



## Dermatology Disquisitions and Other Essays

# Managing dermatology patients who prefer “all natural” treatments

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**Abstract** Dermatology patients are expressing a growing interest in complementary and alternative medicine (CAM) and natural treatment options for management of dermatologic conditions. Counseling on the optimal integration of CAM with conventional therapeutic approaches can be daunting for practitioners who do not feel well-versed in these modalities. A productive conversation between the clinician and patient seeking natural treatments should address the appropriate role and scope of CAM in a therapeutic plan, which is best suited for use as maintenance therapy or to augment traditional pharmaceutical or procedural interventions. Understanding the patient's goals, discussing evidence-based conventional and complementary treatment options, and employing shared decision making can enhance the clinical encounter and strengthen the physician-patient relationship.

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## Introduction

Approximately 40% of US adults use complementary and alternative medicine (CAM), and this number continues to grow.<sup>1,2</sup> Up to 85% of dermatology patients report use of CAM, more commonly among older women.<sup>3-5</sup> The most popular CAM-based treatments are dietary and herbal supplements.<sup>4,6-8</sup> In addition to patient use of CAM, 75% of dermatologists surveyed in the 2008 Healthcare Professionals Impact Study reported personal dietary supplement use.<sup>8</sup> Although physicians believe that CAM can be useful, many report that they are uncomfortable making recommendations, given the lack of training and relative paucity of scientific evidence in this area.<sup>9,10</sup>

The increasing patient demand for CAM is being met by an explosive multibillion-dollar nutraceutical and cosmeceutical industry.<sup>2,11,12</sup> Limited government regulatory oversight of these products, coupled with a plethora of inaccurate online information about CAM, poses significant challenges for clinicians. A physician can, however, play a vital role in educating patients on the efficacy and safety of CAM modalities and their appropriate therapeutic use.

## Complementary and alternative medicine in dermatology

The National Institute of Health (NIH) National Center for Complementary and Integrative Health defines CAM as “a group of diverse medical and health care practices and

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products that are not presently considered to be part of conventional medicine,<sup>13</sup> whereas the NIH National Cancer Institute defines conventional medicine as “a system in which medical doctors and other health care professionals (such as nurses, pharmacists, and therapists) treat symptoms and diseases using drugs, radiation, or surgery.” CAM approaches include the use of natural products (vitamins, trace minerals, and herbs), mind-body practices (yoga, meditation, and biofeedback), lifestyle modifications (diet, exercise, and smoking cessation), and other healing philosophies such as traditional Chinese medicine or Ayurveda.<sup>14–17</sup>

There is evidence to support the use of some CAM interventions to treat various dermatologic conditions. Several evidence-based CAM modalities exist for atopic dermatitis, including probiotics, topical application of sunflower seed and coconut oil, massage, and acupuncture.<sup>18–22</sup> Nutritional supplements have also been studied for various dermatologic diseases. Oral vitamin D has shown promise in improving both psoriasis and atopic dermatitis.<sup>23,24</sup> Zinc and nicotinamide have been used to treat acne.<sup>25,26</sup> In fact, all-natural treatments in dermatology were common until the last century when pharmaceutical agents were developed to meet the needs of a growing population. Many conventional dermatologic treatments have been derived from natural compounds. Tacrolimus was derived from the actinobacteria *Streptomyces tsukubaensis* found in the soil of Mount Tsukuba, Japan.<sup>27</sup> Plant-derived compounds, such as 8-methoxypsoralen, podophyllin, and salicylates, are still routinely used in dermatology practice.<sup>28</sup> Kuncatechins (Veregen) 15% is an FDA-approved topical treatment for condyloma acuminatum that contains green tea catechins with antiviral, pro-apoptotic properties.<sup>29,30</sup>

As conventionally trained physicians, we have witnessed not only the beneficial results of the evidence-based practices but also the adverse effects of improper CAM use. When a patient presents with a predetermined preference for only “natural” options and prefers to strictly avoid pharmaceuticals, a physician is faced with the challenge of both navigating the best course of treatment and maintaining a trusting therapeutic relationship. Physicians are often the first-line resource for health care information and will inevitably encounter patient questions about CAM. Accordingly, we offer some practical counseling recommendations for this cohort of patients.

## Practical approach to managing patients who prefer only “all natural” treatments

### Establish rapport for shared decision making

Integrative medicine emphasizes a team approach to health care both between patient and physician and within the coordination of care with other health care providers. The culture of modern medicine is shifting from the physician authoritative model adopted at the turn of the 20th century toward a shared decision-making (SDM) model. The SDM model recognizes

patients as experts of their own body and physicians as experts of medical evidence and disease management.

The majority of patients with dermatologic conditions are interested in being involved in treatment decisions<sup>31,32</sup>; moreover, each patient responds differently to his or her disease, as some patients with acne or psoriasis may feel comfortable with small visible lesions, whereas others may feel extremely self-conscious and anxious about any noticeable lesions. This heterogeneity makes the SDM model a valuable tool in dermatology practice.<sup>29,33</sup> By using patient-centered communication to understand the patient’s interests and values (see item 6), a physician can help develop an evidence-based treatment plan that is safe, fosters compliance, and respects patient autonomy.

### Explore the reasons why the patient prefers to use CAM

There is often a deeper motivation underlying the desire to pursue alternative treatments, and patients’ belief systems can profoundly shape their preferences. For example, a positive attitude toward science reflects a higher perceived efficacy of conventional medicine, whereas the converse is true for CAM.<sup>30</sup> CAM may be seen as more effective in the treatment of minor and chronic conditions, although often not superior to conventional medicine.<sup>34,35</sup> By elucidating the reason for CAM use, we may be able to help steer the patient toward an optimal treatment plan. [Table 1](#) lists some of the common reasons patients seek CAM in both the literature and in our experiences.

### Explain the role of CAM

Patients seeking all-natural treatments should be counseled that CAM is evolving into “integrative” care, where CAM treatments are paired with rather than used in place of conventional treatments. A patient who does not want a surgical resection of his or her melanoma runs the risk of metastasis and death. This patient can be educated on how, in addition to surgical resection of the melanoma, sun protective measures and a Mediterranean diet may decrease their melanoma risk.<sup>41</sup> Patients should also be educated that there are currently no known “all natural” options with comparable potency of a biologic agent for severe psoriasis and atopic dermatitis or antimicrobials for infections. Patients should be made aware that in cases of severe skin disease, avoidance of prescription medications may have devastating consequences, especially in the setting of high-grade cutaneous malignancy or infections. “Natural” options are best suited for use as a maintenance regimen that also includes conventional modalities. For example, a patient with atopic dermatitis can use coconut oil as a moisturizer in areas of mild xerosis and erythema, but an appropriate course of topical corticosteroids should be used to treat moderate and severe lesions. A patient who is concerned about gut dysbiosis related to taking antimicrobials for acne can be counseled on adding probiotic-rich foods to the

**Table 1** Common reasons patients seek complementary and alternative medicineCommon reasons for seeking CAM treatment modalities<sup>7,35–40</sup>

Chronicity of disease
Poor results from physician/hospital-based treatments
Media claims
Wanting to try all options
CAM was recommended by friend
Misinformation about the side effects of a prescription drug
Cultural beliefs
Desire for autonomy with health care decisions
The patient has not been offered all possible treatments
Unaddressed life stressors may be exacerbating dermatologic clinical manifestations, despite appropriate treatment with medications
Inadequate understanding of the consequences of undertreated or untreated disease

CAM, complementary and alternative medicine.

diet, such as fermented yogurt and kimchi. Incorporating the use of evidence-based CAM to safely augment conventional treatments can, in turn, potentially lower the required dose of pharmaceutical agents, reduce prescription costs, decrease medication side effects, and complement the patient’s desire for natural treatment options.

### Cultivate a supportive physician-patient relationship

Patients are more likely to comply with conventional recommendations when they feel heard and educated about their options, rather than being written off from the start. Many patients who seek CAM report feeling disillusioned with the medical system and are less satisfied with the extent of the emotional support they receive from physicians.<sup>3,37</sup> Patients may also be reluctant to disclose their CAM use for fear of negative responses from their allopathic providers.<sup>42</sup> As a result, patients may seek health care from unlicensed practitioners or the Internet, thus delaying diagnosis and proper treatment. By fostering an open dialogue, physicians can build trust with the patient and help guide a safe treatment plan that will lead to better outcomes.

### Provide patient education using evidence-based data

Patients often learn about CAM from online resources written by a lay person or celebrity-endorsed marketing ploys, not realizing that the information on product labels is often not backed by scientific evidence. CAM use is also often initiated by patients themselves through self-diagnosis, which can be potentially dangerous and delay or prevent proper evaluation and treatment. Fortunately, most patients understand the benefits of conventional medicine, especially in the treatment of life-threatening conditions.<sup>34</sup>

Many patients do, however, believe that because something is natural, it is also inherently safe. Although some natural

treatments can be used safely under appropriate conditions, others not only can be dangerous but also may exacerbate the dermatologic condition. For example, black salve has been touted as a natural treatment for skin cancer, but several studies have shown it to be associated with a high rate of treatment failure, extensive tissue necrosis, and atypical histologic findings.<sup>43–45</sup> Black salve is composed of sanguinarine derived from bloodroot (*Sanguinaria canadensis*) along with zinc chloride.<sup>46</sup> Sanguinarine is a benzylisoquinoline alkaloid that exhibits no specificity for cancer cells; rather, its cytotoxic effects are thought to be related to a rapid apoptotic response induced by glutathione depletion.<sup>47</sup>

Additionally, patients should be made aware that prescription medications, such as topical corticosteroids, antimicrobials, and immunomodulators, have high-quality randomized placebo-controlled trials backing their efficacy, with well-defined side effect profiles when used under appropriate instruction from a qualified health care provider. Noncompliance with conventional therapies can lead to chronic, recurring disease flares and decrease overall quality of life. It is also practical to counsel patients that CAM modalities often take longer to achieve a desired effect and thus may not be the best first-line treatment for acute conditions. CAM is, therefore, most suitable as an augmentative modality in a maintenance or preventative regimen.

### Develop a treatment plan using the SDM model

After discussing the patient’s goals, the dermatologist can use the SDM model to develop a comprehensive prevention and treatment plan that will both be efficacious and incorporate the patient’s preference for a natural approach. Patients should be informed that CAM-only treatments can be expensive due to lack of insurance coverage and require a great deal of compliance. Clinicians should also reinforce that CAM modalities are meant to augment conventional therapies and are not a quick fix; rather, disease burden may be reduced more rapidly by using conventional treatment, with the addition of CAM for maintenance. [Table 2](#) lists various patient concerns related to CAM use and includes practical recommendations for counseling these patients.

### Ask directly about CAM use in all patients

Given the increasing use of CAM modalities, it is also necessary to inquire about CAM use as a component of thorough history taking, regardless of whether a patient requests CAM. CAM use is often not disclosed to physicians or not specifically addressed during patient encounters.<sup>48,49</sup> The potential for certain CAM modalities to exacerbate dermatologic conditions or interfere with conventional treatment should be routinely assessed and discussed in patient counseling. Examples include the possible risk of photosensitivity from St. John’s wort or Dong Quai when used

**Table 2** Examples of clinical scenarios and counseling recommendations

Patient concerns	Physician counseling tips
Has concern for adverse effects of topical corticosteroids after obtaining information online	Acknowledge discomfort Acknowledge the potential adverse effects of topical corticosteroid use, if used long term and inappropriately Openly explore reason for concern Provide guidance on proper use and define treatment goals
Inquires about the use of natural and cold-pressed oils as treatment for AD	Offer evidence-based recommendation for natural oil use Counsel the patient on natural oils that can be used with TCS to potentially decrease TCS need and side effects Offer guidance on appropriate TCS use Design a plan to incorporate natural oils with conventional treatment based on evidence (coconut and sunflower seed oils, avoid olive oil)
Presents with a suspected drug-related skin eruption after starting new natural supplement regimen	Inquire about supplement and herbal medicine use Inquire about the reason for taking the supplements and discuss whether evidence exists on their clinical benefit Educate the patient on the potential side effects of natural supplements Point out that supplements have not been studied in rigorous clinical trials and are not under FDA regulation as drugs
Prefers all-natural creams rather than surgical interventions for skin cancer	Explore the reason why the patient prefers all-natural creams Explain the potential consequences of inadequate treatment for skin cancer Educate the patient on the indication and skin cancer management guidelines and options, including topical, surgical and energy-based modalities Educate the patient on the disadvantages of natural creams, such as skin necrosis observed with the use of black salve

AD, atopic dermatitis; FDA, Food and Drug Administration; TCS, topical corticosteroids.

alone or in conjunction with psoralens.<sup>50–52</sup> It may be prudent to integrate questions about CAM use when taking medication history in both new patient questionnaires and at followup visits.

## Conclusions

Given the increasing prevalence of CAM use, we bear a responsibility as physicians to bolster our working knowledge of CAM, not only to provide patients with additional tools for their health, but also to minimize the risk of adverse events. Consumers are also increasingly interested in using skin products with natural and organic ingredients such as witch hazel, aloe, and neem, highlighting the need for further research and understanding of the effects of cosmeceutical agents.<sup>53</sup> Although there remains a significant need for more well-designed randomized controlled trials, there is a growing amount of scientific literature supporting the use of CAM. The National Center for Complementary and Integrative Health database, Rakel's Integrative Medicine textbook, the Natural Medicines database, and the Linus Pauling Institute Micronutrient Information Center are some useful resources for physicians.<sup>54–57</sup> Past issues of this Journal have also been dedicated to various tenets of CAM in dermatology.<sup>58–60</sup>

An integrative approach that incorporates evidence-based principles from CAM modalities with an allopathic regimen can be of great benefit to patients seeking natural treatments. Open communication, education, and shared decision making are all valuable tools to guide patients in developing safe and effective treatment plans for their dermatologic conditions.

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## Conflicts of interest

Vivian Shi is a stock shareholder of LearnHealth and has served as a consultant or investigator for or has received research funding from Sanofi, Regeneron, Eli Lilly, Dermira, Novartis, AbbVie, SUN Pharma, Pfizer, Leo, Menlo Therapeutics, Burt's Bees, GpSkin, and Skin Actives Scientific. Aunna Pourang is a faculty advisor for [LearnSkin.com](http://LearnSkin.com). Aleksis Hendricks has no conflicts of interest to declare relevant to this manuscript.

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