



Concise Communication

Proceedings of the 6th Annual Integrative Dermatology Symposium in Reno, Nevada

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The Integrative Dermatology Symposium (IDS) took place in Reno, Nevada from October 27 to October 29, 2023. The event was chaired by esteemed dermatologists Dr. Hadar Lev-Tov, MD, MAAS, and Dr. Steve Daveluy, MD, FAAD. IDS is an event that brings together dermatologists, healthcare practitioners, and experts in the field of integrative medicine to explore the intersection of conventional dermatology and complementary therapies. The prevalence of complementary and alternative medicine (CAM) usage varies between 24% and 71.3% in different countries. In the United States, 33.2% of adults have utilized some form of complementary health therapy. Dermatologists generally have a positive view of CAM but may not discuss it frequently with patients due to limited studies and understanding. The IDS platform aims to address this knowledge gap and promote evidence-based research on CAM's impact on skin health. The primary objective of this year's symposium was to provide attendees with valuable insights into the significance of nutrition in dermatology. IDS fostered a dynamic and participatory environment. During the symposium, attendees engaged in discussions, workshops, and a range of unique experiences, such as on-stage cooking demonstrations. Integrative Dermatology is a growing field with the potential of further integration of evidence-based complementary therapies, such as nutrition, acupuncture, and herbal medicine, into dermatological treatments. The following are the proceedings from the conference.

INTRODUCTION

The Integrative Dermatology Symposium (IDS) took place in Reno, Nevada from October 27 to October 29, 2023. The event was chaired by esteemed dermatologists Hadar Lev-Tov, MD, MAAS, and Steve Daveluy, MD, FAAD.

IDS is an event that brings together dermatologists, healthcare practitioners, and experts in the field of integrative medicine to explore the intersection of conventional dermatology and complementary therapies.

The use of complementary and alternative medicine (CAM) in the general population was found to range from 24 to 71.3% in different countries.¹ In the United States, 33.2% of adults have used some form of complementary health therapy.²

Dermatologists generally have a positive view of complementary and alternative medicine (CAM). However, they may not frequently engage in discussions about CAM with their patients due to the limited availability of studies and their own understanding of CAM.³ The IDS platform offers a valuable opportunity to bridge this knowledge gap and promote evidence-based research on the impact of CAM on skin health.

The broadening of traditional dermatological care includes a diverse range of holistic approaches, such as incorporating nutrition, herbal remedies, supplements, off-label medications, and making lifestyle adjustments. This expan-

sion of care can be particularly advantageous in counseling and treatment of patients who use treatments outside of traditional western medicine. A study conducted in a hair loss clinic revealed that 81% of patients incorporated supplements as part of their treatment regimen.^{4,5} Another study found that 51% of patients with psoriasis use complementary and alternative medicine.⁶

The primary objective of this year's symposium was to provide attendees with valuable insights into the significance of nutrition in dermatology. As an example, strong evidence supports the efficacy of complimentary therapies like indigo naturalis and curcumin in treating psoriasis.⁷ Additionally, probiotics and cheongsangbangpoong-tang have shown effectiveness in treating acne.⁸

IDS fostered a dynamic and participatory environment. During the symposium, attendees engaged in discussions, workshops, and a range of unique experiences, such as on-stage cooking demonstrations and taking part in the preparation of Kale chips at their own tables.

The following are the proceedings from the conference:

DAY 1 - OCTOBER 27, 2023

YIN YANG NUTRITION: BALANCING FOOD AND YOUR SKIN

Speaker: Joseph Alban, DAc MS LAC

Dr. Alban introduced the role of Traditional Chinese Med-

icine (TCM) in attaining nutritional and skin equilibrium. TCM aims to guide individuals from an unstable state to overall well-being. The significance of flavors and temperatures of foods in TCM principles was explained by Dr. Alban. As an example, the acrid flavor of fresh ginger induces sweating and is beneficial in dispersing heat and wind, making it suitable for dermatological conditions like eczema.

CLEAR SKIN FROM THE INSIDE OUT: UNVEILING THE LINK BETWEEN GLUCOSE LEVELS AND ACNE WITH CONTINUOUS MONITORING INTERACTION OF THE IMMUNE AND DIGESTIVE SYSTEMS IN THE CONTEXT OF SKIN DISEASE

Speaker: Lienna May, MS CNS LDN

Lienna May discussed the connection between blood sugar and acne, highlighting the well-established link between glucose, acne, and insulin through IGF-1. She highlighted the surprising harm of seemingly healthy foods like açai bowls in elevating blood sugar levels. May recommended a diet rich in leafy greens, high-fiber foods, balanced protein intake, and healthy fats containing omega-3 fatty acids to optimize blood sugar and promote clear skin.

NUTRITION AND ITS IMPACT ON INFLAMMATORY DISEASES

Faculty: Chef Kimber Dean and Raja Sivamani, MD MS AP Chef Dean and Dr. Sivamani demonstrated the application of scientific principles in culinary practices. Dr. Sivamani highlighted the benefits of low glycemic diets for skin conditions associated with metabolic diseases. As an example, they showcased the use of kale chips as a healthier alternative to potato chips. The discussion then focused on hair loss and plant-based protein. Chef Dean showcased a recipe for raw vegan brownie bites enriched with organic chocolate protein powder. To wrap up, Chef Dean presented a one-day meal plan for individuals with hidradenitis suppurativa (HS) and acne. The meals included vanilla chia seed pudding, mixed greens salad with lemon tahini dressing, spaghetti squash with basil cashew sauce, and chocolate mousse.

MORE COOKS IN THE KITCHEN PANEL

Moderator: Steven Daveluy, MD

Panelists: Asmi Sanghvi, MD; Joseph Alban, DAC MS LAC; Lienna May, MS CNS LDN

Dr. Daveluy and the panelists discussed approaches to addressing acne and inflammation through diet and nutrition. They highlighted gradual behavioral changes to improve long-term outcomes in managing skin conditions, such as stress reduction with acupuncture and the use of essential oils. The panel further emphasized the significance of healing the gut microbiome by adopting a non-processed food diet for optimizing treatment responses in inflammatory skin conditions such as psoriasis.

INTERACTION OF THE IMMUNE AND DIGESTIVE SYSTEMS IN THE CONTEXT OF SKIN DISEASE

Speaker: Jason Hawkes, MD MS FAAD

Dr. Hawkes discussed the significant association between gut dysbiosis and non-infectious inflammatory skin conditions like hidradenitis suppurativa, atopic dermatitis, and psoriasis. He emphasized the impact of dysbiosis on disease flares and the potential benefits of JAK inhibitors in skin and gastrointestinal inflammation.

NONSTEROIDAL APPROACHES TO TOPICAL THERAPY

Speaker: James Song, MD

Dr. Song highlighted novel nonsteroidal options for plaque psoriasis treatment, such as VTAMA (Tapinarof) and Zoryve 0.3% cream (roflumilast), as alternatives to topical corticosteroids, offering improved safety profiles and effective treatment options.

INTEGRATIVE APPROACHES TO VITILIGO: THE POST-STERIOD ERA

Speaker: Ammar Ahmed, MD

Dr. Ahmed discussed complementary treatment options for vitiligo, including vitamins, dietary components, and herbal remedies. For example, he highlighted Black seed oil and Picrorhiza kurroa (kutki) as potential herbal treatment for vitiligo, but more data is needed, as randomized controlled trials are lacking.

INTEGRATIVE CASES FOR INFLAMMATORY SKIN DISEASES PANEL

Moderator: Hadar Lev-Tov, MD MAS

Panelists: DeJarra Sims, ND, David Euler, LAc, Jason Hawkes, MD MS FAAD

The panel explored integrative strategies for managing inflammatory skin conditions like eczema and psoriasis. They discussed holistic approaches such as the Miami Eczema School, which aims to educate patients and clarify misconceptions that participants have about atopic dermatitis and its management. The discussion also included the importance of educating patients on stress management and healthy eating to avoid flares in inflammatory skin diseases.

DAY 2: OCTOBER 28, 2023

CIRCADIAN RHYTHMS AND SKIN HEALTH

Speaker: Michelle Jeffries, DO

Dr. Jeffries discussed the influence of circadian rhythms and clock genes on skin health. Notably, she emphasized that the disruption of the circadian rhythm has been associated with numerous negative health outcomes, including those of the skin. She advocated for the importance of aligning sleep cycles, skincare routines, and cortisol rhythms with clock genes for optimal skin health.

TYPE 2 INFLAMMATION IN ITCH AND PRURIGO NODULARIS: INTEGRATING BIOLOGICS AND BEYOND

Speaker: Jason Hawkes, MD MS FAAD

Dr. Hawkes discussed the pathophysiology and treatment options for prurigo nodularis (PN). He delved into Type 2 inflammation its role in PN. He highlighted dupilumab as an FDA approved treatment, as well as certain off-label treatments for PN, such as gabapentin, methotrexate, and selective serotonin reuptake inhibitors (SSRIs). He also discussed nemolizumab, an IL-31RA antagonist, as a potential promising novel therapy for the treatment of moderate to severe PN.

INTEGRATIVE APPROACH TO ASSESSING THE GI TRACT

Speaker: Raja Sivamani, MD MS AP

Dr. Sivamani started the presentation by reviewing intestinal anatomy and the importance of a healthy barrier between the lumen of the GI tract and the enteric immune system. A disruption in intestinal permeability, or “leaky gut” contributes to inflammatory, metabolic, and systemic diseases. He emphasized the importance of a functional approach in evaluating gut health, discussing methods for assessing intestinal permeability such as the use of lactulose-mannitol testing and zonulin as a biomarker. He also noted that calprotectin may be helpful in detecting gut inflammation, such as in neutrophilic inflammatory conditions. Dr. Sivamani also discussed gut microbiome and role of diet, emphasizing that a high-fiber, plant-based diet can result in higher growth of bacterial species that are beneficial to maintaining gut homeostasis.

GUT HEALTH & MICROBIOME PANEL

Moderator: Raja Sivamani, MD MS AP

Panelists: Katherine Varman, MD FAAD, Lakshi Alderidge, MSN ANP-BC DCNP FAANP, Michael Traub, ND

The panel reviewed cases and highlighted the utility of functional gut testing for managing inflammatory dermatoses, emphasizing the significance of gut health in skin diseases and the impact of diet on skin health. For patients with atopic dermatitis, the panel suggested collecting a thorough medical history to identify any family history of atopy, frequency of flares, and precipitating factors and emphasized the implication of gut dysbiosis in skin barrier function. In psoriasis, they discussed the association of gluten sensitivity, inflammatory bowel diseases, metabolic diseases, and gut dysbiosis.

SUPPLEMENTS FOR SUN PROTECTION

Speaker: Katherine Varman, MD

Dr. Varman discussed the role of supplements with photoprotective properties in preventing photo-carcinogenesis, stressing the importance of a diverse diet and specific nutrients for sun protection. She related the role of omega-3 fatty acids and micronutrients, including zinc, copper, manganese, folate, and niacinamide in enhancing skin defense against UV damage. She discussed the importance of

carotenoids for sun protection, and their presence in naturally occurring sources such as carrots, tomatoes, and kale.

PHARMACY TO TABLE: THE IMPACT OF NUTRITION ON DERMATOLOGICAL TREATMENTS

Speaker: Steven Daveluy, MD

Dr. Daveluy discussed the impact of diet in managing dermatological conditions, highlighting the association between diet, inflammatory skin conditions, and the role of the gut microbiome in skin health. Some dietary examples included how whey protein, present in dairy, can trigger acne due to its influence on the mTORC pathway. He also emphasized the role of high fiber/low red meat diets and omega-3 supplementation as complementary therapeutic modalities in the management of psoriasis.

HORMONES, KETO & FASTING: ESPECIALLY FOR WOMEN IN AND AROUND MENOPAUSE

Speaker: Anna Cabeca, DO

Dr. Cabeca discussed the influence of diet on health, especially in menopausal women. She endorsed the importance of a low-fat, plant-based diet. She also discussed the impact of insulin and cortisol on hormonal balance while endorsing the benefits of 13 to 16 hours intermittent fasting on metabolic health.

USING INTEGRATIVE APPROACHES TO MAINTAIN SUCCESS PANEL

Moderator: Steven Daveluy, MD

Panelists: Emma Norton, ND; Joseph Alban, DAC MS LAC; Stacy McClure, MD

The panel discussed strategies for maintaining success in skin health in case-based scenarios.

In acne patients, they emphasized the significance of understanding patients’ aesthetic goals, educating patients on potential treatment side effects, and providing dietary counseling. The panel addressed dietary considerations for conditions like psoriasis and eczema, advocating for realistic dietary changes tailored to individual lifestyles. Practical recommendations included menu planning for busy patients. Overall, they emphasized a holistic approach integrating nutrition, stress management, and microbiome health as essential in treatment of all skin conditions.

THE NEW SCIENCE OF FOOD, HORMONES, AND HEALTH

Speaker: Neal Barnard, MD FACC

Dr. Barnard walked through multiple studies that covered how hormones can be altered by simple diet changes, which in turn can impact hormone-related conditions such as diabetes, menopausal symptoms, and prostate and breast cancers. Some of Dr. Barnard’s suggested dietary guidelines included consumption of soy for decreased risk of breast cancer, limiting dairy products to reduce the risk of prostate cancer, and a plant-based diet for glycemic control in patients with type 2 diabetes.

DAY 3 - OCTOBER 29, 2023

ACNE AND ROSACEA PANEL

Moderator: Raja Sivamani, MD MS AP

Panelists: Apple Bodemer, MD; Michael Traub, ND, Jonette Keri, MD, PhD

The panel discussed integrative treatment regimens for acne and rosacea. Topics included dietary habits, supplements, and topical treatments to enhance outcomes and prevent recurrence. The panel discussed the use of myo-inositol, which has been shown to help with hormonal acne and omega-3 supplements which can help mitigate adverse effects from isotretinoin. In female patients with acne, who are unwilling to utilize conventional treatments, they discussed the benefits of supplements such as saw palmetto, maca root, silymarin, and pumpkin seed oil. They also endorsed that good-quality sleep and a high fiber diet that can be helpful in treating both acne and rosacea patients.

EMERGING THERAPIES IN ACNE & ROSACEA

Speaker: Jonette Keri, MD PhD

Dr. Keri delivered a presentation on new therapies for acne. One of the newer topical therapies mentioned was clascoterone, an androgen receptor inhibitor to counteract the effects of the androgenic effects of DHT in the skin. Another novel topical therapy mentioned was a triple-drug combination of a fixed dose of clindamycin phosphate 1.2%, benzoyl peroxide 3.1%, and adapalene 0.15 % gel. The discussion also included the efficacy of dietary interventions, such as a low glycemic load diet and supplements such as myo-inositol in managing acne.

SPILL THE TEA ON COSMECEUTICALS AND BOTANICALS

Speaker: Shasa Hu, MD

Dr. Hu emphasized the enduring human preoccupation with anti-aging throughout history, from ancient anti-wrinkle remedies documented on papyrus to Greek researchers' exploration of age-fighting foods. In the modern context, she mentions how the aging industry has become a billion-dollar business in the United States. Dr. Hu discussed how alpha hydroxy acids such as lactic, glycolic, citric, and malic acid show promise, but should be used with caution in conjunction with retinoids. She also discussed antioxidants such as niacinamide, which is beneficial in sebum regulation, and vitamin C, which is renowned for countering UV-induced damage and enhancing collagen synthesis. Dr. Hu emphasized that topical retinoids remain the gold standard in addressing aging concerns, and suggested bakuchiol as an effective retinol alternative.

WHAT'S NEW IN HAIR HEALTH?

Speaker: Apple Bodemer, MD

Dr. Bodemer discussed emerging therapies for various types of hair loss, including androgenetic alopecia and alopecia areata. The talk highlighted treatments such as finasteride, which is commonly used to treat androgenetic alopecia, and offered alternatives options such as botanical 5-alpha

reductase inhibitors found in pumpkin seed oil, green tea, and American ginseng. Other alternatives discussed were garlic extract and curcumin, which seem to show potential in treating alopecia areata. Dr. Bodemer also discussed more novel treatments such as JAK inhibitors and their role in promoting hair health. Finally, Dr. Bodemer emphasized the role of healthy diet, such as the Mediterranean diet, in promoting hair health.

HIDRADENITIS SUPPURATIVA NEW AND EMERGING FOR THERAPY

Speaker: Hadar Lev-Tov, MD

Dr. Lev-Tov discussed the pathophysiology of HS, emerging medical and surgical therapies, and nutritional recommendations. Topics included the use of TNF-alpha inhibitors such as adalimumab and infliximab, as well as more novel treatments like povorcitinib, an oral Janus kinase inhibitor, and clascoterone, a topical androgen receptor inhibitor, for HS treatment and management. Surgical interventions, such as deroofting and local excisions can be considered for the management of HS in cases where medical treatments alone are insufficient. Nutrition-wise, the Mediterranean diet may be beneficial in HS management. Dr. Lev-Tov emphasized the importance of considering both medical and lifestyle interventions, such as nutrition and exercise, for effective HS care.

ORAL AND TOPICAL COMPOUNDING FOR AGING

Speaker: Natalie Gustafson, PharmD

Dr. Gustafson discussed a variety of oral and topical agents that can be compounded to combat aging. She opened the talk with a review of metformin and its beneficial effects on multiple aspects of health, including cardiovascular health and anti-aging benefits. She also discussed the safety profile and dosing of metformin and advised the use of the extended-release version. Some of the anti-aging topicals she highlighted include tazarotene, hydroquinone, niacinamide and vitamin C. She then reviewed various oral photoprotective agents, such as lycopene, lutein, and polypodium leucotomos, stating that some of the benefits of these oral agents include ease of use and ability to determine half-lives.

CONCLUSION

The Integrative Dermatology Symposium brings together dermatologists, healthcare practitioners, and experts in integrative medicine to explore the intersection of conventional dermatology and complementary therapies. This year's symposium highlighted the importance of nutrition in dermatology.

Integrative Dermatology is a growing field with the potential of further integration of evidence-based complementary therapies, such as nutrition, acupuncture, and herbal medicine, into dermatological treatments. The increasing body of evidence has the potential to pave the way for the development of complimentary therapies rec-

ommendations aimed at promoting skin health and managing dermatological conditions.

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