics and circulation, compounded by immune dysregulation and a host of other functional organ deficiencies.

By trying to identify and alter the individual's likely causative factors, I have had success in treating AA patients and in those with a variety of other inflammatory and autoimmune skin diseases.^{7,8} For over 3 decades, I helped a portion of those with immune mediated skin disorders that did not respond to the treatment of multiple dermatologists or alternative health practitioners. I have treated AA and inflammatory skin disorders, in part by extending beyond probiotics by using diet, and supplements to reduce the population of yeast in the gut microbiome.⁹ That intralesional Candida extract has also been shown to reverse AA and may indicate a dose-related specific immune informational relationship of that organism to AA pathogenesis.^{10,11}

Literature supports the concept that T-cell immune attack of the follicle is a key mechanism in the loss of hair in AA.¹² Based on my past research on the genetic specificity of human lymphocyte cellular immune cross reactivity,¹³⁻¹⁶ I search for potential antigens from the gut, microbiome, or environment, and attempt to greatly limit their exposure by a series of enhancements of normal flora and organ-processing supports. Often, these individuals have signs of IBS or leaky gut such as bloating, gas, fatigue, or pain after eating, which typically clears on treatment of the digestive system before the skin condition improves. It is crucial to remove causes of leakage across the intestinal barrier into the lymphatics and blood stream.¹⁷

This involves removing foods containing gluten, and foods that favor pro-inflammatory organisms, such as *Candida albicans*,¹⁸ that both promotes gut barrier disruption and also has been shown to cross-react with a number of different human organs,¹⁹ as well as with *Malassezia* yeast common to the follicular apparatus. Identifying and reducing exposure to gluten and causes of *Candida* overgrowth are essential to controlling leakage of antigens across the gut border to stimulate immune attack of targets in the skin and elsewhere. Other pro-inflammatory organisms invading the small intestines in SIBO, and drugs that either facilitate excessive leakage across the

intestinal barrier, and food or microbial antigens that potentially stimulate cross-reactive attack against the hair follicle,²⁰ are also removed or remedied. The medical literature clearly documents concepts of inflammation in autoimmune disease, and cross-reactivity leading to inflammation. Preceding conditions such as severe stress and bacterial infections such as Lyme disease, and viral infections including EBV, CMV, and Covid are considered to predispose by dysregulating the immune system.

The basic concept is that specific epitopes from the gut enter the lymphatics or circulation and stimulate cross-reactive attack of similar specific epitopes in the inflamed structure, such as the follicular apparatus in AA.^{21,22} This thinking is appearing more in the medical literature, supported by basic immunologic studies. Additional genetic, predisposition, and exposure variables determine what specific tissues and organs are attacked and the nature of the response, and therefore, what inflammatory disease presents itself. An example would be the tendency for reactive hyperproliferation of epidermal cells in psoriasis. Although specific auto-antibodies may be present as markers, reactive T cells are most likely key to the immunopathology in most of these diseases.²³ Their targets may have complex specificity related tissue and HLA antigens, tissue antigens, structural tissue peptide sequences, conformational changes, and chemical or additional microbial modifications. That would account for different "triggers" in different individuals with the same disease.

Probable determination of some of these triggers can be made from a careful sequential history of events preceding onset or aggravation of an inflammatory skin disorder. Lab testing or trial of diet therapy often confirms etiologic factors. Support for the time and complexity of medical practice seeking treatment of etiology is typically not covered by insurance, which favors pharmaceutical solutions. Funding for studies done to modify individual-specific causes would help improve their precise application, and help understand the mechanisms involved. The cost of newer drugs would help determine the value added by a holistic approach that increases the efficacy of those drugs to the patient. By reducing the causal factors, the efficacy of pharmacologic agents could be enhanced.

The proposed CORE index being created, and other dermatologic evaluative guidelines, would be more able to predict factors relating to cause and successful treatment if the methodology of searching for and treating underlying causes that I have described would be included in a section of the domains to be evaluated. It would not take long to see whether these were relevant factors to the etiology of inflammatory disorders such as AA, and thus worth moving to the core section. Phenotypic variables and repeated sequential exposure-disease aggravation episodes raise the probability for a cause-and-effect relationship.

Dermatologic thinking, and this well constructed evaluative structure, would benefit by including core variables that lead to seeking the probable etiology of the inflammatory attack, causing the specifically directed inflammatory and autoinflammatory skin condition.

Accurate evaluation of efficacy of the new JAK inhibitors for AA and other inflammatory skin disorders would benefit by including these omitted “integrative” core domain variables, to make sure that they do not distort outcomes positively or negatively. People with the worst digestive and dietary contributions to their AA might have less favorable results, distorting efficacy downward. Those making the best integrative attempt at control of their AA might have better results than with the drug alone, distorting efficacy results in the positive direction.

Determining underlying integrative treatments that decrease targeted and general inflammation in a patient has the potential of increasing overall efficacy of the total treatment regimen for inflammatory skin disorders. Dealing with the underlying issues would reduce the chance of tolerance to the drugs and the false sense of security from improvement without altering the underlying issues causing inflammation or autoimmunity.

The methodology that I have described and been using applies, with some disease specific modification and appropriate incorporation of conventional dermatologic methods to not only AA, but to almost all inflammatory skin conditions. Ideally, it requires a dermatologist skilled in these methods searching for patient specific triggers preceding disease onset or aggravation, and a patient able to follow and afford multiple dietary restrictions and incorporation of various supplements in the diet. Many parts of the inner work and transformation chapters in *Radiant Skin from the Inside Out* were written by my daughter Alicia Dattner. As a coach, she has helped me attune more to patients’ needs and feelings, and translate the science into concrete usable and inspiring information that invites them to be excited to stick with new supplements, diet, and lifestyle protocols, to make life-changing shifts in their health.

Skilled coaching for the dermatologist can help them extend their capabilities, and skilled coaching of the patient can help them follow a protocol. Patient support in my practice was provided skilled coaches who worked with me. Due to the challenges of additional practitioner time required, additional holistic education required, and the time, motivation and resources required of patients, the pharmacologic treatments will remain predominant, with adjuvant help from holistic and integrative methods in some who need additional treatment efficacy.

Often, in my experience, success with this method for skin

disorders clears other health issues as well, as if the skin disorder was just a symptom of the underlying issue. My intention is to add to Dermatology an evolving holistic strategy addressing probable underlying etiology that will help those who have failed or cannot take conventional dermatologic treatment for their AA or other inflammatory skin disease. Dermatologic indices and guidelines being created should include integrative and holistic core domains to be evaluated, and treated. Including holistic dermatology as a recognized subspecialty would reaffirm the comprehensiveness and scientific relevance of our specialty. Integrative education, research, and training would help the percentage of dermatologic patients successfully treated by increasing the number of dermatologists skilled in their appropriate application.

DISCLOSURES

Dr. Dattner is the owner of HolisticDermatology.com.

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AUTHOR CORRESPONDENCE

Alan M. Dattner MD FAAD

E-mail:..... doctordattner@gmail.com