

IDCP Recommended Resources and Reading List

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IDCP Resources:

- **IDCP Tribe Community Platform (Discussion, Q&A, Networking):**
<https://learnskin.tribeplatform.com/idcp-2023-24-at99x0ev>
- **IDCP Facebook Group:** <https://www.facebook.com/groups/1036616830088512>
- **IDCP Program PPT Handouts:**
<https://drive.google.com/drive/folders/10UC4w2zVlztBQG7NZycljzRs-nREPsCD>
- **IDCP Program Calendar:**
https://docs.google.com/spreadsheets/d/1MLyVxVu_o32CjtIQkRbYejAfh5eS8gTm17Ti5EWxkHA/edit#gid=0

Resource Packs from Dr. Lio:

https://www.dropbox.com/sh/qa8n5825ue31cpn/AACRp3fhFpIHGSscn9_uS2hEa?dl=0

IDCP Dr. Lio Papers:

<https://www.dropbox.com/sh/f6eqkxa8y2rv3pu/AAAxafWE6e5DAYVaDvw7ktHTa?dl=0>

IDS Dr. Lio Handouts:

<https://www.dropbox.com/sh/uab2vivwgpuc8it/AADbbUKdyWFOo4Hmv8KeQr0Ua?dl=0>

Patient Handouts from Dr. Lio:

<https://www.dropbox.com/sh/ipf55sncooeg22s/AACYcnuFb2Vlu5eKCW44iC7-a?dl=0>

Integrative Dermatology: Practical Applications in Acne and Rosacea by Peter Lio, MD and Reena Rupani, MD

<https://www.amazon.com/Integrative-Dermatology-Practical-Applications-Rosacea/dp/3030589536>

Integrative Dermatology Textbook by Robert Norman, DO; Philip Shenefelt, MD; and Reena Rupani, MD

<https://www.amazon.com/Integrative-Dermatology-Weil-Medicine-Library/dp/0199907927/>

Integrative Dermatology Handbook by Peter Lio, MD

<https://www.amazon.com/Handbook-Integrative-Dermatology-Evidence-Based-Approach/dp/3319178156/>

The Web that Has No Weaver: Understanding Chinese Medicine by Ted Kaptchuk, OMD

<https://www.amazon.com/Web-That-Has-Weaver-Understanding-ebook/dp/B00XAZ625E/>

Spontaneous Healing by Andrew Weil, MD

<https://www.amazon.com/Spontaneous-Healing-Discover-Enhance-Maintain-ebook/dp/B004QZA80C>

The Business of Dermatology

<https://www.amazon.com/Business-Dermatology-Jeffrey-S-Dover-ebook/dp/B087JGX4WR>

The Autoimmune Solution by Amy Myers, MD

<https://www.audiobooksnow.com/audiobooks/the-autoimmune-solution/752755/>

The Plant Paradox by Steven Gundry, MD

<https://www.amazon.com/Plant-Paradox-Dangers-Healthy-Disease/dp/006242713X>

The Anatomy of Hope by Jerome Groopman, MD

<https://www.amazon.com/The-Anatomy-of-Hope-audiobook/dp/B0001GDQMC/>

Recommendations by [Samantha Sharp, MD - Guest Faculty on Hypnosis](#)

[How to Win Friends and Influence People](#) - digital version here

For children: [Harry the Hypno-potamus](#).

[The Brain Software Podcast](#)

Article on Alternative Treatments to Itch:

<https://www.newyorker.com/magazine/2008/06/30/the-itch>

Anne Kennard, DO, author of the IM cookbook [Nourish](#). Dr. Kennard can be reached at akennard@atsu.edu if you have any follow-up questions.

Diet and Dermatology: [Handouts](#)

[LearnSkin eBooks](#)

[LearnSkin Weekly Podcast](#)

[LearnSkin Monthly Premium Member Masterclass](#)

[LearnSkin Integrative Toolkit \(Beta\)](#)

Peter Lio, MD is Co-Chair of the Expert Resource Group at the AAD on Integrative Dermatology - all are welcome!

Articles of Importance

A New Toolkit for Integrative Dermatology

Ma H, Shi V, and Lio P. A Multidisciplinary Toolbox for Atopic Dermatitis Treatments. Feb 2021. Link:

<https://practicaldermatology.com/articles/2021-feb/a-multidisciplinary-toolbox-for-atopic-dermatitis-treatments>

-Thompson MM, Hanifin JM. Effective therapy of childhood atopic dermatitis allays food allergy concerns. J Am Acad Dermatol. 2005 Aug;53(2 Suppl 2):S214-9.

-Jensen P. Alternative therapy for atopic dermatitis and psoriasis: patient-reported motivation, information source and effect. Acta Derm Venereol. 1990;70(5):425-8.

An Introduction to Supplements

-Swann JP. The history of efforts to regulate dietary supplements in the USA. Drug Test Anal. 2016 Mar-Apr;8(3-4):271-82. doi: 10.1002/dta.1919.

-On healthcare by popular appeal: critical assessment of benefit and risk in cannabidiol based dietary supplements. Cogan PS. Expert Rev Clin Pharmacol. 2019 Jun;12(6):501-511. doi: 10.1080/17512433.2019.1612743. Epub 2019 May 7.

Sleep and Sleep Enhancement

-Simpson NS, Gibbs EL, Matheson GO. Optimizing sleep to maximize performance: implications and recommendations for elite athletes. *Scand J Med Sci Sports*. 2017 Mar;27(3):266-274.

-Cohen S, Doyle WJ, Alper CM, et al. Sleep habits and susceptibility to the common cold. *Arch Int Med* 2009; 169: 62–67.

-Hendricks AJ, Manivannan M, Shi VY. Clinical Pearls on Sleep Management in Atopic Dermatitis. *Dermatitis*. 2019 Sep/Oct;30(5):287-293.

-Zhou ES, Gardiner P, Bertisch SM. Integrative Medicine for Insomnia. *Med Clin North Am*. 2017 Sep;101(5):865-879.

The Skin Microbiome

-Kong HH et al. Temporal shifts in the skin microbiome associated with disease flares and treatment in children with atopic dermatitis. *Genome Res*. 2012 May;22(5):850-9.

-Strugar TL, Kuo A, Seit  S, Lin M, Lio P. Connecting the Dots: From Skin Barrier Dysfunction to Allergic Sensitization, and the Role of Moisturizers in Repairing the Skin Barrier. *Journal of drugs in dermatology: JDD*. 2019 Jun;18(6):581-.

-Vieira BL, Lim NR, Lohman ME, Lio PA. Complementary and alternative medicine for atopic dermatitis: an evidence-based review. *American journal of clinical dermatology*. 2016 Dec 1;17(6):557-81.

-Shi K, Lio PA. Alternative treatments for atopic dermatitis: an update. *American journal of clinical dermatology*. 2019 Apr 1;20(2):251-66.

-Lim NR, Lohman ME, Lio PA. The role of elimination diets in atopic dermatitis—a comprehensive review. *Pediatric dermatology*. 2017 Sep;34(5):516-27.

-Nickles MA, Lio PA. Cannabinoids in Dermatology: Hope or Hype?. *Cannabis and Cannabinoid Research*. 2020 Apr 28.

-On healthcare by popular appeal: critical assessment of benefit and risk in cannabidiol based dietary supplements. Cogan PS. Expert Rev Clin Pharmacol. 2019 Jun;12(6):501-511. doi: 10.1080/17512433.2019.1612743. Epub 2019 May 7.

-Strugar TL, Kuo A, Seit  S, Lin M, Lio P. Connecting the Dots: From Skin Barrier Dysfunction to Allergic Sensitization, and the Role of Moisturizers in Repairing the Skin Barrier. Journal of drugs in dermatology: JDD. 2019 Jun;18(6):581-.

-Nylund L, et al. Microarray analysis reveals marked intestinal microbiota aberrancy in infants having eczema compared to healthy children in at-risk for atopic disease. BMC Microbiol. 2013 Jan 23;13:12. doi: 10.1186/1471-2180-13-12.

-Effect of probiotics on gastrointestinal symptoms and small intestinal permeability in children with atopic dermatitis. Rosenfeldt V, Benfeldt E, Valerius NH, Paerregaard A, Michaelsen KF. J Pediatr. 2004 Nov;145(5):612-6.

-Staphylococcus aureus and Atopic Dermatitis: A Complex and Evolving Relationship. Geoghegan JA, Irvine AD, Foster TJ. Trends Microbiol. 2018 Jun;26(6):484-497.

-Evangelista MT, Abad-Casintahan F, Lopez-Villafuerte L. The effect of topical virgin coconut oil on SCORAD index, transepidermal water loss, and skin capacitance in mild to moderate pediatric atopic dermatitis: a randomized, double-blind, clinical trial. Int J Dermatol. 2014 Jan;53(1):100-8.

Products & Treatments

- [Prolon](#) fasting mimicking diet
- [EWG Skin Deep App](#) - product database
- Additional products listed by area of topic each week below

Compounding Pharmacies

[Apothecare at Lakewood Ranch & Compounding Center](#)

Address: 8618 E State Rd 70, Bradenton, FL 34202

Phone: (941) 751-5000

[Aroma Workshop](#)

Address: 2110 N Halsted St, Chicago, IL 60614

Phone: (773) 871-1985

Email: hello@aromaworkshop.com

Notes: Owner Tedd Nennan (works with Peter Lio, MD)

[Beaker Pharmacy](#)

7810 W Eldorado Pkwy Suite 200, McKinney, TX 75070

Phone: (972) 972-4700

Fax: 469-907-1197

Notes: They ship nationwide, no charge, very good pricing

[Camby Pharmacy](#)

Address: 8411 Windfall Ln #90, Camby, IND 46113

Phone: (317) 548-8015

Notes: (Password: 3178366570)

You can find them in EMR. Choose the address on Windfall Rd in Indiana. They are licensed in WI, IN, NH, NJ, MI, MO, PA, FL, CO, IL currently. Licensing is pending in CA, KY, TX, OR but expecting soon.

[Chemistry Rx](#)

Address: 950 Henderson Blvd., Folcroft, PA 19032

Phone: (855) 790-0100

Email: info@chemistryrx.com

Notes: LDN

Glenn Arpino

Dermasave

New York

[Koshland](#)

Address: 301 Folsom St, Ste B, San Francisco, CA 94105

Phone: (415) 344-0600

Notes: IDS exhibitor

[Mark Drugs](#)

1020 N. Milwaukee Avenue, Suite 140 Deerfield, IL 60015

Phone: 847-419-9898

Toll Free: (877) 419-9898

Fax: 847-419-9899

Notes: They can do anything, including sterile ophthalmic preparations

[Pharmaca Integrative Pharmacy](#)

Address: 2313 N Lincoln Ave, Chicago, IL 60614

Phone: (773) 360-8595

[Skin Medicinals](#)

Address: contactus@skinmedicinals.com

Phone: (312) 535-3552

Notes: Personalized compounding

[Tailor Made Compounding](#)

Address: 200 Moore Drive, Nicholasville, KY 40356

Phone: (859) 887-0013

Notes: Peptides

Caitlin Trisler, PharmD | Compounding Pharmacist

(They can do sterile compounding)

Customedica Pharmacy

EAGLE: 149 W. State St., Ste 101 | Eagle, ID 83616

p (208) 939-8008 | f (208) 938-1067

Weekly Addendums

Logistics

With regards to zoom, if you'd ever like to change screen size so that the main speaker is full screen or the PowerPoint is more visible, [you can adjust using these steps.](#)

Module 1: Fundamentals of Integrative Dermatology

Centella asiatica (Gotu kola): <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3116297/>

- TCM eBook linked under LearnSkin eBooks above
- Neem is a balancer against Kapha since it's an astringent

- Neem may help psoriasis, it has been shown to improve PASI scores. Some studies show scalp psoriasis have higher colonization of Malassezia so I will put them on antifungals or some on Neem that are interested in an integrative approach
- May affect sperm (study in rats) so may affect sperm motility
- Neem sources
 - [Gaia Herbs](#)
 - [Banyan Botanicals](#)
 - [Organic India](#)
 - [Athreya Herbs](#)
 - [Mountain Rose Herbs](#)
- Patient dosing for Neem
 - Once a day to begin and increase to twice a day
 - 500mg 2x a day
- Age restrictions with Neem?
 - Children OK to 12 years old, not toddlers or younger as they may not tolerate high dosing. May do 250 mg daily (1/8 teaspoon).
- Best practice for Neem
 - Request certificate of analysis to check heavy metal toxicity and quality

Cold infusion - 3 or 4 parts to one for a cold infusion, shake it up every so often for 48 hrs, then strain it through filter paper. Can be used topically as an antimicrobial. Can add after a retinoid to reduce redness as well. Can use neem powder or dried leaves, the powder is a little more particulate. Sometimes can be used with atopic dermatitis in coconut oil as well.

[Himalaya](#) has neem cleansers

Q: If neem used for malassezia imbalance, could it be used for PVersicolor?

Raja: yes

Oral lichen planus - turmeric can help, without black paper since it can be aggravating, sometimes with quercetin well.

Q: How do you equate store whole bought turmeric/ginger with a dose amount to patients?

Raja: Powder form is what I would have patients use with oat milk and some avocado they get the fat along with it.

Q: For seborrheic dermatitis, how do I deliver an oil without causing yeast/fungus overgrowth?

Raja: If you extract coconut oil with neem, or sunflower seed oil has been shown to be helpful, grapeseed oil is a thinner oil, and then pumpkin seed oil is well tolerated on the face. Jojoba oil as well with neem or white curcumin for seb derm. White curcumin I do with my compounding pharmacy which can be found online from [sabinsa](#)

Psoriasis Case

- Turmeric
 - Dried or fresh?
 - Dried turmeric is most widely available
- How to use Neem and Turmeric in actual practice--favorite brands? How do you combine it with traditional medicines? Do you have patients continue for maintenance therapy?
 - Start with moderate psoriasis, low grade joint pain
 - 4-6 months then wean off the neem. May continue the turmeric.
 - Supplements can be expensive
 - Get turmeric powder in bulk from Costco
 - Recommend patients to make turmeric “golden tea” or “golden milk” with plant based milk
 - Patients can make their own capsules - a capsule filler is pretty inexpensive and easy to use (AB)
 - 2,000 mg=1 tb sp; 1 capsule of dried turmeric powder is about 500mg
 - Turmeric Brands
 - Whole spice curcumin from Indian grocery store
 - [Pure Encapsulations](#)
 - [Mountain Rose Herbs](#)
 - [youthery Turmeric Extra Strength Formula 1,000 mg., 180 Capsules](#)
 - [Kirkland Signature Ground Turmeric, 12 oz., 2-count](#)
 - Are you concerned with non-organic as far as pesticides?
 - 3 things to consider with herbs:
 - Whole Herb
 - Phytochemical
 - Standardized Extract

Acne Case

- Is pumpkin seed oil safe in pregnancy? - Can still use it topically

- Use pea protein instead of whey protein
- Do you use pumpkin seed oil for males with acne as well?
 - Yes, you can use pumpkin seed oil in men and the androgenic alopecia study was in men.
- Is neem considered an immunostimulant? Do you worry about using it in patients with CTD (connective tissue disease)?
 - Not a classic immunostimulant (echinacea is)
 - Yamada K, Hung P, Park TK, Park PJ, Lim BO. A comparison of the immunostimulatory effects of the medicinal herbs Echinacea, Ashwagandha and Brahmi. Journal of ethnopharmacology. 2011 Sep 1;137(1):231-5.
 - Yamada K, Hung P, Park TK, Park PJ, Lim BO. A comparison of the immunostimulatory effects of the medicinal herbs Echinacea, Ashwagandha and Brahmi. Journal of ethnopharmacology. 2011 Sep 1;137(1):231-5.
 - "Several in vitro and in vivo studies have shown that Spirulina platensis, Aphanizomenon flos-aqua, Chlorella, Echinacea, and alfalfa activate immune cells via certain cytokines and chemokines. Case reports suggest the association of ingesting immunostimulatory herbs and the clinical onset or flares of diseases characterized by an exaggerated immune response such as lupus erythematosus, dermatomyositis, and autoimmune blistering disorders."
- Pumpkin seed oil sources
 - [Mountain Rose Herbs](#) (topical)
 - [Leven Rose](#)
 - [Cold Pressed Pumpkin Seed Oil](#) - That is good if you need a larger area -back chest...
 - [Now Supplement](#)
 - [Deva](#) (vegan capsule)

Manjistha - 500mg from [Banyan botanicals](#) and [Athreya](#) (may turn tears and urine a little red), does not affect the liver and kidneys

Shardunika (Gymnemma sylvestre) - will knock out sweet taste, can reduce carb cravings. 500mg every day

Vitiligo Case

- Bakuchi herb
- Brands

- [Dabur](#)
- [Charak](#) - Pigmento tablet and ointment formulation for Vitiligo
- V-tar (30% crude coal tar sol'n): apply very tiny amount q week (to match skin color)--wash off p 6-8 hrs -Dermasave labs: (800) 277-7099 or (845) 635-4087
Glenn Arpino
- Gingko biloba 60mg bid
- [Foundation Skincare](#) has ginkgo, polypodium leucotomos, and alpha lipoic acid.
- PUVA type therapy is great, but don't you worry about the long term skin cancer risk compared to NBUB?
 - Not with short term use
- Wrightia tinctoria for vitiligo?
 - No experience
- Tattooing the alpha MSH?
 - No experience

Checklist for Finding a High-Quality Supplement:*

1. Does it meet the following quality standards?
 - a. Current Good Manufacturing Practices (CGMP) certification from the US Food and Drug Administration
 - b. European Union (EU), Australian (AUS), or Canadian (CFIA) organic certification
 - c. National Science Foundation (NSF) International certification
2. Does the company have an independent adverse event reporting program?
3. Is the product certified organic or ecofarmed?
4. Have their products been laboratory tested by batch to confirm their stated ingredients and no pesticides or heavy metals?

Resources: <https://www.usp.org/>

**Adapted from: VanDolah, Harrison J. et al. Clinicians' Guide to Cannabidiol and Hemp Oils. Mayo Clinic Proceedings, Volume 94, Issue 9, 1840 - 1851*

Turmeric Tea

1/4 cup warm vegetable broth

1 teaspoon of turmeric

1 teaspoon of virgin coconut oil

pinch of black pepper

Warm the broth in the microwave for about 10-15 secs then add the

turmeric and stir until dissolved.

Add coconut oil as it aids with absorption, and black pepper (piperine) may enhance bioavailability of curcumin (turmeric).

Turmeric Milk

2 cups of almond, coconut, or hemp milk

1 tablespoon agave or honey

1 tablespoon virgin coconut oil

1 teaspoon ground turmeric

1 cinnamon stick or 1 teaspoon ground cinnamon

small pinch of black pepper

Warm the milk and whisk to combine ingredients. Strain the milk if you have large pieces of ginger, cinnamon, peppercorns.

Drink two cups per day.

Module 2: Herbs and Botanicals

- [Drug Herb Interaction Chart](#)
- [Natural Medicines](#) also offers an Interaction Checker.

EGCG (Epigallocatechin Gallate)

Common Demulcents

- Licorice
My favorite licorice containing topical is one called Look No X-E-Ma by a company called Four Seasons. (AB)
- DGL
- Aloe ferox

This is my favorite Aloe Vera Gel for acne—well formulated, reliable:

<https://www.amazon.com/Badger-Aloe-Vera-Gel-4oz/dp/B079P7J5DK> (PL)

Order: Gel, acne med, moisturizer

Or formulate with Aloe Vera via compounding pharmacist

Is aloe Vera powder available commercially? Could it be mixed with an HA gel?

Is that 1-5% powder in a moisturizer base? Mountain Rose Herbs source

Manjistha 500 mg daily up to bid

Marshmallow Root: Gaia Herbs (Product is Digest Support, can be used topically)
Herb Pharm

GLR-6 for gut repair on Amazon to help with leaky gut

<https://www.amazon.com/Intestinal-Fortitude-Marshmallow-Glucosamine-Inflammatory/dp/B07PCSKBW8/>

In module 2, Dr. Sivamani discussed tea steeping times 3-5 minutes are safe, longer equated with contamination.

I'm wondering about re-steeping? I drink several cups of tea a day and often re-steep my teas. Am I at risk? At what point should I consider heavy metal testing?

Bakuchiol

Dhaliwal S, Rybak I, Ellis SR, Notay M, Trivedi M, Burney W, Vaughn AR, Nguyen M, Reiter P, Bosanac S, Yan H. Prospective, randomized, double-blind assessment of topical bakuchiol and retinol for facial photoageing. British Journal of Dermatology. 2019 Feb;180(2):289-96.

Dhaliwal, S., Rybak, I., Ellis, S. R., Notay, M., Trivedi, M., Burney, W., ... & Sivamani, R. K. (2019). Prospective, randomized, double-blind assessment of topical bakuchiol and retinol for facial photoageing. British Journal of Dermatology, 180(2), 289-296.

We reviewed your article on episode 42 of Dermasphere :) (M Tarbox)

Bakuchiol Source: [Sytheon](#)

Are you concerned about the environmental impact of using bakuchiol? Are there any concerns there (vs retinol).

-Moving into chemical synthesis

-Look for ethical sourcing

-[EWG](#)

Less irritating on the face than 1% retinol

Is bakuchiol safe in pregnancy?

There are no studies to indicate that it is or isn't, but I am fine with women using it during pregnancy. (RS)

Managing Irritation

1. Decrease frequency
2. Apply moisturizer first, then the retinoid
3. Further dilute with moisturizer
4. Consider SCT (Short contact therapy: apply, brush your teeth, then wash off)

Moisturize with Cerave to decrease with irritation (M Tarbox)

Apply on unwashed face (S McClure)

-Water is a penetrant:

<https://www.dropbox.com/s/h5tis49rwnmlw8j/Skin%20Penetration%20copy.pdf?dl=0>

Ref: Trommer H, Neubert RH. Overcoming the stratum corneum: the modulation of skin penetration. Skin pharmacology and physiology. 2006;19(2):106-21.

Gotu kola (centella asiatica) increases production of sebum and collagen 1

Adaptogenic teas: <https://the.republicoftea.com/tea-culture/what-are-adaptogens/> and <https://www.traditionalmedicinals.com/>

Ashwagandha - tends to increase testosterone

Shatavari - used to control menopausal symptoms

Curcumin - anti inflammatory (2,000-4,000mg)

What is a good brand in your experience for rosemary oil for thinning hair?

-I recommend cold-pressed as that is more important than the brand itself so that the patient has liberty to find the brand that makes sense for them or is easily accessible. (RS)

What kind of results do you counsel patients to expect with this type of hair loss regimen (AGA)?

-They should expect modest results. 1000 mg Pumpkin seed oil showed a 40% improvement after 24 weeks. Topical rosemary was similar to minoxidil 2%.

So is Nutrafol something you usually prescribe for AGA? Saw some good studies by DR Sadick -I compound in the clinic but I also do like Nutrafol's brands and they have been committed to research. COI: I have served as an advisor for Nutrafol with their research studies. (RS)

Supplements like nutrafol or untangled have ashwagandha in it, but is this too little to have an effect? Better to do ashwagandha on its own?

-Synergistic effects can occur with multiple herbs and so it depends on the study and sometimes smaller amounts of herbs can combine. However, studies are needed to bear this out. (RS)

-Need to watch out for polyherbalism too so that we don't have too many of one herb or supplement coming from multiple sources. (AB)

Is there any efficacy with castor oil and hair growth? It has been touted for hair growth.

-Not aware of research supporting it (AB)

-Rosemary oil in foods

For oral pumpkin seed oil and rosemary oil how much do you tell patients - tsp/tbsp?

-[Now Supplement](#): pumpkin seed oil 1000 mg daily (RS)

For topical pumpkin seed oil are you having them suspend them in something else?

- Use directly on the scalp and leave overnight (RS)

Do you get unwanted facial hair with these herbs? Do you use them in both men and women? And do you use them long term for maintenance?

- I have not seen unwanted facial hair as a side effect (RS)

-I have used Shatavari and Ashwagandha long term. I am careful about Neem long term (RS)

Just wondering if these are for all types of hair loss?

-No, won't work for all types (ie scarring, nutritional deficiencies, etc)

Shardunika and Gurmar: [Banyan Botanicals](#)

Dosing of 1-2 tablets (500mg capsules) prior to meal twice a day or in the evening

[Naturopathic & Integrative Dermatology CME Series at LearnSkin](#)

When to Reach for What Herb

Do you apply the aloe vera before the tretinoin? (As first layer?)

- Depends on the formulations (apply gels before creams)

Is the licorice you are using as a demulcent always oral or do you use topical formulations?

-Topical to impact the skin

Are we using aloe Vera gel in place of an emollient or in addition to an emollient?

-Aloe vera gel is used in addition to an emollient if the skin is very dry (Aloe vera is a demulcent and not as good of an emollient). If the skin is oily, I do not. (RS)

I always think of gels as drying even with the aloe vera, do you think it's more moisturizing to do a ceramide cream before tretinoin vs the aloe?

-For people with dry skin, a gel base can be aggravating. For those with oily skin, it can be great. It's important to tailor to the skin type and a ceramide is a great idea before. On the other hand, other emollients can be used such as jojoba oil or grapeseed oil as well if needed.

Nicotinic acid = Niacin, it's important to distinguish Niacin from Niacinamide/nicotinamide to patients and give specific product recommendations.

Module 3: Nutrition

Additional lecture by allergist Neal Jain, MD: [Integrative Approach to Allergic Rhinitis and Other Atopic Conditions](#)

White curcumin is from Sabinsa (1%)

Aside from patients with known Nickel sensitivity (e.g. in their jewelry), who else would you try the low nickel diet on? Anyone with hand dermatitis?

-I recommend a lot of chewable vitamin C to chelate nickel. People are very good at adding that on. (SD)

Even though nickel IgE testing may not be able to pick up these cases of nickel-induced vesicular hand dermatitis, are all these patients patch test positive?

-It's much lower yield if they don't have contact dermatitis. However, people still can have sensitivity systemically even if the contact sensitization is not present (AB and RS)

Do you have a good source for patients to use in order to follow a WFPB diet? Or do you have some type of sheet that you provide patients to follow?

-Will refer to Engine 2 diet (<https://plantstrong.com/>) by Rip Esselstyn. Has great recipes for plant based options.

-Forks Over Knives: <https://www.forksoverknives.com/>

-[The Cheese Trap](#) is a simplified resource for patients to understand why and how dairy can be harmful.

Low Histamine Diet

Has this helped your patients with Mastocytosis? - I have not used it for this (AB)

Has low histamine diet helped generalized pruritus patients?

-No, not aware of any evidence

Is there any alcohol that patients with chronic urticaria can take? I have a recalcitrant CSU patient who is a mixologist and needs to taste the alcohol (she said). She slightly improved after stopping alcohol.

In addition to diet do you also recommend lukewarm bath/shower?

For recalcitrant itching or CSU, I would recommend lukewarm baths and showers as well as the heat can be aggravating (RKS)

This isn't dermatology, but are you aware of any evidence for low histamine diet and GERD/irritable bowel? I feel like the histamine could be a problem

Low nickel has been associated and we know that histamine blockers (H2 blockers) have been used to treat GERD so there is a mechanism for it there.

Ayurveda Overview by Raja S

Vata, Pitta, Kapha

Ida / Pingala

How do you identify Ayurvedic Constitution? Vata constitution vs imbalance?

What would be an Ayurvedic approach to the eczema prone patients with comedonal acne?

If less sebum contributes to more wrinkling, does that suggest isotretinoin-treated patients will look older faster than they might otherwise?

I have a question about diet, I have an issue bringing up diet with my HS and Psoriasis patients. I have trouble bringing it up in a 10 min office visit without the discussion seeming to fall flat. I think folks don't like being told about weight and diet. And curious how folks bring this up in a proactive, positive manner. That patients hear in a caring manner.

That's another question, maybe for another chapter: isn't not all tetril oil (for example) created equal? which brand is better than the other?

Does bariatric surgery improve HS?

In general, how long does it take to see improvement with these 3 diets?
2 months at least

Would you mind sharing your low histamine handout?

Module 4: Mind-Body and Mindfulness

- [Tara Brach's guided meditations are available here.](#)
- [UCLA also offers free guided meditations and mindfulness resources.](#)
- [Loving Kindness Meditation](#)

Case presentation by AC:

17yro male being treated with diet, probiotics, other antioxidant supplements. Balance of decisions with products sold in the office and recommending without bias. How do you prioritize what supplements to give?

E: Looks a little like pyoderma faciale, maybe SIBO and rosacea. Is there a specific antibiotic that would be best?

Raja: Rifaximin is what is used in SIBO but minocycline and doxycycline cover SIBO too

F: I'm seeing it is to give a mix of conventional and natural. Ex: If giving antibiotic, give probiotics to balance.

Raja: The probiotic with evidence for acne is Healthy Trinity by the company Natren and they showed that antibiotics can work synergistically with that particular probiotic

Would start aggressively with steroids and then go in with the probiotic and guggul (herb used in Ayurveda that can help with acne and lipid control) 500mg BIG of guggul

<https://www.swansonvitamins.com/p/himalaya-herbal-healthcare-guggul-60-veg-caps>

Raja's Presentation:

The role of breathing:

- There's laterality to the way we breathe, with left and right nostrils. The chakras in ayurveda have different energies that circulate on the left and right side. Ida is cooling to the body and pingala is heating. When you breathe, you can do alternate nostril breathing or left and right nostril breathing. You block one of the nostrils, breathe in for 6 seconds, hold for 4 seconds, then exhale.
- This can help with insomnia, just for 10mins at the end of the day. Studies have shown oxygen consumption, weight loss, metabolism markers. 27 resp cycles repeated 4x a day in the study. The right side is supposed to boost energy levels, and they found oxygen consumption in the body went up statistically significantly and body weight went down, boosted metabolism slightly as well.

- Another study 6 cycles/min for 45mins daily for 2 weeks on left nostril breathing, blood pressure would drop and they found their vital capacity went up.
- Another study was done on medical students and did a comparative study, had a control group with no intervention, other with left nostril breathing. First 1.5mins day, 2nd week 3mins, and by 4th week to do 6mins. The nostril makes a difference, trouble with sleep or itch, breathing can help. It's easy because you don't have to still the mind but you can do left nostril breathing.
- Left nostril activates more of the parasympathetic nervous system compared to the right nostril which may boost metabolism. The mouth is closed during the breathing process. Aim for 4-6 breaths a minute or lower. In 4, hold for 4, out for 4. You can choose different ways to do it and different times.
- Raja will mention more data on hormones and endorphins at another meeting.

Case example:

Px with AD, 12yro boy worsening facial rash. Perioral dermatitis? Did the steroids induce perioral dermatitis.

Potentially contact dermatitis, mint in toothpaste may trigger TRP channels.

NO: Also look into mother wearing nail polish due to the formaldehyde content and then airborne allergens and where the child spends most of their time during the day

Raja: Sometimes the neck will be involved in airborne dermatitis

NO: Dr. David Cohen has a long list of potential contact dermatitis allergens too and has recommendations for deodorant, toothpaste, etc

Raja: Charcoal toothpastes don't always have mint in them so sometimes I have patients swap for charcoal toothpaste

I use compounded white curcumin as well, some studies show it's as effective as triamcinolone. Ivermectin 2% or 1.5% with 2-5% for white curcumin from [Sabinsa](#), compounding pharmacists can choose the base but I tell them it's for the face.

PX in case reduced toothpaste and it worked and the steroids.

Epsolay - microencapsulated benzoyl peroxide topical 1-2x a day

Postbiotics- bacillus coagulans postbiotic topically for acne/rosacea

AC :Vitreoscilla filiformis another one used for it's postbiotics topically

Laughter as a form of medicine:

- 4 humor interventions, laughing, clapping, etc and everyone starts laughing
- They looked at IgA levels and the big one was the stress response, even though it was modest they were able to reduce stress and it does statistically significantly.
- Other intervention when watching something funny on TV and helped children sleep faster and reduce SCORAD scores

I had a patient who avoided balsam of peru, and it was the only thing that cleared her perioral dermatitis. No other prescriptions helped. I was wondering if anyone else experienced balsam of peru trigger perioral dermatitis? (DC)

-Yes, one of my mentors was Howard Maibach in contact dermatitis clinic and we frequently had people that had perioral dermatitis as a presentation and Balsam of Peru. In fact, in some cases you have to consider a balsam of Peru avoidance diet as well if it is a wider spread rash if you see it on the patch test. (RS)

I've got a lady with similar picking issue on the face. I don't think the Unna boot would fly.

I've been using hydrocolloid bandages with moderate success. Any ideas? (JC)

-Tough case. I like the idea of hydrocolloid dressing too. Had mixed results with NAC; start at 600mg bid and titrate up to 3g qd max. (JS)

-Have you used N-acetyl cysteine for prurigo?

-If you are going to use N-acetyl cysteine, then the dosing is ramped up and I start with 1200 mg/day and then go from there and then one month later, I'll move them up to 2400 mg once a day. Here is a clinical study on N-acetyl cysteine:

<https://pubmed.ncbi.nlm.nih.gov/27007062/> (RS)

I want to start using naltrexone for some of my picking/very itchy patients who have failed NAC - can we go over how to start naltrexone? One of patients has parkinsons, is this contraindication for naltrexone?

-Low dose naltrexone from Apple: 0.5 mg po QAM x 2 weeks, then increase to 0.5mg po BID x 2 weeks... increasing to up to 1 mg po BID. (AB)

-As a PSA, one of our colleagues published a nice recipe for compounding your own LDN at home with 10 tabs of 50mg mixed with 500cc of orange juice. (JS)

-Reference: [https://www.jaad.org/article/S0190-9622\(19\)30511-0/fulltext](https://www.jaad.org/article/S0190-9622(19)30511-0/fulltext)

Topical indigo naturalis 5% (AB) for anti-inflammatory

Topical indigo naturalis 0.5% or 1% mixed with white curcumin (1%) anti-inflammatory (RS)
I get my topical indigo from Tedd Neenan: hello@aromaworkshop.com (PL)
Indigo is particularly good for inverse psoriasis (Apple and Raja)

Treatment Ideas for Persistent pruritus and subcorneal pustule on the arms but not the entire arm:

Topical CBD or PEA (RS). I use Greenway Therapeutix for CBD (RS)

Could also try topical KAT cream. Ketamine amytryp lido

Amitriptyline 1%, ketamine 0.5% in vanicream

Reference: Poterucha TJ, Murphy SL, Davis MD, Sandroni P, Rho RH, Warndahl RA, Weiss WT. Topical amitriptyline-ketamine for the treatment of brachioradial pruritus. JAMA dermatology. 2013 Feb 1;149(2):148-50.

<https://jamanetwork.com/journals/jamadermatology/article-abstract/1654863>

This is a moisturizer that has PEA and is the one that has been studied:

<https://www.amazon.com/PHYSIOGEL-Calming-Relief-Cream-100ml/dp/B082Q511CV>

Consider NB-UVB as well

Topical sulfur soap (AB). Leave it on for 5 to 10 min and they need to moisturize afterwards.
Sends people to Amazon and get a sulfur bar soap. There is SebX shampoo (5%) with salicylic acid.

Recommendation by Dr. Bodemer:

[Breathing: The Master Key to Self... book by Andrew Weil \(thriftbooks.com\)](#)

Holotropic breathwork - inhale and exhale with no pause, constant breathing and can create an altered mental state. Can take individuals into a deep state of meditation and gives insight into why your physical body may be impacted by emotions. Sometimes it may bring up trauma. Should work with a breathwork teacher or therapist when doing this.

-holding on exhale increases carbon dioxide

-may be beneficial for chronic nasal drip or sinusitis

[When the Body Says No- Gabor Mate](#)

[A Structured Psychiatric Intervention for Cancer Patients](#)

Mechanism of Pumpkin Seed Oil for Hair Loss or Acne:

1000mg orally and can be used topically too in a few drops (2-3)

-Delta-7 phytosterols are in pumpkin seed oil that inhibit the 5-alpha reductase. They are unique to pumpkin seed oil vs other plant based oils

-[Mountain Rose Herbs](#) has high quality cold-pressed pumpkin seed oil

-[NOW brand](#) is simple for capsules at 1000 mg per capsule (not vegan)

-[Vegan pumpkin seed oil supplement](#)

Side effect may be heart palpitations, may reduce blood pressure, in these patients 500mg

Module 5: Microbiome and Modulating the Microbiome

Molluscum Case Presentation:

4yro with eczema and molluscum

Peter: Cantharidin is my favorite, it can be put on and washed when at home. From a beetle and used from the time of Hippocrates. Take a Q tip or cotton swab and put a tiny dot on. A new product is going to be approved soon in a vial in a commercial product.

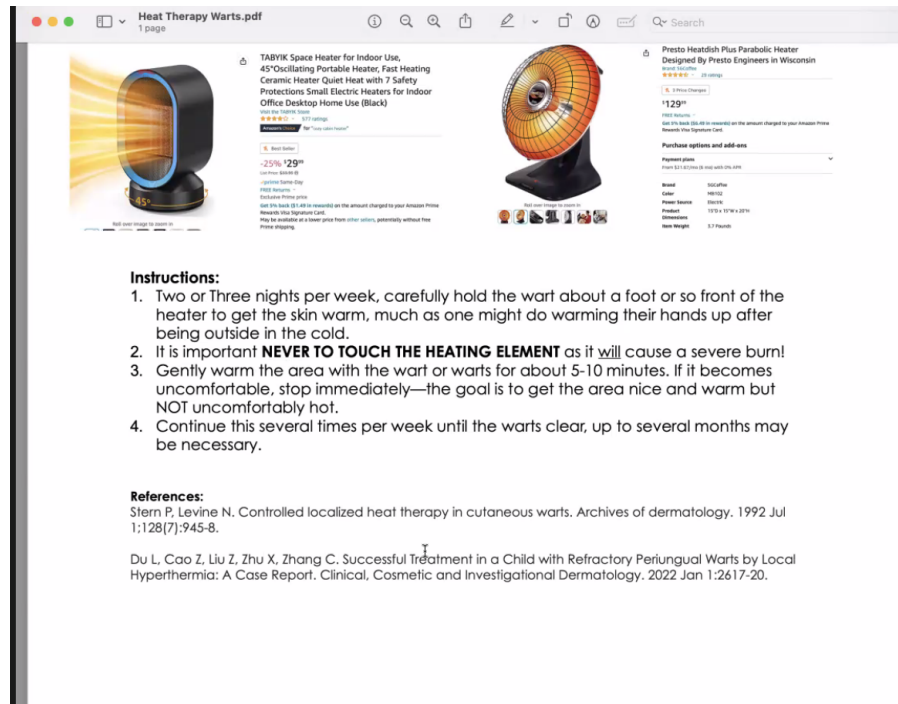
Lemon myrtle oil - another natural option, to apply nightly

<https://www.amazon.com/Plant-Therapy-Essential-Undiluted-Therapeutic/dp/B072PRGQ8F>

Research Study:

<https://www.sciencedirect.com/science/article/abs/pii/S0753332204000174>

I'll also recommend patients to pick up a space heater, about 6inches to a foot away, just as if you're warming your hands against it. Powerful for warts too. A device in China does something similar that has an 80% cure rate. Hair dryer may work too. About 140 F/hot tub temperature.



Have you heard about heat patches or where to find them? - No I haven't but it sounds interesting

Integrative options for eczema - hemp seed oil vs olive oil, hemp seed oil food grade orally has a good fat ratio that has been shown to be helpful in dogs with atopic dermatitis 2tbsp/day in human patients

Study in patients: [Efficacy of dietary hempseed oil in patients with atopic dermatitis - PubMed \(nih.gov\)](#)

[Amazon.com : Nutiva Organic Cold-Pressed Hemp Seed Oil, 16 oz : Grocery & Gourmet Food](#)

L-histidine is another supplement 2 tbsp per day, 1tsp/day in young children 4g/day in adults was found to boost production of filaggrin after 4 weeks

Study: [Feeding filaggrin: effects of l-histidine supplementation in atopic dermatitis - PubMed \(nih.gov\)](#)

[Amazon.com: BulkSupplements.com L-Histidine Powder - L-Histidine Base - Histidine Supplement - L Histidine 500mg - Immune Support Supplement - Amino Acids Supplement - 500mg per Serving \(100 Grams - 3.5 oz\) : Health & Household](#)

Vitamin D

Peter: Winter related atopic derm - pilot study with 11 patients, supplementing with vitamin D vs placebo was shown to be significant improvement in AD. Then other studies showing low vitamin D levels and worse eczema, higher vitamin D showed better eczema. However, a lot of mixed studies following. For a subgroup of patients it seems it does work so I have all my patients take it, I used to test but they always would come up deficient so I think it's good to have everyone on it.

[Solar D Gems 4000 IU Vitamin D3 plus Omega-3s with Natural Lemon Flavor, Carlson Labs \(nhc.com\)](#)

[Ddrops Vegan Liquid Vitamin D2 1000 IU | Walgreens](#)

Black Tea Compress for facial eczema and contact dermatitis

Black Tea Compress



1. Obtain un-flavored black tea, such as Newman's Own Organic Black Tea.
2. Brew one tea bag for 10 minutes in one cup of boiling tap water, then discard this tea.
3. Add another cup of boiling water to brew a second cup using the same tea bag for 10 minutes, and allow this weaker tea to cool to room temperature.
4. Soak a soft cloth or gauze in the weak tea infusion, and wring out gently.
5. Apply the damp compress to the affected area(s) for 20 minutes.
6. Apply a good moisturizer immediately after to prevent dryness.

Repeat this 4-5 times per day for six days or until improved.



Witte M, Krause L, Zillikens D, Shimanovich I. Black tea dressings - a rapidly effective treatment for facial dermatitis. J Dermatolog Treat. 2019;;1-4.

Oolong Tea - drinking after meals also shown to improve atopic dermatitis

Cryotherapy - shown to improve AD as well

Peter: Why I do not use imiquimod - I have seen it cause fever and febrile seizures since it can create a cytokine storm in some people

Antimicrobial enzymes - bacteriophages, endobyoma product not available in the US but has an anti-staph enzyme in the product that was shown to help patients with eczema.

Zoryve - Roflumilast once daily application, they are making a foam vehicle for seb derm

- [Study on influence of coconut oil on blood lipids](#)

Once you got to 50+, gut microbiota actually got more unique...

Your gut is becoming more unique, so perhaps your approach to different people should become more unique...

Wellness = lots of diversity, "good" microbes

Depending on the environment, the gut may be more or less resilient...

16S rRNA = Somewhat universal, inexpensive

Whole Genome Shotgun = More detailed view, more information, more accuracy, but more expensive

RNA Sequencing = Looks at gene expression. Less expensive than Whole Genome, but not appropriate for identifying a microbe—> usually done in conjunction with the WGS.

WGS: 99.9% specificity, 95.7% sensitivity at the species level

Functional Genomics: uses DNA, does not have risk of missing a gene that is not actively transcribing as in metatranscriptomics...

Raja: Atopic dermatitis is a dry disease, and a preponderance of *S. Aureus* (thus Shannon index plummets). However, if you take a lipophilic site and you dry it, you will get increased diversity since you've affected the dominant species... So diversity alone may not necessarily be a sign of a healthy microbiome...

Raja: basically you need context to fully understand it.

Kelly: People with Autism spectrum disorder can have very high diversity, but also have dysbiosis... so things are not as simple as they seem...

Raja: Firmicutes/Bacteroides (F/B ratio) is predictive of psoriasis

Proteobacteria/Actinobacteria Ratio — Increased P/A ratio is associated with lower short chain fatty acid production...

Yan et al acne study, P/A ratio in acne: 9.3 vs. 2.5 in controls— nearly 4 fold increase!

Raja: On shifting diets... if you switch to try to eat healthy, there will be an adjustment period (maybe 2 weeks) for the microbiome to shift.

Question - if there is so much variation week to week in a particular person's microbiome, then how useful is one kit measuring biome composition at one point in time?

-Some variation, but overall very consistent in a person

Student Comment: 20% of people responded to therapy for metastatic melanoma, and it was related to gut microbiome. Fecal transplant or drinking pomegranate juice seemed to encourage this bacteria...

-More studies needed

-My understanding is that it was the response to Nivo that was altered by differential gut bacterial populations (JC)

Can you and would you give supplements depending on the deficiencies in the functional report directly? (JJ)

-Yes

How stable is the microbiome? Very

Companies for SIBO Testing: The two major companies are [Trio-Smart](#) and [Quintron](#).

-Lactulose challenge has less variability, you have to prescribe it for patients before doing the testing. Then take breath tests every 15 minutes.

[Viome](#) and [GI effects](#)

[GI-MAP](#) (\$99-150) 16S sequencing for variable regions, bacterial information only and then qPCR.

Most gut testing, tests for relative abundance which makes up most of an individual's bacterial state.

Whole genome sequencing cost tangs from \$199-299 will provide more information

Metatranscriptomics/metagenomics will test for what gets produced by the bacteria

[Cosmos-ID](#) is a company that does not sell products with their testing

Butyrate and Propionate are more associated with gut health. Acetate is associated with other areas.

Saccharolytic fermentation (if low) would indicate low carbs coming in.

Propionate and amines being high will indicate a protein rich diet.

[High Fiber Foods Handout](#)

Vitamin A for acne: 300,000 to 400,000 for Vitamin A but will usually go by weight. If they are up to 100lbs, every 50kg go up to 50 to 50 and then triple it to end dose.

-70kg start at 50-100IUs then go up to 250IU

-If 100kg may go up to 400IU

Module 6: Energy Medicine

Guest Speaker: Lisa Lombard, PhD

Email: lisalombardphd@gmail.com

Topic: Clinical Hypnosis

Hypnosis has efficacy for self regulation, stress, and GI conditions as well.

Can be helpful for alternatives to scratching, and changing habits.

Hypnosis can help rebuild and build resilience.

The more you can focus on something, the larger it can get. When you turn your attention to something you magnify and grow it.

Suggestion is what differentiates mindfulness and meditation from hypnosis.

Question: Can hypnosis be harmful? Clinical hypnosis should not be harmful but it is important to screen for any pre-existing conditions. Sometimes individuals may cry during a session. It needs to be individualized to the person you are working with.

Hypnotist or hypnotherapist does not mean they have a license in something.

[ASCH-American Society of Clinical Hypnotherapists](#)
[Society of Clinical and Experimental Hypnosis](#)

National Pediatrics Hypnosis Institute

- Judith Hong, MD (judithhong81@gmail.com)
 - Offer physician training courses - email for more information
- [The Order of Time](#) on quantum mechanics

Judith Hong, MD Reiki Program Details

Level 1 Reiki Certification course.

* Learn about the basics of Reiki and how to perform hands-on treatments

* Learn about Reiki meditation and the Precepts

- * Learn basic techniques applicable to any form of energy work
- * Receive a Level 1 Reiki attunement
- * Be a certified Level 1 Reiki practitioner

Physician Level 1 course

- * For physicians only (there is 1 PA signed up for July 11, all the rest are physicians)
- * Includes a video lecture that goes over in detail more of the scientific studies and research. Also how Reiki can be used by physicians
- * Creates a safe community for physicians to dialogue and learn and share Reiki together

Details:

- * 2 hours of pre-recorded videos
- * Written manual that outlines the videos
- * 3 hour live class on Zoom
- * Cost is \$130
- * optional William Lee Rand manual that you order separately (\$15-30 depending on digital or hardcopy.)
- * contact me with any questions

Module 7: Pain and Itch

- [Ayurveda and Marma Therapy by Dr. Frawley](#)
- [Marma Points of Ayurveda by Vasant Lad](#)
- [Transdermal Marma with Vaidya Mishra](#)
- <https://nutritionfacts.org/>
- <https://ijdrp.org/index.php/ijdrp> - founded by Laurie Marbas, MD
- <http://www.dresselstyn.com/site/plant-based-nutrition/>
- <https://www.ornish.com/>
- <https://plantstrong.com/>

Guest Speaker: Laurie Marbas, MD

Email: laurie@mora.com

Podcast: <https://soundcloud.com/laurie-marbas>

Biggest barrier to plant-based medicine?

-Habit change, how to build into their lives can be frustrating

"How Not to Diet"

I use continuous glucose monitor: uses the Freecell Libre (costs patients 100/month) and sits on the back of the arm for two weeks and the phone.

Dexcom G6 is more expensive continuous glucose monitoring and easy to use the sensor with the phone.

"Type 1.5 diabetes": thin, 45-65, struggled to get good blood sugars on a plant based diet, Dr. Marbas notes that they are coming back with positive antibodies.

How to address cultural issues when discussing plant based diets?

- 1) Look for substitutions so that you don't lose cultural identity such as coconut yogurt instead of dairy

Ateit app & myfitnesspal - 3 day food journal

<https://apkdownloadforwindows.com/app/com.dusanslivka.StoreAndEat/>

Resources

Dean Ornish

Caldwell Esselstyn

Sources for plant based recipes:

Rita: Purple carrot is a plant-based meal service, although they do have a few items that have yogurt.

Student Comment: We started with one of the services that mails you meals that you prep yourself, like Chef's plate, and only ordered vegetarian meals, which we did 3 days a week for dinner, plus leftovers for lunch. It was a nice way to start and also taught us some new ways to cook vegetarian

Apple: I really like following vegan recipe ideas on instagram. The Engine 2 Diet is another great resource for patients - especially people who don't think they can get full on vegetables!

How do you respond to people that say they already eat well?

The average American many not realize what a "little bit" means and don't trust recollection. Can do 3 day food diaries or use the app Ateit.

Question: Any plant based collagen supplements?

Raja: New evidence shows that three amino acids may replicate the effects of collagen supplements and you need to include a branched chain amino acid. BUT leucine rich collagen or supplementation can flare acne and possibly HS, but there is no vegan collagen at this time.

Module 8: Ingredients and Customized Medications

Apple -

Marma points - Ayurvedic massage points, similar to thinking about neurological pathways but in a different way (energy).

Book: Ayurveda beginner's guide by Susan Weis-Bohlen

—mg in a fixed oil for LDN, is cheap but not covered by insurance, may vary from \$30-50. If you concentrate it to drop the cost you have to make sure they are taking the exact amount with the right measurements.

For itch 1.5mg at night once a day, switch to morning, then after 7 days go 3mg, and then for another week, then go up to 4.5mg, IF no effect then go back down. It can take longer to kick in and see a response with the skin, can take 4-6months. 3.5mg-4.5mg is the sweet spot for the dosing.

Mental Health LDN - start with anxiety dosing 0.5mg BID, standard dose at bedtime, usually interferes with sleep the first 4-7 days. Some people may have some night time awakenings due to alterations in endorphins.

Taper down, if no response at 6 months at 4.5mg, may influence cravings (carb cravings, etc) to feel out if it's working in another area but not the skin yet, then go down to 3mg and then go up in 0.25mg or 0.5mg increments and try those doses for 3-4months each. People can have different responses so going up and down with the doses helps try to find the sweet spot for the individual.

80% of people do well at 4.5mg dosing

Pediatric dosing—most compounding pharmacies may have this info

Have to use it in lower doses in those with thyroid disease and monitor more frequently

Compounding pharmacies have a book on LDN, can get it on amazon too

There are papers in the GI and mental health world, but the skin conditions don't have a ton of great data for it. There are a lot of safety data on it, only reacts with any opioid drug or anesthetic - will block it. In initial studies it was used in HIV patients. Stop within 5 days of a surgery.

Neurologists are comfortable using it.

Topical for posthepatic neuralgia, scalp itch

Topically usually use 1%, but compounding pharmacies have a lot of studies on different formulations

Headache and diarrhea the only headaches

Podcast link: <https://learnskin.libsyn.com/episode-48-low-dose-naltrexone-in-dermatology>

Last year's notes:

Guest Speaker: [David Damaske, PharmD, MBA - Beaker Pharmacy](#)
david@beakerpharmacy.com

- Licensed to ship in over 40 states
- List of products Beaker can make
- How to order: call or use Shrink Bands in notes

Are you able to substitute the triamcinolone for clobetasol in the LCD/SA/TMC compound?
(DS)

- Yes you can substitute

What do you think of using propylene glycol as a base, instead of petrolatum, for example?
(RF)

- Don't use petrolatum a lot. Have seen allergies to both petroleum and propylene glycol

Can we use the diclofenac (for AK) and Tranexamic acid (for melasma) tablets/capsules for the creams since we don't have the topical formula here in the Philippines. What base would be best for these types of creams? (JJ)

-

Any tips to make topical spironolactone less "stinky"? (SM)

-One of the things we've done is put in different oils to mask the scent.

What are the rules for herbal compounding?

- State by state rules and need to be USP/EP grade
-

Are compounding pharmacies allowed to ship across state lines? (RF)

For e-prescribing can use Shrink Band to send out customized prescriptions?

There are three giant wholesalers

What is the way to use capsules and tablets?

- Get a fine powder and may need to crush.
- Ointments can hold powders better than creams

Can we get tofacitinib cream? (JD)

- Unable to find supply for it and can be very expensive

What's the average shelf life for most of these products? (JS)

- Topical creams are set at 30 days without testing
- If it contains water, its set at 30 days
- If it's anhydrous, then it is 90 days to 180 days....these are not as elegant on the face.

How do you come up with the % that we use in the compounds

- Work collaboratively to develop the final product together

I prescribed cysteamine 5%, tranexamic acid 1%, niacinimide 4%, Tretinoin 0.025% cream once, and it smelled very badly. Do you know which ingredient it may be from? (DC)

-Dannie its the cysteamine, coz from fish. Very fishy smell (JJ)

Are you able to do compounds with CBD? Or is that considered an herbal needing USP grade ingredient?

-Govt will need to figure it out in terms of legalities.

(SO) Any suggestions for an alternative for Genadur or other rx nail hardener?

(CA)There is a Canadian product called veralac that is equivalent to genadur

Dr. Lio: Genadur ingredients: INGREDIENTS

Diethylene glycol monoethylether, equisetum arvense extract, ethanol, hydroxypropyl chitosan, methyl sulfonyl methane, water.

Veralac: <https://www.canadapharmacyonline.com/DrugInfo.aspx?name=Veralac6938>

We've talked a bit about compounding things with a pumpkin seed oil base, coconut oil, etc, do you ever use these? -Yes, we have used coconut oil before (David)

(SJ) I prescribe a lot of compounded 5FU/SA for warts and love it. Has really changed my practice because I am terrible at treating warts! What strength of SA is typically compounded with 5FU at your pharmacy?

Apple: Hey Scott! I use 70% sal acid in that combination.... What do you use? I started with 40% with 5-FU for my own wart and it did not impress me!

David: The one we make is more of a paste, the Wart Peel we make is 17% Sal Acid and 2.5% 5-FU. It can be made in different concentrations as required.

David: We also use 5-FU 5% and Sal Acid 12%. We can make other strengths if the provider desires.

(MC) Do you guys ever use the 5FU/SA for molluscum?

Peter: I wouldn't do that for molluscum—too strong, too irritating.

Apple: my personal experience is that it is just fine

I know of literal "Low Cost Pharmacy" that has pretty affordable options, but I find a lot of compounds are still pretty expensive for my patients

(MC) Skin Medicinals is a great option too--they're easy to work with

Apple: Yes, It is something I bring up when I offer compounded products.

Case presentation: Dr. Lio, it looks like contact dermatitis, I would get her patch tested, use squalane

Black tea compress: To make a gentle black-tea compress, please do the following:

1. Obtain un-flavored black tea, such as Lipton or Newman's Own Organic Black Tea
2. Brew one tea bag for 10 minutes in one cup of boiling tap water, then discard this tea.
3. Add another cup of boiling water to brew a second cup using the same tea bag, and allow this weaker tea to cool to room temperature. It is great to put it in the refrigerator to get it nice and cool.

4. Soak a soft cloth or gauze in the weak tea infusion, and ring out gently.
 5. Apply the damp compress to the affected areas for 15-20 minutes.
 6. Apply a good moisturizer immediately after to prevent dryness.
- Repeat this 4-5 times per day until improving.

Gloves in a bottle product: [Gloves In A Bottle | Shielding Lotion for Dry Hands](#)

SJ& CT: I have seen several patients with Covid-vaccine induced eczema.

MC: Have also seen several urticarial reactions post-COVID vaccine. Usually lasts a few months. This patient seems unusual since it's been 10 months. How long have you guys seen your post-vaccine urticarial reactions lasting?

Agree - a few months. 10 months seems long.

Apple: I would try a trial with low dose naltrexone, it can be low cost and compounded in a fixed oil, can go up to 12mg per ml. It is very stable and will be stable for years on the shelf. Check her thyroid, start at 1.5mg for a week then 3mg, then 4.5 if after 4 months there is no response I would dial it back

(MC) I would try to push the anti-histamines. At least for her to try them—let her know it could likely be short term to just get her through this reaction. Give it 4-6 weeks

does cocamidyl betaine cross react with fractionated coconut oil? or non-fractionated coconut oil?

Peter: No, it is fairly rare to be an allergen

Placing Orders

I use EMA (Modernizing Medicine) and send electronically. I choose “pharmaceutical compound” as the medication name, type in directions for the patient under “Sig”, write in the ingredients, strength and base in “directions for pharmacist” box, and then I select the compounding pharmacy under “Find a pharmacy”. (RF)

I enter under a custom compound in Epic and then enter free text. We have to use print to fax all of the compounded prescriptions in WI. (AB)

Module 9: Integrating Pharmaceuticals

Guest Speaker: Tedd Neenan , Certified Aromatherapist
hello@aromaworkshop.com

The Effectiveness of Aromatherapy in Reducing Pain:
A Systematic Review and Meta-Analysis:

<https://downloads.hindawi.com/archive/2016/8158693.pdf>

First, the Hay paper about using essential oils for areata:

<https://jamanetwork.com/journals/jamadermatology/article-abstract/189618>

Tedd can make this exact preparation and I have used it for years!

Here is what I give to my patients (PL):

Alopecia Areata Essential Oil Treatment (Aromatherapy)

A study in the Archives of Dermatology (Hay 1998) found that 44% of participants who massaged their scalps with a mixture of essential oils daily for three months showed growth in the bald areas compared to only 15% of those in the control group. The tonic was composed of active essential oils: 2 drops thymus vulgaris 3 drops lavandula angustifolia 3 drops rosmarinus officinalis 2 drops cedrus atlantica and used the carrier oils: jojoba oil 3 ml grapeseed oil 20 ml.

Treatment:

1. The mixture can be purchased at MDA
2. Massage 2-3 drops of oil per area into the scalp each evening for a minimum of 2 minutes.
3. Wrap a warm towel around your head for 1 hour.
4. Repeat this each night until hair re-growth is complete or up to 6 months.

We also talked about the onion extract for alopecia areata "Cellium". Here is a recent paper: [https://www.jidsponline.org/article/S1087-0024\(20\)30009-5/fulltext](https://www.jidsponline.org/article/S1087-0024(20)30009-5/fulltext)

And you can actually buy it on Amazon:

<https://www.amazon.com/ABBOTT-CG210-Hair-loss-Treatment/dp/B078LJ46GN/>

And a paper we wrote recently about alternative approaches to areata:

<https://www.jintegrativederm.org/article/55607>

Finally, we talked about having a "scent" for your office. While everyone is different, I'd be careful with this in case a patient is sensitive to a particular fragrance, but also some people are more neuro-psychologically sensitive to "odors" in general. I'm one of those folks who will start sneezing if I smell a strong smell--it's not allergic, it's more of a neuro-irritant effect I think!

So if done, I might recommend a passive diffuser only in one small area of the office, with a relatively simple oil (rather than a complex blend). I'm thinking something like sweet orange oil might be super nice and clean... and even Disney extensively uses scents throughout the parks without too much worry:

<https://www.disneyfanatic.com/the-sense-and-science-behind-disney-scents-lh1/>

Here is the paper we wrote about pain-free procedures that mentions the aromatherapy (orange + lavender):

<https://practicaldermatology.com/articles/2016-apr/pain-free-dermatology-minimizing-discomfort-in-procedures-for-children-and-adults>

<https://academic.oup.com/ced/article-abstract/20/2/143/6629486>

Alopecia Areata

<https://www.jintegrativederm.org/article/55607>

A product with garlic and onion in it, over the counter is being turned into a prescription. It's not easily available in the US but you can get it on amazon

Helichrysum essential oil has anti-inflammatory, antifungal, and antibacterial properties that may be useful in healing skin.

-Contains Arzanol: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3807707/>

-Face tonic

Vitamin B12 base: shea butter cream (unscented)

-How often do patients apply the b12 compound?

AA essential oil reference: XXX

Sorry random topic....quick question....what probiotic do you recommend for kids and teens for atopic dermatitis?

Liquid Probiotic:

<https://www.amazon.com/PROBIOTICS-MaryRuths-Plant-Based-Certified-absorption/dp/B01CFJ3SXO>

What topicals do you use to normalize skin pH?

Aloe vera gel

Apple cider vinegar diluted with water (hard on the skin at first)

Rosemary essential oil (100s of pounds of plant that are distilled) and hydrosols (more gentle)

Why do you use colloidal silver instead of something like mupirocin?

No prescription rights in California and can't give mupirocin as an ND. Also, it's not an antibiotic and I believe I'm not contributing to antibiotic resistance.

Above is true except when working with a derm or MD and then they can prescribe everything except Scheduled meds (RS)

Do your treatments ever not work? What would you say is your percentage of success treating a higher than 10 percent BSA psoriasis?

If a patient stops the probiotics or treatment regimen when they are feeling better what is the rate of relapse? Are they dependent on staying on the naturopathic regimen the way they would have to stay on a pharmaceutical regimen to maintain those results?

-Yes, they frequently do need to stay on the regimen to maintain. I explain this frequently to patients when we shift to naturals. Others may have other perspectives but it's what I've noticed. Also, an example is the niacinamide trial for AKs. It worked while they were on it and then they lost the response when they discontinued. (RS)

-I also think it is REALLY important to address diet if you are working with probiotics. If they are not eating great, the probiotics can't flourish. (AB)

Module 10: Atopic Dermatitis

Q: How do you incorporate sunflower oil into a regimen?

PL: Right after the bath or shower sunflower oil, then do targeted medication, and then seal it in with a moisturizer.

Q: Dr Lio, could the food be indirectly affecting AD via microbiome?

PL: Yes, fiber and lack of fiber can influence the gut microbiome

[Soothe-X™ Product Line | Sensitive Skin Protection | Abby Rose – Abby Rose Skin Care](#) Has cardiospermum in it

Q: What is the youngest age group you use L histidine and hemp seed oil?

PL: The study of L-Histidine was in adults... so we don't have much pediatric data.

Q: Can topical absorption result in systemic absorption and affect cholesterol and triglycerides?

PL: Not sure about this, we need studies, it may affect them but there are unknowns. In other cultures they've been using it and it's worked well but it is true that we don't know and if there are contaminants, that could be an issue with systemic absorption.

Q: Is 4g a day of L Histidine used in the pediatric population as well as in adults?

Q: Where do you source your virgin coconut oil besides Tedd?

PL: Either Ted or one like this:

<https://www.amazon.com/Viva-Naturals-Organic-Virgin-Coconut/dp/B00DS842HS>

Q: Kindly review your probiotics/prebiotics of choice for children and adults:

CL: BioGaia Gastrus or Lactobacillus reuteri protectis, we make yogurt according to Dr William Davis' directions. cured my son's asthma.

Compounding formula from Dr. Lio

Sig: Please compound LCD 3% in Zinc Oxide Paste base, qs ad 60 gm. To apply qhs to areas

A way that we can do a home version to approximate it is to mix Cutar oil/lotion into a zinc oxide base.

You can buy the cutar here:

<https://www.amazon.com/Cutar-Emulsion-794731005013-6-Ounce/dp/B000NKL6DW>

And the base here (nearly 1 lbs):

<https://www.amazon.com/Protectant-Ointment-Provides-Treatment-Chafing/dp/B07YCRC8XT>

You can remove about half of the zinc oxide base (so about 210 grams if you have a kitchen scale) and put it into a clean container or ziplock bag for later use, and add in about 4 tablespoons (60ml which is roughly 1/3 of the bottle) to the zinc base and mix well. Using a mixer on low can really help with this.

When you run out, you can add back the other half of the zinc and another 4 tablespoons of the Cutar and mix again.

Question: I'm sorry dr Lio, what is this LCD zinc oxide mix for? itching? or for red uncomfortable skin?

PL: For topical steroid withdrawal, Zinc is antimicrobial and wound healing, for red uncomfortable skin,

Question: Regarding probiotics, some patients experience constipation while taking it. How do you address this? Is timing important? Bedtime dose? Before or after meals?

PL: I haven't seen patients experience constipation with probiotics, any one else? Take a break, maybe add some fiber or a bulk laxative. Normally I tell them to take probiotics in the morning, but it doesn't necessarily matter. Maybe switch the timing to see if it changes anything. My favorite is [Nexabiotic](#). [MaryRuth's](#) for kids.

NS: A patient said they had brain fog after taking probiotics.

Question: Do you biopsy everyone before starting Dupi (or JAK inh)?

PL: No, only if it looks odd and lymphadenopathy and everything else has failed. JAK inhibitor should work, if not I get worried.

Question: Have you seen an atopic on dupixent develop psoriasis? I had this happen in a 20 yo man. We stopped dupixent, treated him with lights and now are considering next steps. Psoriasis is now clear and eczema is returning.

PL: I think it's overlap syndrome, but I would do just what you did. If light therapy isn't helping a JAK inhibitor may help. Tremfya or Skyrizi, my personal preference is light therapy and topicals.

Side question: I have a ton of questions who are concerned about aluminum in deodorant. Why wouldn't Dermeleve have the same "concerns"?

PL: Even Strontium some patients may question it, my opinion of aluminum in products that it may not be as bad as we think. We get exposed to it in other ways (diet) and it's still

okay to worry a little bit but it may not make a huge difference with exposure. We are also using it in small areas intermittently as needed unlike deodorant we use every day.

Interesting trial at National:

[Jewishhttps://www.nationaljewish.org/clinical-trials/seal-study-stopping-eczema-and-allergy](https://www.nationaljewish.org/clinical-trials/seal-study-stopping-eczema-and-allergy)

Study going to moisturize babies at birth up to 3 years and see if it will prevent the development of eczema and allergies.

PL: I am an investigator on the study and helped pick the emollient as there is a lot of prevention data. A previous study used a moisturizer for 6 months, and another study in Japan that showed similar data. Beep study and Prevent AD all- 2 larger studies did not show any effect but they had different populations. For this study we are using epicera

Question from KM: I love the acupressure recommendation for itching - do you recommend acupuncture in general for AD patients? Or things like notalgia paresthetica?

PL: Yes and yes. It can be an effective adjunct component especially if there is a stress component. It's almost never enough on it's own. It may still help anyone a little bit. For notalgia paresthetica, if it is a structural issue chiropractors may be able to help or a physical therapist.

In darker skin types, you see follicular forms, lichenified forms, and hypertrophic forms more often (PL)

There is an impact from lifestyle which includes food related shifts but it's not the answer (PL).

Food testing does not mean that a positive test result means that it is the true trigger. It might be an epiphenomenon with IgE testing that may be sensitized through the skin (PL)

IgG testing is not as accurate either. Patients who eliminated foods from their diet developed an allergy when they were added back in so need to be careful about food elimination including anaphylaxis.

The AIP diet is a practical diet as an anti-inflammatory diet (avoid processed foods and grains). It's not an elimination diet. Practically, each meal should begin around a salad or veggies and greens.

Three hurdles:

- 1) Get you clear: frequently take a conventional approach to get them clear. Oil based cleaners from Avene and Eucerin are ones that Peter likes to use. Follow up call in a week to discuss how to bring down the steroids and then switch to nonsteroidal (TCIs or crisaborole). Also have patient on vitamin D and on a probiotic. Select kids who worsened in the winter when supplementing with Vitamin D. Preferred probiotics is <https://www.hyperbiotics.com/products/pro-15>. Prefer to treat with vitamin D (babies 400 IU, peds 1000 IU, adults 4000 IU, Carlsen Labs, SolarGems)
- 2) Keep you clear
- 3) Keep it up

How do you recommend patients take the probiotic—daily? Bid? With food? Any contraindications?(SS)

With food and typically in everyone. Maybe hold back with extreme immunosuppression and with acute bone marrow transplant as an example.

For food allergies, baked eggs will be ok but it's not clear if cooking strawberries will affect how strawberries trigger histamine release (PL)

Assess for dermatographism to see if low histamine diet is a possibility (AB)

Integrative action plan:

The eczema action plan itself addresses the psyche.

Topical Pink magic (vitamin B12) for inflammation and CBD topicals (barrier, itch) and

Likes CBD with CQUELL.com - Peter

Likes CBD with Greenway Therapeutix - Raja

Black tea compresses for facial dermatitis.

BLACK TEA COMPRESS

Inflammation

TO MAKE A GENTLE BLACK-TEA COMPRESS, PLEASE DO THE FOLLOWING:

1. OBTAIN UN-FLAVORED BLACK TEA
2. BREW ONE TEA BAG FOR 10 MINUTES IN ONE CUP OF BOILING TAP WATER, THEN DISCARD THIS TEA
3. ADD ANOTHER CUP OF BOILING WATER TO BREW A SECOND CUP USING THE SAME TEA BAG, AND ALLOW THIS WEAKER TEA TO COOL TO ROOM TEMPERATURE. IT IS GREAT TO PUT IT IN THE REFRIGERATOR TO GET IT NICE AND COOL
4. SOAK A SOFT CLOTH OR GAUZE IN THE WEAK TEA INFUSION, AND RING OUT GENTLY
5. APPLY THE DAMP COMPRESS TO THE AFFECTED AREAS FOR 15-20 MINUTES
6. APPLY A GOOD MOISTURIZER IMMEDIATELY AFTER TO PREVENT DRYNESS

Witte M, Krause L, Zillikens D, Shimanovich I. Black tea dressings - a rapidly effective treatment for facial dermatitis. J Dermatolog Treat. 2019;:1-4.

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Topical Vitamin B12 and CBD can be used for nummular dermatitis and xerotic dermatitis

Can try topical CBD for seb derm as well (RS)

For topical vitamin B12 cream: <https://www.aromaworkshop.com/home.php>

Uses an Aron's regimen through compounding pharmacy. Showed that those that had been on TAC, immunosuppressants, phototherapy, and 70% felt it was better with Aron's regimen.

For Itch (PL)

You could use this compound for the itch: Amitriptyline hydrochloride 1% + Ketamine hydrochloride 0.5% + lidocaine 1% in Vanicream to make 50 grams. Apply TID to area. 2 refills. -Triple paste (MEL)

- Alcantin A compound with Iodiquinol/hydrocortisone/aloe for this area too (RF)

Topical B12 Cream

0.07 g cyanocobalamin (vitamin B12)

46 g persea gratissima Oil (avocado oil)

45.42 g water

8 g TEGO® Care PS or methyl glucose stearate (an emulsifier)
0.26 g potassium sorbate (a preservative)
0.25 g citric acid

However, we usually just write it for a compounding pharmacy as: Please compound vitamin B12 powder into a moisturizer base so that the final concentration is 0.07%.

The one we have made is a little more elegant (PL):

Water, Glycerin, Shea Butter, Beeswax, Fractionated Coconut (Cocos nucifera) Oil, Jojoba (Buxus Chinensis) Oil, Sunflower (Helianthus Annus) Oil, Phenoxyethanol, Tocopherol(Vit. E), 0.07% Cyanocobalamin(Vit. B12), Sodium Citrate.

Module 11: Atopic Dermatitis

Tonifying in Ayurveda - increasing the activity of something that would help support the body or skin's defense system.

Gut Microbiome testing

BiomeFX testing markers to look at:

AMR richness is not that useful for clinicians

Alpha diversity refers to shannon diversity is useful, if it falls over time you can notice a shift. Tells you the spread of different organisms, can notice if species is dominant. Watch for patients who then consume more raw foods.

Pathogens - some can be associated with SIBO and other gut irregularities

Keystone species is very useful, if you start seeing certain patterns

- Looking for mucinophilic bacteria in high numbers
- if low, not enough fiber or not giving your bacteria enough time to rest, if you don't eat enough food they can over grow
- Look at bifidobacterium as well, lactobacillus rhamnosus low may indicate a barrier issue
- if there high fat and protein and low fiber, keystone species will be low

Q: When do you think it's important to perform this type of testing? Does the medical system cover it or does the patient have to cover it?

Raja: It's not always covered but if they have an HSA sometimes they'll cover it, but normally it's not covered. SIBO testing is covered by insurance frequently (TrioSmart test). Anytime you want to assess if diet or nutrition is a factor in them, the gut testing is a way to bring that discussion up in a safe place. The patient did the BiomeFx test prior to coming in the office, this patient was on a ketogenic diet. Doing the test opened up the conversation to discuss how sometimes the ketogenic diet isn't always best for the gut or what can be added. The patient did not say they were on a ketogenic diet but I could tell they were from the test results.

Q: What are the logistics for getting the test to a patient?

Can have the test in stock in your clinic or you can have the patient order it online or you can order it online through RupaHealth.

Q: Is there a spot that you should

Don't do it on the first stool that comes out is what I tell patients. If it's from the first it could be sitting in the rectum for a longer time and not be an accurate representation of the microbiome in the colon.

If Actinobacteria Eggerthellaceae is present, you can convert egallotannins to urolithins (from eating pomegranates etc).

Ammonia production being high is what may indicate a ketogenic diet

Last year's Guest Speaker: [Olivia Hsu Friedman](#)

Find a TCM Practitioner: <https://tcndermatology.org/>

Does consultations through telemedicine

- Patients need to send photos ahead of time to prepare
- Typical way to work is
 - Initial intake - 1 hour: go into many aspects of a person's life
 - Sense that everyone is unique
 - Look at co-morbidities

- Look at how they have been affected and then choose ingredients to fit their picture the best
- Frequently utilize herbal medicine and then change the formulation as you go along to meet where the patient is

Question: How would you recommend we approach adding a systemic medication for eczema if a patient is also taking herbs from an acupuncturist? I had a patient who had eczema and was on herbs but they were not sure what herbs they were taking.

OF: I have some patients that do both, I make it very clear what herbs are in each formula. Some practitioners use patented herbal formulas, there are also granules that are dry that can be customized. I use custom formulas and give patients the names of every herb in the formula. I collaborate with other doctors as well, I was referred by a physician and am currently helping treat someone who was prescribed dupixent and myself and the physician communicate about the ebbs and flows and the best way to treat it.

Raja: Database for herb-drug-natural products interactions:

<https://naturalmedicines.therapeuticresearch.com/>

Q: As a TCM practitioner, can you comment on this: When it comes to dermatological cases, Chinese herbal medicine is better than acupuncture.

OF: Especially in conditions that cause the patient to itch, like eczema, acupuncture may be a little uncomfortable for the patient to sit still if they feel itchy.

Q: AS a follow up to that - are there specific conditions you think acupuncture works best for in derm, and then also, do you ever get referrals sent to you that don't think are as appropriate?

OF: There's no condition you couldn't use acupuncture for. It can also be really helpful for mental health as well. I don't think there's anything acupuncture can handle, but it goes back to if it will be comfortable for the patient (will they be able to sit for 20mins with needles if they are itchy or if there's lesions).

My clinic is so specific to TSW that I haven't had to refer too much and a lot of people come to me because they already know what I do. Everyone is also required to watch a video I made that explains what the process is like, so I don't have to do too much screening.

What school did you go to?

NUHS (National University of Health Sciences) in Chicago, IL.

Are Chinese herbs FDA approved?

OF: Some of them are, the pharmacy I work with [KAMWO](#) that allows the FDA to come in and they also do 3rd party testing as well.

Raja: For FDA approval you have to go through the billion dollar process so herbs aren't FDA approved. The only FDA herbal mix is a topical mix of cinnacatechins for warts, and then another one with AKs and then it led to more cancer (Picato).

Is there a formula that you use for everyone or one go to? (PL)

Olivia: Depends on the patterns. For example **in eczema**, you will see some amount of heat that is translated to erythema and inflammation, some amount of dampness, and some amount of dryness and we look at how those ratios are present.

- Heat = inflammation (superficial or deep)
- Itch = broken down into 11 different ways
- Dryness
- Dampness

Herbs form bonds when used together (synergy) when not just used by them.

Prepare herbs in vacuum packs so that they stay pure. If you are taking a pill or dry granule will mean that the herb will lose efficacy along the way.

Chinese herbs are the approach where you target several areas at the same time.

How do you find a TCM practitioner?

TCM Practitioner Registry: <https://tcndermatology.org/>

Are there heavy metals in the herbs? (SS)

Olivia: Need to work with reputable source and the source needs to have testing for heavy metals and other contaminants.

Are there contraindications to herbs?

Olivia: Supplements are typically not a problem. Usually there is not a problem

How long is training to be certified in herbs?

Olivia: 2.5 years to be an acupuncturist and then 3-4 years to be an herbalist. Regulations differ state by state. Need to take certifying exams and then can become licensed.

How successful are herbals in general and how long do you wait?

Olivia: wait 1-2 months to see if there is a positive response or no/low response.

On average, in most conditions, usually there are many things going on and how many systems are involved and your constitution. Some people respond quickly to herbs while others take a long time. Compliance makes a large difference. Herbal medicine can be expensive so that can be a barrier as well if it is pricey and sometimes people have to stop their herbals because of lack of finances. In those cases, will send back to a derm like Peter.

Module 12: Acne

[HealthyTrinity](#) - studied in adult acne, if someone has sensitive skin I would lean towards this product (Raja)

[SereneSkin](#) - sometimes spore based probiotics can flare dermatitis, if no sensitivities I lean towards this product (Raja)

Q: Is glutamine a trigger for acne?

Raja: L-glutamine isn't usually an issue, leucine is the issue with acne and whey protein.

Q: What protein would you substitute whey protein for?

Raja: Pea protein, or soy protein, some people don't like the taste of soy protein

Q: What about beef isolate proteins?

Raja: Those may be high in leucine

People who intake soy have a lower risk of breast cancer not a higher risk. Isoflavones and others have phytoestrogen properties and can make acne better not worse. 160mg of isoflavones supplemented in adult women in a study - DHT levels went down and their acne improved considerably. Study:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4579974/pdf/kder-07-01-1063751.pdf>

Topical spironolactone for acne in females

Adapalene, spironolactone 5%, and white curcumin in a compound and tea tree oil to mask the smell of the spironolactone (1% or so), if a lot of hyperpigmentation add in tranexamic acid

Exact formula: Spironolactone 5%/ Adapalene 0.2%/White curcumin 1% masked with tea tree oil in a cream base (with adapalene one time a day)

Adapanoid is a new novel form as well

Hydroquinone doesn't work well with other chemicals so it doesn't make the vehicle as elegant. Hexylresorcinol 2% is what I use.

Niacinamide is another one people use a lot.

Pumpkin Seed oil - from mountain rose herbs, Raja tells patients to put medication on first and then apply the pumpkin seed oil

Probiotics for Acne - [Healthy Trinity](#) (not vegetarian it has gelatin) or [SereneSkin](#) for kids you may half the dose - not as many studies in kids.

Any topicals or systemics for comedonal acne or anyone that can't tolerate the retinoids?

-Bakuchiol at 0.5% has been shown to help with acne topically and it's not as irritating as retinoids (best company for quality is Sytheon)

-myo-inositol 2000mg orally may help with acne (codex labs has a destress supplement in it)

-MSM 1000mg

-soy isoflavones 160mg

-Chaste Berry/Vitex 400mg/day

-Barberry is another one, milk thistle

-short contact retinoids just apply for 5-10mins and take off

-topical pumpkin seed oil

For darker skin tones, would you still use antibiotics or isotretinoin?

-Doxycycline can affect the gut for 6 months but doesn't have the same impact as other antibiotics, you can still maintain some of the anaerobes. I will give it with a probiotic and do that. There's other studies looking at spironolactone.

Chlorine review showed there's no conclusive evidence that isotretinoin helps acne, so there may be some problems with the chlorine review's methodology.

Low dose vs high dose isotretinoin, I love low dose isotretinoin and it may be better than doxycycline too (Raja) I have a lot of women on spironolactone and isotretinoin.

Omeegas that come from fish are more bioavailable, the ones that come from plants aren't as potent but it's still okay for vegetarians and vegans. For dosing 1,500-2,500mg in adults, for an infant 250mg, kids 500mg. Nordic Naturals is a good brand, for any fish oil place in the fridge to reduce the fishy smell.

Non fish source of omega 3 - walnuts, brussel sprouts, flax seed, hemp seeds, chia seeds

Some patients take capsules of probiotics and apply topically. For bifidobacterium or lactobacillus that may work, but spores it may not work with

Compounding pharmacies can be a good resource.

CA: I have noticed bakuchiol has helped with skin of color patients compared to retinol.

Acure has a good product.

I've used DIM- from thorne if spironolactone doesn't work

I like topical dapsone as well

Raja: If bakuchiol is too high (or if it's bakuchi oil (not bakuchiol) it can also contain psoralens which can cause photosensitivity) [sytheon](#) has a good source and you can use it in compounding. 0.5% is what you want to start with. Max 1%

Niacinamide with retinol

Raja: One formulation I compound is spironolactone 5% with bakuchiol 0.5% and niacinamide 4-5% , mask it with tea tree oil since it smells as well and the tea tree will mask it. Tea tree has head to head with BPO being just as effective.

You can also add pumpkin seed oil topically. Tretinoin with pumpkin seed oil can also be combined.

Q: Any concerns with bakuchiol in pregnancy?

Raja: I'm not concerned with the bakuchiol topically, we may get more in the diet

KM: Spearmint Tea is something I've used as well for acne

Raja: Anhydrous base in compounding can be used for 180 days.

PCCA is a major company with some set compounding bases. You can order some

For oral pumpkin seed oil I have people take 500mg or 1000mg (study was for 400mg)

Guggul 500mg BID

Whey protein is high in leucine which might trigger the mTOR pathway but other plant extracts can block it: quercetin, curcumin (Raja)

Testosterone shifts in different grades of acne. Higher estrogen levels- less acne it was within the normal range where they found the shift. With men - people with the worst acne had higher levels of testosterone which were within the normal range. Sometimes there are some foods that can increase testosterone. So it's important to look at ranges and see if they sit closer to the higher "normal" range even if there is no PCOS, etc.

- Sulfur washes: [Sulfur8](#), [Joeseof's](#), [Kavi](#)
- [DermaHarmony](#)
- [Natren Healthy Trinity](#)
- [PushCatch Liver Detoxification](#)

Is there a specific EGCG supplement/topical/brand or just green tea bags that you use? DC

-Get to know compounding pharmacists - they can get access to EGCG at compounding grade

-Patients are open

-White turmeric from [Sabinsa](#)

-Plain green tea extract, helps cover up some of the red

Do you utilize niacinamide or zinc for acne? SD

-Collaborate with compounding pharmacy

-Zinc picolinate (3:1 - 1/3 copper, 2/3 zinc) 2mg copper for every 25-30mg of elemental zinc

-Brands: Food-based supplements (Mega foods); [Amazon Elements](#);

-DIM (diindolylmethane) modulates estrogens and progestins

-Long-term use outcompetes copper for absorption; result in anemia not able to replete with iron; use copper pots for cooking

-Women's balanced nutritol can help with anti-inflammatory acne.

 Focused on controlling hormones with botanicals

-Women's hair loss supplements can be used for hormonal acne

-Ashwaghandha can increase testosterone

-Nutrifol has new product that replaces Ashwaghandha with Shatavari -- does not impact testosterone

-Aldapalene 0.3% better tolerated than tretinoin 0.05%

Topical aloe vera along with tretinoin

-Pumpkin seed oil - delta 7 sterol blocks 5-alpha-reductase

 Study of topical use in acne

 Cold pressed (Trader Joes)

 Other good oils: grapeseed oil, jojoba oil, apricot kernel oil

-Saw palmetto - around 300mg / day

 Can combine with spironolactone to decrease dose of spironolactone especially if side effects are an issue

-Resveratrol: topical or oral?

Pterostilbene - may be more potent than resveratrol

-Topical spironolactone smells bad - patients hate it :)

 4% - 5% is appropriate concentration

 Spironolactone is the ONLY product that has been shown to decrease sebum production

 Retinoids change sebum but don't decrease sebum production

-Check with compounding pharmacist about combining with an essential oil like tea tree oil to mask smell.

-45g = about \$45 (Hillcrest Pharmacy in Utah)

-Clascoterone not easy to get or get approved but a good option.

CBD for acne: PEA another cannabinoid

Cannabinoid receptors found in sebaceous gland cell line

 CBD has been found to decrease activity of sebaceous cell line

Terasana: CBG cannabigerol with squalene oil

When do you have them put on pumpkin seed oil? generally in evening after aldapalene / tretinoin

Case 2:

Elevated cholesterol and triglycerides:

Isotretinoin: Gugul can help control cholesterol and triglycerides- combine with isotretinoin
- it is also a hepatoprotective herb (consider silymarin as another hepatoprotective herb)

When you see small elevation in AST ALT consider whey protein / dairy

- Athrea herbs

- Banyan botanicals

Shardhunika another good ayurvedic 500mg right before a meal especially if they are carb craving

- Can also take before snacking

Protein: avoid whey or casein

- Pea protein is a complete protein so good option for those who are wanting to increase protein intake

- Orgaine also has prebiotic fiber - can be found at Costco

Shardhunika is used in cooking and is safe. No studies in kids but no reason to be concerned

- 500mg - 1,000mg is a safe range

- 1 teaspoon is 2,000mg

- 500mg is ¼ teaspoon

Polyphenols inhibit mTORC 1 and 2

- EGCG is also a dual inhibitor (mTORC1 and mTORC2)

Dairy: show patients the summary of the meta analysis summary

- Juhl CR, Bergholdt HKM, Miller IM, Jemec GBE, Kanters JK, Ellervik C. Dairy Intake and Acne Vulgaris: A Systematic Review and Meta-Analysis of 78,529 Children, Adolescents, and Young Adults. *Nutrients*. 2018 Aug 9;10(8):1049. doi: 10.3390/nu10081049. PMID: 30096883; PMCID: PMC6115795.

Module 13: Acne Continued

Apple Bodemer, MD leading

Fatima: The pros, cons, and many unknowns of probiotics:

<https://pubmed.ncbi.nlm.nih.gov/31061539/>

[Gut Microbiota-Targeted Diets Modulate Human Immune Status - PMC \(nih.gov\)](#)

Q: Aflatoxins with fermented foods? Is that a concern?

Apple: The highest source may be in Jif peanut butter, or in peanut butter. If you ferment food and it doesn't look or smell right or in high temperatures you might have more of a risk for fungal growth but I haven't experienced the

Q: Do you give a probiotic when you take an antibiotic for acne?

Apple: For short term I suggest it but there is limited data, for long term I try to minimize antibiotic dose and do low doses and probiotics may help offset the antibiotic side effects, they should take the probiotic 4 hours apart (before or after taking the antibiotic).

Q: What do you do for acne?

Apple: It depends on the patient, spearmint tea and reduce testosterone levels in rats, there can be different styles among different practitioners. I have different options that I use like DIM for some people but not all for acne, I tell them here are some things that you can try and I give them different things and let them choose the order of what they want to try. Supplements may work for hormonal acne and diet more helpful for comedonal acne.

Supplements for hormonal acne: DIM, inositol for those with PCOS, spearmint tea, and if they have peri menopause blue cohosh.

Q: Do you recommend intermittent fasting for acne?

Apple: Since FOX 01 is highest in states of starvation, I will suggest intermittent sometimes. You don't have to decrease calorie counts, but we still don't know a ton.

Q: Different supplements of B vitamins, B12 may be pro-acne, do you recommend it?

Apple: A lot of those reactions are with super high doses or infusions, so it goes back to using supplements and doses in moderation. With pantothenic acid or any of the water soluble vitamins we don't need to worry too much since anything in excess will get excreted.

Fatima: Taking B12 or folate in pregnancy if taken too much, may cause epigenetic changes in the child resulting in AD.

[Nutrition In Clinical Practice Katz - American Book Warehouse](#)

EWG app for personal care product and endocrine disruptors: <https://www.ewg.org/apps/>
Apple: I think food storage is another factor of endocrine disruptors and those microbeads as well in products.

How do you counsel patients on endocrine disruptors? [Qet](#) does small batch items.
Apple: [Body deli](#) out of california mostly distribute to naturopaths, and some products need to be refrigerated that I like.

What is your favorite source for DIM?
Zymogen (SE)
Dim pro 100 by pure encapsulations (MT)

DIM Supplement Protocol (AB)

Diindolylmethane is found in cruciferous vegetables. When taken as a supplement, this is very safe.

It helps to balance hormones--in particular the different forms of estrogen. It does not appear to change hormone levels overall.

The dose is 100mg to 300mg a day. Please start at 100mg a day for about a week and if you tolerate it well, you can increase to 200mg a day for a week and then try 300mg a day.

Side effects are generally not seen except at doses of 600mg a day or more.
These can include GI distress, mild nausea/vomiting, headaches and low potassium level.

How young to use DIM? And do you have pts on birth control on it?

Pantothenic acid brand? Now
Dr. Lio's acne handout says nicotinamide 500mg BID + pantothenic acid 1000mg BID

Maca - increases libido

1,500mg per day

Spironolactone topically mixed with 8% dapsona from SKNV pharmacy (smell like pot) - thin layer and dab for spot treatment

Module 14: HS

- [Natren \(Holy Trinity\)](#) - Probiotics
- [Hyperbiotics](#) - Probiotics
- [Microbiome Labs](#) - Probiotics
- [Source Naturals](#) - Zinc
- [Cold-Eeze](#) - Zinc Lozenges
- [Klaire Labs](#) - Nutraceuticals
- [CQuell](#) - CBD
- [MegaFood](#) - Supplements

Dr. Lio moderating the roundtable

Dr. Steven Daveluy Guest Speaker

Tries to be careful when saying “We’ll see how well this works in the next few weeks” vs “We’ll do a trial and error period” or “We’ll give this a try” since it’s a little more positive.

Lifestyle modifications are most helpful

Support Groups

Hope for HS

HS Connect

They involve physicians to make sure the content being put out is verified and they moderate the conversations that patients are having to avoid propagating harmful info like reddit.

HS Connect has resources on clothing recommendations, some patients prefer tighter clothing, others looser.

More Info:

HS Foundation

Clothing

HidraWear: has insurance coverage, removable pads to absorb, developed by an HS patient

HidraWear Handout:

<https://learnskin-ebooks.s3.us-west-2.amazonaws.com/PAM130+US+Prescribers+Guide+V9.0.pdf>

Diet for HS Hand out:

<https://learnskin-ebooks.s3.us-west-2.amazonaws.com/HS+Diet+Recommendations.pdf>

Mediterranean, Dairy Free, Brewer's yeast free, intermittent fasting

Brewer's yeast free is a hard diet to follow, so I will check the antibody level first. Some may be in the normal range but if they are even close to that it's worth it to cut it out. When cutting out food items, they can also do a

Look for *Saccharomyces cerevisiae* antibody (>10U/mL)

Mind-Body Connection:

Mood disorders are more common in patients with HS

Emotional trauma is a risk factor for HS

1.2 the odds of trauma and 1.35 odds of childhood trauma

Positive Coping Strategies:

Reframing-look at thoughts from a different perspective

Humor

Support of friends and family

Mind-Body Techniques:

Meditation, affirmations, journaling, prayer, biofeedback, exercise, spiritual books

Compassionate Mind Training- imagine a hug for self compassion

3 elements: kindness, common humanity, mindful acceptance

Mind-Body Medicine for Skin Diseases Handout:

https://learnskin-ebooks.s3.us-west-2.amazonaws.com/Proofed_Mind+Body+Medicine+Dermatology.pdf

MBSR programs

Compassion Mind Training programs (can be done in groups too) you can direct patients too

Inside the clinic room you can do loving kindness meditation, compassion meditation, Example of compassion meditation: picture your grandma there giving you love and compassion and telling you that you are doing your best and also to think of someone else you can send your love and compassion to

Emotional trauma in childhood can increase the risk to HS, because their stress pathways are dysregulated and off balance which is connected to the immune system

Shame plays a big role in HS, many may apologize and say I'm sorry you have to see this, so I say please do not apologize I see it so I can help, etc

Validate the patient's pain and say how you know it is very painful

Compassionate Mind Training

Ex: thinking about your grandma hugging you

HS Patient Global Assessment - 1 question for patient assessment

Procedures:

Intralesional triamcinolone

Intralesional steroids into tunnels 40mg/cc almost half went away

You don't want to go in the pocket, go around and under

I always use 40mg/cc now, only exception is maybe if it's a new one

Laser Hair Removal

Can reduce new lesions and calm down inflammation, kind of like an antibiotic or biologic, it might be good to do pre treatment with antibiotics to

Youtube: Dr. Daveluy's DeRoofing Video: <https://youtu.be/UR5Zi7LxmrY>

Q: Any similar options for dissecting cellulitis? Overlaps?

Yes

Q: how do you CPT code for derroofing or punch?

Dr. Daveluy: There are 6 HS codes, 2 axilla, 2 groin, and 2 perianal, I use those and they reimburse for the small ones. If derms do this codes the insurance companies will do an audit to re-evaluate procedure codes etc. Can also do IND codes

Q: Does LHR prevent new areas of involvement in HS? Should we be recommending it for high risk areas?

Dr. Daveluy: Can prevent HS in the early stages 17999 non specific billing code, if they don't go with that 17111 bill it as a destruction code, if that doesn't get covered I offer it to patients at a discount. The earlier you can do laser hair removal the better before it gets to other stages.

Q: What sort of volume are you using for ILK 40?

Q: What would your first treatment to stage Hurley 1 with recurrent cysts, every about 3-4 months?

Q: Why only 3-4 laser treatments?

Is there a contraindication to performing more?

Benzoyl peroxide wash, for women I like spironolactone especially if they aren't looking to have kids, but even if you do we can stop it prior to 8 weeks of pregnancy

I'll give patients my clinic number if they have a flare they can come and get some injections instead of going to an urgent care where they may interfere with other meds

How do you bill for the derroofing? I&D or simple excision?

Dr. Daveluy: I use I&D codes for derroofing, for CO2 laser I use HS codes

Q: Clascoterone?

Dr. Daveluy haven't used it yet since it's hard to get covered, but it should work in theory to be pretty helpful

Martha: I have used it before for mild HS 2x a day works well

Q:What dose of spironolactone do you use for HS?

Dr. Daveluy: I Start at 100mg with spironolactone

Cynthia: I have good experience with topical spironolactone, with 8.5% dapsone, and recently, thanks to Raja, I have added tetri oil (to mask the odor mainly).. not sure yet, whether that is working better

Q: We've talked a lot about ways to approach the discussion of weight loss with patients. Do you have any pointers from how you counsel your HS patients?

Weight loss is hard, I often wont bring it up at the first visit, I like to build trust with them first and frame it that things are different for everybody but some studies show it can be helpful and acknowledge it is a hard thing to do especially with HS it is harder to exercise. I also have a nutritionist in the area that has HS that does telemedicine visits I refer too.

Q: Metformin?

Dr. Daveluy: I like metformin, sometimes the GI effects are too much for people, you may have to work your way up to it. If they mention that their other doctor mentions diabetes, I mention how it could help with that and HS potentially

Dr. Lio Turmeric Shot Recipe:

1/4c warm vegetable or chicken broth

1 tsp of turmeric

1 tsp of virgin coconut oil

pinch of black pepper

Warm the broth in the microwave for about 10-15 secs than add the turmeric and stir until dissolved.

Add coconut oil as it aids with absorption, and black pepper (piperine) may enhance bioavailability of curcumin (turmeric) significantly.

I have them do it 1-2 times per day. (Start once per day as it can be a little overpowering for some folks)

How soon would you start with Humira?

My threshold has decreased, I might not do it in patients that are very mild, if they are heading in a bad direction I may start with it earlier if they aren't responding or if we stop antibiotics it keeps flaring

Holy trinity probiotic studied in acne is another thing I may recommend since it's been shown to help in acne as well. One patient just did the probiotic and swore it was just as good when she was on doxycycline.

Last year's round table:

Intermittent Fasting: Benefits with 16-18 hour fast

Ramadan style fasting has been helpful with decreases in PASI scores in psoriasis.

What increases PAI1-

TNF-alpha and IL-6 drive PAI-1 production from adipocytes

LPS drives PAI-1

Stress

Smoking

What decrease AI-1

Exercise

Weight Loss

Metformin

Thioglitazones

Metformin dosing is dosed as 500 mg daily x 1 week, 1000 mg daily x 1 week, and then 1500 mg daily. Watch for GI side effects, weight loss, metallic taste, lactic acid, low B12,

Pioglitazone

- Peroxisome proliferator activated receptor-gamma (PPAR- γ) agonist
 - Decrease insulin resistance
 - Decrease levels of IL-6
 - Antiproliferative activity
- Dose
 - 15mg – 30mg daily with food
- Concerns
 - Liver toxicity
 - Monitor ALT
 - Weight gain
 - Edema
 - CHF
 - ? Bladder cancer

Apple does axillary resections in the clinic

Deroofing video: <https://www.youtube.com/watch?v=UR5Zi7LxmrY> (SD)

Codes for deroofing:

11450 for axilla, 11462 for inguinal, 11470 for perineal/perianal/umbilical

HS Symposium:

HS Symposium is coming up at the end of this month. It's virtual this year and has tons of great info. <https://na.eventscloud.com/website/27056/> (SD)

Wins:

Patient reduced carb craving with ingestion of Shardhunika (RS)

Took out the fast food and prepare food in the kitchen and her HS patient did not have a major breakout (DC)

Aron's regimen didn't work for atopic dermatitis and tried sunflower seed oil with improvement (DC)

Intensives & IDS in Reno, NV from October 25-October 26, 2023

IDCP Intensives Part 1

Module 15 & 16: Psoriasis

Q: is taking opiate pain meds an absolute contraindication to LDN?

Apple: If they are taking it inconsistently the worst could be that they don't feel the benefit from their opioid pain med. Timing is so important, if its 4mg or less of naltrexone it will go out of their system in about 24hours or so. If they take an opioid in the morning it may not work as well if they had naltrexone. I would start lower dose with about 0.5 instead of the standard, and then see how they are doing. You could ask the patient to communicate with their pain doctor and try to have a conversation with them to form a collaborative relationship. If you outline the risk and it's minimal and the patient is open to it, this may be the best way to approach it. For someone who is habituated, they need to find a pain doc that's comfortable with low dose naltrexone, if they add in low dose naltrexone they could get an augmented response and it's something I would acknowledge to the pain doc. I would mention how we've tried other things but haven't had success. Integrative pain doctors can be primary care doctors that focus on pain management, the university of arizona has a search option where you can search for board certified integrative doctors.

The website to search for integrative doctors through UAZ:

<https://integrativemedicine.arizona.edu/alumni.html>

Dermeleve: <https://dermeleve.com/>

Apple has used this for:

- neurogenic itch
- seb derm
- contact dermatitis from over the counter dandruff shampoos
- genital areas
- mild eczema
- essential pruritus
- inverse psoriasis

Q: Is there anything helpful for aphthous ulcers?

Apple: 400mcg a day of B12 can be helpful for aphthous ulcers, low dose naltrexone orally or systemically, ask about stress,

CL: Steroids locally, or xylitol gum or xylitol mouth washes

Q: Regarding hormonal acne - how do we dose DIM?

Apple: I start with 100mg a day and then go up from there to 300mg a day

Q: Do you recommend rosemary oil for hair loss and which one?

Apple: I am a little underwhelmed with rosemary oil, there is an essential oil blend that has rosemary, cedar lavender, in jojoba oil that I use in some patients with alopecia areata since there was one study. With scalp massage it will encourage blood flow but I haven't seen a ton of results with rosemary oil alone. It's something I can give my patients to do that makes them feel like they can do something about it. For small patch alopecia areata I will give this alongside steroid injections.

The NOW brand has a good rosemary oil, YoungLiving is another one, Pranarom is my favorite too

Rosemary essential oil shouldn't be applied directly as it can be irritating but it can be used in a carrier oil

Aflatoxins

- AflatoxinB1 is the most potent carcinogen
- Fermented vegetables don't seem to have a ton of aflatoxins

- Rhamnosus and bacillus decreases aflatoxin
- They took fermented drink and measured the aflatoxins and they put a starter with lactobacillus and they saw the aflatoxin was decreasing as the lactic acid built up from the fermentation
- Grain based foods and beverages, and fermented dairy products, and fermented meats were relatively high with aflatoxins
- We're all exposed to it at some level, hopefully a low level
- In a study some kids were getting hepatocellular carcinoma and they found it was the wealthy kids who ate a lot of peanut butter and there was a lot of aflatoxin. Another study with casein and rats, where there was a correlation between the casein levels and tumors.

Q: Is fractionated oil considered cold pressed?

Raja: it is not the same one.

Gymnemma sylvestre: <https://mountainroseherbs.com/gymnema>

Treatment-Refractory Central Centrifugal Cicatricial Alopecia Responsive to a Novel Botanical Treatment: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9004676/>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9004676/table/t0001/?report=objectonly>

PEA (palmitoylethanolamine) for atopic dermatitis/eczema:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4111646/>

Intestinal permeability test

<https://www.rupahealth.com/lab-tests/genova-intestinal-permeability-assessment>

Topical Fo-Ti for Vitiligo

https://www.iherb.com/pr/herb-pharm-fo-ti-system-restoration-1-fl-oz-30-ml/12007?gclid=CjwKCAjwyNSoBhA9EiwA5aYlbzZrDcADcEQyZML1ohSHHBhQ5jzkl1Im7TqWEr9mhlELMwzHnkeYRoCg3EQAvD_BwE

Case Presentation:

53yo F re-presents to our office: 9 yr hx of pruritic, burning, red rash

2o complaint - develops PIH

Prior tx include topical steroids, topical antifungal

Treated by another derm in our office 2016: HQ for PIH and HC2.5% for "xerotic dermatitis"

Provider noted in chart "doesn't seem interested in tx that isn't natural or from Whole Foods"

PM/SH: Negative

Meds: Probiotics

Comprehensive labs with PCP and naturopathic practitioner

GI symptoms-constipation

Clinically consistent with atopic dermatitis

Started Opzelura with a great result, patient pleased with outcome

Patient would like to approach maintenance from a holistic approach

Px had GI effects testing done

- High bacteroides indicates a high animal protein based diet
- Euryarchaeota phylum (Methanobrevibacter smithii species) can indicate methane dominant SIBO

Q: Can SIBO testing be covered by insurance?

Raja: [Trio-smart](#)-some patients can get SIBO testing covered, about \$200, patients can submit to try to get reimbursed or you can try to get prior authorization

Q: On the trio-smart page, it mentions using glucose instead of lactulose, is that right?

Raja: Trio-smart gives a glucose substrate but you should use lactulose instead.

(Lactulose -2.5ml)

Q:What are the steps for the SIBO test? Would you swap the lactulose for the glucose?

Raja: I will show you all the instructions next week.

Q: Would there be any difference if you didn't do the gut testing and just recommended increasing fiber intake?

Raja: The gut testing can provide more information and insight than patient's subjective reporting if you look at the details and sometimes it can help inform and educate the patient as well/motivate them to make changes

Q: Any suggestions on dosing for fluconazole or nystatin in these patients?

Raja: 1 dose 300mg weekly for 2 months

Quercetin can help with itch

Neem can lower blood sugar and should be used carefully in those on glucose lowering medications.

Enhanced bioavailability of turmeric when combined with lecithin and black pepper

Indigo Naturalis info:

- Indigo Study on Psoriasis: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5581407/>
- Indigo particles should be small, some compounding pharmacies can provide it. Some people order off amazon but it may not be the correct particle size or effective.
- Some products aren't as concentrated either and may have a paler blue look
- Some people get concerned about the color and if it will stain, but it typically should not stain
- 5% or 7% indigo in a formula
- Haven't used it in hair often because of the potential for staining hair
- Q: what is the exact compound you ask your pharmacist to put together? do you have to specify type of indigo? Do you just compound it in bland base?
- Peter: We have it made in small batches by Tedd Neenan. We get it from
Ingredients: Directions: Apply thinly into affected areas 2 or 3 times a day. Indigo Naturalis is a plant proven to help alleviate problematic dry skin. The blue appearance is temporary and will wash off.
- Contains: Water, Ceteraryl & Cetareth-20, Glycerin, Shea Butter, Beeswax, Coconut (Cocos nucifera) Oil, Dimethicone, Glyceryl Stearate & PEG-Stearate, Jojoba (Buxus Chinensis) Oil, Sunflower (Helianthus Annus) Oil, Phenoxyethanol, Tocopherol (Vit. E), Carbomer, Sodium Citrate, Caramel, Indigo Natural
- Thank you for sending the samples of pink magic from him! Just to clarify - you can order that from him for a specific patient? I can't offer it in my office, but I still want to make it available for my eczema patients..
- Peter: Yes you can

Q: Should neem be used short term only?

Apple: I think 3-4 months is okay to use. It is used extensively in Ayurveda so I think it's relatively safe. Main concern is fertility issues with long term dose. Side effects may include GI upset to inform patients about.

Raja: Yes, 3-6 months at a time

For scalp Psoriasis:

[MG17 shampoo](#)

-tar and UV exposure may increase risk of skin cancer

[Sebex Shampoo](#)

Coconut oil for scalp psoriasis, put it in hand, liquify and massage into scalp with a shower cap. Leave in 30min-3hrs. After do not have them scratch, just rinse with warm water gently to release some of the scale and then use the SebX shampoo or tar based shampoo. And follow with a thick conditioner or hair mask since it may dry the hair.

Avocado, yogurt, banana and honey mixture for the hair as well to moisturize as an intense hair mask.

Azule- bar sulfur soap

Organic elephant 3% sulfur soap

LDN Rx:

10 tablets of naltrexone 50mg (500mg total) Crush into 500ml (16.9 oz) of orange juice

This makes a 1 mg/ml solution

Pt. can take 1/2 - 1 teaspoon qhs (2.5mg-5mg)

And 3 months of medicine for \$15!

Ref: Bronfenbrener R. Inexpensive compounding of low dose naltrexone (LDN) with orange juice. Journal of the American Academy of Dermatology. 2019 Mar 28.

DUTCH Plus recommendations by Dr. Julie Greenberg

Normal 28 day cycle: take test during days 19-22 of the menstrual cycle

Longer cycle ex: 32 day cycle, take test during days 23-26 (shift by # of days longer)

Shorter cycle ex: 22 day cycle, take test during days 13-16 (shift by # of days shorter)

Irregular cycles: they need to figure out when they are ovulating (more complicated- if someone is in this group they can contact me and I'll help them out)

Men: any time

Non-menstruating females: any time

Heavy metal testing? Discuss at intensives

Infusion centers are familiar with chelation

Perioral dermatitis - uptick with masks

-Unmask mask is 95% more breathable and made in USA, more air flow

Does anyone have any experience with seed cycling for PCOS acne and/or adult female hormonal acne? The data I found wasn't supportive, but there aren't a lot of good quality studies yet, so I was wondering if anyone had clinical experience. (RF)

-AB

Oil pulling with cold pressed extra virgin coconut oil or sesame oil

<https://www.banyanbotanicals.com/info/ayurvedic-living/living-ayurveda/lifestyle/how-to-do-oil-pulling/>

Amazon.com: Green Organic Supplements' Acne, Azelaic Acid : Beauty & Personal Care

https://www.amazon.com/Green-Organic-Supplements-Acne-Azelaic/dp/B07VS42M1L/ref=sr_1_5?dchild=1&keywords=Green+Organic+Supplements%27+Azelaic+Acid&qid=1631841968&sr=8-5

Psoriasis case presented by Apple:

Patient went after an omega 6/omega 3 ratio of 2-4:1

OMEGA 3/6 FATTY ACIDS

- **Poly Unsaturated Fatty Acids (PUFA's)**
- **Omega 3** – the last double bond is three carbons from the end
 - Eicosapentaenoic acid (EPA)
 - Docosahexaenoic acid (DHA)
 - Alpha-linolenic acid (ALA) – converted to EPA and DHA
 - Not very efficiently
- **Omega 6** – last double bond is six carbons from the end
 - Linoleic acid = most prevalent
 - Converted to Arachidonic acid (AA)
 - Gamma-linolenic acid (GLA)
 - Converted to dihomo-gamma-linolenic acid (DGLA)

ANTI-INFLAMMATORY

PRO-INFLAMMATORY

ANTI-INFLAMMATORY

Optimal omega 6 to omega 3 is 1:1 to 4:1 but standard american diet is 10:1 to 30:1 (too much omega 6 in the standard diet)

For isotretinoin, start at 4 g daily, For psoriasis, will start lower and then build up. (AB)
The marine vegan sources are higher in DHA and EPA and other vegan food sources are higher in ALA which has a lower conversion and the evidence is more focused on DHA and EPA. (AB)

If they are already on other supplements that thin the blood or eat a lot of fish, may not need as high of a dose. Watch for mercury in people who consume a lot of fish! (AB)

The total dose is for 2-4 g of DHA AND EPA

Use omega-3 supplements for rosacea and dry eyes at 2 g daily

Module 17 & 18: Rosacea

Hydrogen sulfide and hydrogen is more common in diarrhea
Methane is seen more in constipation (Methanobrevibacter smithii)

Demodex testing - almost everyone has demodex
0.5% ivermectin with white curcumin 1-2% compounded in a PCCA or anhydrous base. Can add niacinamide 4-5%
I will also put Gotu Kola since it will help with sebum production as well

Would metronidazole orally be okay for SIBO as an alternative to rifaximin?

Raja - Have not tried it but have tried candibacter-AR and andibactin BR

[Metagenics | Candi-Bactin-BR®](#)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4030608/pdf/gahmj.2014.019.pdf>

Some people have SIFO (small intestinal fungal overgrowth) instead of SIBO

Raja has done oral ivermectin as well for rosacea. Adriana always would use oral ivermectin before they got the topical as well.

Botox injections seem to help sebderm because it helps block sebum production, it may or may not help with rosacea, maybe papulopustular rosacea. It may worsen the rosacea if it makes the skin dryer.

Dairy augments the production of sebum, there was a study that showed people who consumed more dairy improved their rosacea.

Topicals:

Ivermectin

White Curcumin 1-2%

Licorice 0.5%-1.0%

Acetyl zingerone 1%

Encapsulated benzoyl peroxide by Galderma has been working really well for rosacea (Epsolay from Galderma) <https://epsolay.com/>

Histidine degradation pathway, so the body puts more histidine in the skin barrier

Hydroquinone can break down and actually irritate rosacea

[Rozatrol](#) - worked well for patients with flushing and erythrotelangiectatic rosacea. Has a milk protein in there to help the hydration/sebum production. It's about \$93

Are probiotics good or not good in rosacea? Will it worsen the SIBO?

It will depend on the type of bacteria. Lactobacillus and bifidobacterium aren't as good at controlling SIBO but some of the spore based bacillus strains may be helpful.

Pre-biotics in creams (Mineral 89), have you seen any help with those?
Post-biotics from bacillus coagulans seem to be helpful

Acyl hexapeptide-6 has botox like effects, topical peptide.

Paroxetine is an effective treatment for refractory erythema of rosacea: Primary results from the Prospective Rosacea Refractory Erythema Randomized Clinical Trial

Salads will flare SIBO, balsamic vinegar with further flare SIBO. If you ask people if they eat raw foods they say no but they don't know salad is a raw food. I ask them if they feel bloated after a salad or something. Sometimes I try to get them to eat more root vegetables. Make sure they are not on raw foods. If it's very fermented yogurt it will be sweet and thick, if it gets too thick and acidic that will become more fermented and worsen rosacea.

Last year's Guest Speaker: Rajani Katta, MD rkattamd@gmail.com
<https://www.doctorkatta.com/>

KattaMD.com

When you do a diet diary how long do you have them do it for?

Raja: We have them do a 3 day diet recall

How do you recommend fermented foods to some patients?

Rajani: Sometimes I will recommend a LOW FOD MAP diet

Raja: If you allow yogurt to just barely ferment it becomes sweeter instead of more pungent if it ferments longer

Do you have a favorite fermented food to recommend patients?

Rajani: I don't have one, and I'd love to be able to give patients guidance but I'd love to see some kind of research on what fermented foods have the best health benefits. I think it's interesting that a lot of cultures incorporate fermented foods daily.

I had a rosacea patient, I put her on doxycycline and she never took the doxy and saw a nutritionist who told her to take a low histamine diet and gluten and dairy. She is doing

great, do you know anything about that type of diet? And what probiotics do you recommend to patients orally?

Rajani: Diet and chronic idiopathic urticaria, reacted to other fractions of tomatoes, the patients reacted to tomatoes that did not have histamine. I think there is something else in these foods that's not histamines, but if you follow a low histamine diet you're naturally avoiding these foods. Is it just because these foods are vasodilating in urticaria, same with alcohol. I'm wondering if she was avoiding foods that also are on the list to avoid for rosacea.

Raja: Spore based probiotics are more active travelers because they can germinate. If someone is very sensitive to fermented foods, sometimes I think spore based do a better job with fermenting things which may lead to more inflammatory side effects. I've moved more towards lactobacillus and bifidobacterium for rosacea, but there haven't been many studies on it for rosacea but for atopic dermatitis. There's more evidence for spore based probiotics in acne. Bacillus indicus - a strain that makes carotenoids naturally can help with skin protection/photoprotection.

When looking at the GIMAPs or BIOME, I wonder if there's a way to know if certain bacteria are associated with more vasodilation or vasoconstriction effects?

Rajani: That is very interesting, I do not know I'll have to look into that

Raja: More Staph aureus in SIBO, some correlations with hypertension might be a place to look in the literature (vasoconstrictive foods). They started talking about mouthwash use and hypertension.

Are cooked tomatoes more or less vasodilatory?

Rajani: Yes, cooked tomatoes might cause even more vasodilation

SJ: I convinced myself that rosacea was due to demodex mites and using topical ivermectin. I know demodex plays a major role, how do you connect the gut issues and the immune/mite issues?

Rajani: End stage of an inflammatory process that can be triggered in multiple different directions. It's interesting how there are skin barrier defects in rosacea as well.

Raja: It may be something about priming the immune system at the gut level, and they tracked demodex from country to country and the one you are born with stays with you wherever you go.

SJ: I also do a lot of oral ivermectin, there was another study out of India - combination therapy of ivermectin and metronidazole orally. At least for papulopustular, they go into

remission. I do think topical and oral ivermectin helps with clearing rosacea in patients with demodex.

Belgium physician (Fabienne Forton) has 8-10 articles into the theory of demodex and rosacea and impaired innate immunity

12-18mg of ivermectin for 8-12weeks

Acaricidal properties potentially?

Raja: there are certain scenarios where individuals have rosacea but do not have excess demodex

With topical microencapsulated benzoyl peroxide, we are finding individuals to go into remission. In rosacea there's a trend for decreased c. acnes and increased s. Aureus

Case Presentations RT Notes

SJ: I like to recommend neck exercises for scalp dysesthesia

<https://pubmed.ncbi.nlm.nih.gov/29577244/>

NR: Do you worry about the quality of niacinamide in the less expensive formulations?

Apple: I don't like the ordinary as much because it has a sticky texture. I like Paula's Choice and Swanson.

Rapamycin for longevity? A patient was asking.

SJ:

<https://www.medicalnewstoday.com/articles/could-rapamycin-be-our-next-weapon-in-the-fight-for-longevity>

Topical rapamycin reduces markers of senescence and aging in human skin: an exploratory, prospective, randomized trial: <https://pubmed.ncbi.nlm.nih.gov/31761958/>

11/10/22:

SIBO Testing and Rosacea Cases

-to get SIBO Testing covered through TrioSmart use a code for IBS (doesn't have to be specific type of IBS)

-Biocidin products helped one patient's SIBO

Would you test someone with resistant rosacea who doesn't have GI symptoms?

Raja: I would but then it's hard to get it covered by insurance if you can't put an IBS code

How much water to drink daily?

Half of body weight in ounces (AB)

"The solution to pollution is dilution." (SM)

Food sensitivity vs food allergy

Handout on Oral Allergy Syndrome:

<https://acaai.org/allergies/types/food-allergies/types-food-allergy/oral-allergy-syndrome>

Nightshades:

Glycoalkaloids are thought to affect the intestinal permeability barrier and perhaps trigger leaky gut. That's the only connection I've seen with nightshades.

[Greenway Therapeutix CBD](#)

[Biocidin](#)

Peter Lio, MD

Question on help with a patient with Intertrigo:

The 10 Rules (by John Alexander-Williams: BMJ, 1983)-Peri-anal itch but can be useful for intertrigo

1. Keep the area clean by washing after every bowel movement and night and morning
 - Nightly bath is very important but may also use a shower jet or bidet
2. Avoid rubbing with soap or washcloth
 - Gentle washing with fingertips is fine
3. When away from home, Wet Ones or Baby Wipes are better than dry paper
4. Keep the area dry
 - After washing or wet-wiping, dab the area dry with a towel or soft toilet paper; do not rub
 - Some prefer a hair dryer to avoid rubbing completely
5. Avoid excessive moisture
 - Wear cotton underwear and loose clothing

6. After drying gently place a thin piece of cotton dusted with powder against the anus inside the pants (Caldesene)

7. Avoid perfumed talcum powder: use Zeasorb or Caldesene

8. Avoid ointments or creams unless prescribed by your dermatologist

9. Keep the bowels regular

-Eat plenty of bran and roughage (Metamucil)

10. Scratching at night may damage skin

-Wear cotton gloves to sleep

Calmoseptine

Peter: My conventional go-to for intertrigo is Iodoquinol + HC 2.5% which you can get at Beaker

Raja:

Indigo naturalis

[Koshland pharmacy](#)

0.5%-1%

Sometimes will add an antifungal

Important to note that weight can mean different things to different people

From Peter regarding contact dermatitis:

My thought is that there may be a component of allergic contact dermatitis, possibly to components of paper.

I also wonder if there is an underlying issue such as inverse psoriasis.

You can read a bit more about that here: <https://dermnetnz.org/topics/flexural-psoriasis>

I'd like to try the following things all at once to see if we can get you much better quickly!

A) Avoid all paper products to that area. This would include toilet paper, wet wipes of any sort, and pads. If you do need to blot the area, I would ask that you get some soft cotton towels like these:

<https://www.amazon.com/Burts-Bees-Baby-Washcloths-Absorbent/dp/B07FSJLQ7D/>

B) Getting a bidet really can help! This is a very good model:

<https://www.amazon.com/Luxe-Bidet-Neo-120-Non-Electric/dp/B00A0RHSJO/>

—> It is easy to install if you are handy; but it might be good to get someone experienced with plumbing if you're not sure.

C) At least twice per day, and after every bowel movement, I would like you to do the following:

1. Spray the area with SkinSmart antibacterial spray
2. Apply a thin layer of coconut oil to the area
3. Apply a liberal amount of Soothe-X Balm to the area

Here are the links for the products:

SkinSmart spray:

<https://www.amazon.com/SkinSmart-ANTIMICROBIAL-oz-Clear-Hypochlorous-ingredients/dp/B01N0O0TV7/>

Coconut Oil:

<https://www.amazon.com/Fractionated-Coconut-Oil-Aromatherapy-Moisturizing/dp/B07346X1R5/>

[You can use the one you have as well—that is a good one!]

Soothe-X Balm: <https://abbyroseskinicare.com/products/soothe-x-face-body-balm>

For intertrigo: Peter's suggestions as above and they

For skin picking:

N-acetylcysteine 1200 to 3000 mg daily

- Stacy M: has had success with picking.

<https://www.vitaminshoppe.com/p/twinlab-nac-acetyl-cysteine-600-mg-60-capsules/tl-1482>

"Amazon reportedly removes NAC-containing dietary supplements

The move comes nine months after FDA stated its position in warning letters that NAC couldn't be lawfully sold in a dietary supplement because the ingredient was first approved as a drug in 1963. Apr 22, 2021"

Rupa Labs have support on the labs as well.

Licorice topical & other standardized botanical extracts:

<https://sabinsa.com/products-and-services/standardized-phyto-extracts/>

Bakuchiol: Burt's Bees product: [Amazon.com: Burt's Bees Renewal Intensive Firming Face Serum, 1 Fluid Ounce : Beauty & Personal Care](#)

Topical Curcumin: PsoriaGold: [Natural Topical Anti inflammatory - Psoria-Gold® Curcumin Gel](#)

Tedd Neenan <hello@aromaworkshop.com>: He can help with making customized topicals like pink magic or green tea topical, etc.

Student comment: Firestick plant (pencil cactus) for warts

Different types of Guggul

Triphala means it's a mix, as a decoction

[Guggul powder](#)

-uses triphala for SIBO

Kurt: How many [Triphala Guggul tablets](#) do you recommend? BID?

1000-2000mg, 600mg tablet 2x

Low zinc levels and warts

Peter:

Favorite way to use zinc is the zinc gluconate lozenges to avoid GI upset

Zinc usually causes nausea, 15-20% of patients

Raja:

Probiotics:

For acne: [SereneSkin](#)-spore based (spore based can increase *Akkermansia*)

Acne: Healthy Trinity- non-spore based (adult women study)

Peter:

For existing eczema in adults:

<https://www.amazon.com/Hyperbiotics-PRO-15-Probiotics-60-Capsules-Patented-Technology-Easy/dp/B00JEKYNZA/r>

For atopic dermatitis in kids, my new fave:

<https://www.amazon.com/PROBIOTICS-MaryRuths-Plant-Based-Certified-absorption/dp/B01CFJ3SXO>

For prevention of AD: <https://www.amazon.com/dp/B08Y66H6B7>

And then when the baby is born:

<https://www.amazon.com/Culturelle-Probiotics-Supplements-Bacteria-Digestive/dp/B075RDZ3WF>

Module 19: Vitiligo

Ginkgo biloba

- Extracts of the leaves and sometimes of the fruit are used
- Some studies show it's use in vitiligo with phototherapy and topical steroids
- As a monotherapy the results aren't as dramatic at these doses:
 - 40mg TID
 - 60mg BID
- May also help with stress, anxiety, and cognitive function
- 120mg/day well tolerated, side effects seen at doses above 240mg daily
 - Side effects can include restlessness, headache/dizziness, GI distress, bleeding, palpitations, allergic skin reactions
 - Should be used cautiously in individuals on blood thinners
 - Should not be taken in individuals with seizure disorders
 - Seeds contain ginkgotoxin (do not eat the seeds)
- Ginkgo plus ALA (alpha lipoic acid)

Case:

Young girl with vitiligo, should her thyroid be tested?

IDS speaker mentioned everyone should be tested every 3 years for their thyroid no matter what age and if they have symptoms or not.

Low dose naltrexone can be used in children, I have used it in someone 8years old (Apple) There is a child weight based protocol for that. It can be compounded into a liquid form, it's easier to titrate and well tolerated. Need to have a TSH before starting no matter what the age.

Muir AH, Robb R, McLaren M, Daly F, Belch JJ. The use of Ginkgo biloba in Raynaud's disease: a double-blind placebo-controlled trial. Vasc Med. 2002;7(4):265-7. doi: 10.1191/1358863x02vm455oa. PMID: 12710841.

Lan CC, Wu CS, Chen GS, Yu HS. FK506 (tacrolimus) and endothelin combined treatment induces mobility of melanoblasts: new insights into follicular vitiligo repigmentation induced by topical tacrolimus on sun-exposed skin. Br J Dermatol. 2011 Mar;164(3):490-6. doi: 10.1111/j.1365-2133.2010.10113.x. Epub 2011 Jan 28. PMID: 21039414.

Apple: The retinoid formula I use is 0.X % tretinoin with 1% concentrated aloe powder in clarifying base. The clarifying base is a very common base that is made by PCCA who supplies most of the compounding pharmacies in the country with bases.

Case:

Female with resistant Pityrosporum folliculitis and potential allergy

CBD products:

Greenway Therapeutix - CannoCream

CQuell

3:1 ratio of Neem into cold pressed oil

Neem oil into pumpkin seed oil for acne

Case:

Seborrheic Dermatitis

De La Cruz [10% sulfur ointment](#)

[Dr Joesoef's sulfur soap](#)

Has anyone tried Zoryve yet for se Derm?

Raja: I have used it

NR: I like elidel, I have a pt who cleared with the zoryze!

Case:

SIBO patient, having symptoms with rifaximin

[CandiBactin-AR](#)

[CandiBactin-BR](#)

[SIBO - Small Intestine Bacterial Overgrowth - Welcome \(siboinfo.com\)](#)

Recommended Products for Vitiligo

- [Foundation Skincare Pigmentation Defense](#)
- Polygonum multiflorum (RS)
- [Fo-Ti](#) (RS)
- I have used V tar with some success for facial vitiligo (MEL)

UTI bacteria linked to rheumatoid arthritis:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2270745/>

Ginkgo biloba 60 mg BID Alpha-lipoic acid 1000 mg Polypodium leucotomos 250 mg TID

Zanderm for cosmetic make-up (SH)

TheOrdinary.com also has a 10% azelaic (JK)

<https://tailormadecompounding.com/> - Peptides (RS)

Wells Pharmacy - Peptides <http://www.wellsrx.com/> (KB)

Cre8 - Peptides <https://www.cre8pharmacy.com/> (KB)

L Carnitin <https://www.nowfoods.com/supplements/l-carnitine-1000-mg-tablets> (RS)

Question: Is there a connection between Candida testing and Vitiligo? Apple: There are different types of tests, but I will usually discuss autoimmune regulation and low dose naltrexone. I will connect with a naturopath for immune related things, 4R protocol: reduce and eliminate. You can ask patients about any GI symptoms, can check for antibodies for sensitivities and try a food trial/elimination diet.

Stress or trauma may trigger or flare vitiligo, so working on stress management.

-Medical hypnosis can be another area that can be helpful to frame an experience, identify visualizations to help their body heal naturally (visualizing cells protecting melanocytes to give them a sense of control). All medical hypnosis is self-hypnosis and teaching patients to get into a relaxed state.

-Hypnosis can also be very helpful for chronic urticaria

<https://cdn.mdedge.com/files/s3fs-public/Document/September-2017/073030163.pdf>

Question: Any results with pseudocatalase? Apple: I haven't seen it or used it. Peter: One of the studies seemed positive but it didn't bear out in clinical medicine. Vitar-cold tar liquid, you can only get it in one place, comes in a small jar and stains the skin. I will take a tissue and paint the vitiligo area to mask the vitiligo.

Question: has anyone had any luck for getting home units for patients with vitiligo? Apple: Most patients need to show it works before getting a home unit. Especially with COVID I'm able to get a lot of patients covered for home units. Peter: There is an item that you can use for localized areas of vitiligo.

<https://www.daavlin.com/physicians/prescribing-home-units/prescribing-home-phototherapy-units/>

<https://www.natbiocorp.com/start-an-order/order-home-units/>

Question: Use of excimer laser and business? Peter: I use it mostly for psoriasis. It can be expensive. Stacy: Maybe using it in combination of other therapies and with small areas there have been good success. Jennifer: Not having much success with treatments on the face.

You can get tofacitinib 2% compounded from custom scripts in Miami for \$50-60 for a 30g tube (KA)

Ginkgo biloba 60 mg BID

Alpha-lipoic acid 1000 mg

Polypodium leucotomos 250 mg TID (Apple: it can get pricey if they are on it long-term)

Foundation Skin Care has Pigmentation Defense combo.

<https://foundationskincare.com/products/pigmentation-defense>

1 po bid

Pearl Grimes: checks

CBC

TSH

TPO (higher risk of thyroid later)
ANA (rare, but important for UVB)

Antioxidant cocktails with UVB help:

Polypodium leucotomos, Lipoic acid (50 mg), vitamin C (50 mg), vitamin E (20 mg), polyunsaturated fatty acids (12%), and cysteine monohydrate (50mg) two tabs daily

V-tar (30% crude coal tar sol'n): apply very tiny amount q week (to match skin color)--wash off p 6-8 hrs

-Dermasave labs: (800) 277-7099 or (845) 635-4087 Glenn Arpino

-Call in the script and give the patient's name, then they call the patient and send it to them

-\$35, and the patient can get reimbursed from insurance

Peter:

For hormonal acne: DIM 100mg qd to start

Jarrow Formulas Dim Plus CDG, Supports Estrogen Balance & Healthy Cell Replication, 30 Capsules

https://www.amazon.com/dp/B00BFD09LG/ref=cm_sw_r_cp_api_glt_fabc_SQBEXPCY1X0WF2G6TTVG

[A randomized, double-blind, placebo-controlled study of a novel pantothenic Acid-based dietary supplement in subjects with mild to moderate facial

acne.](<https://www.ncbi.nlm.nih.gov/m/pubmed/24831048/?i=1&from=/24831048/related>)

Yang M, et al. Dermatol Ther (Heidelb). 2014

NOW Supplements, Pantothenic Acid 500 mg, 250 Capsules

https://www.amazon.com/dp/B0013OUQEM/ref=cm_sw_r_cp_api_i_mXu2DbT1Z8ZNW

Consider Berberis: [Amazon.com: Stones Dissolver - Berberis Vulgaris Drops - Supports Kidneys & Urinary Tract Functions | Aids in Detoxification | Natural Herbal Supplement - Highest Quality - 2. fl oz by Heavenly Herbals, Inc.: Health & Personal Care](<https://www.amazon.com/Stones-Dissolver-Functions-Detoxification-Supplement/dp/B079LVWC53>)

50 drops per day

Or: 3 teaspoons daily of the dried berry: [Amazon.com: Saffronia Natural Dried Barberries Fruit - Antioxidants Rich Ideal Source of Vitamin C Zereschk Tasty Red Berry Delightful Color Cranberries - 6 Oz: Health & Personal Care](<https://www.amazon.com/Saffronia-Dried-Barberries-6-OZ/dp/B07B7PH9WG>)

•Flutamide (Eulexin) 125 mg po qd (women only): very effective, hepatotoxic in 1% at dose > 500 mg/d: 17/21 pts improved in 2-21 mo, even for Acutane and spironolactone failure

Topically, consider: Acnomet: 2% resorcinol, 8% sulfur cream

Student comment: Maybe try gut testing, I've had a similar patient come up positive for *H. pylori*

Apple: Acupuncture may help, it's important to discuss every symptom to the acupuncturist.

Student comment: Great success with the Pumpkin seed oil too.

Apple: I love Sulfur for acne. Organic elephant sulfur bar soap. Grisi Bio is one that come in the higher concentrations that many of my patients like.

ALA-PDT (Rox from JAAD 2010):

1. Levulan under occlusion for 3 hrs
 2. 200 J/cm² of 633 red light (Omnilux) at 10@ mW/cm²
 3. Cool water spritz and fan
- May induce permanent acne remission

ALA-PDL (V-beam): Alexiades-Armenakas protocol: JDD 2006

1. Cetaphil wash
 2. Single coat ALA x 45 min
(2b. Wash recommended)
 3. PDL: 10mm/10ms/7J-7.5J/30/30 1 minimally overlapping pass
 4. Cold packs/Cetaphil wash
 5. Sunscreen!
- Repeat q month: 2.9 tx avg

Student comment: Mandelic acid has been helpful for some acne patients.

<https://www.amazon.com/US-Organic-Certified-Eyedropper-Application/dp/B071VN34PB?th=1>

LPP

Apple uses LDN for LPP - I am seeing better results with LDN over Plaquenil (SH)

2023 Intensives Notes

Breakfast lecture: Learn More About SOTYKTUTM (deucravacitinib): Clinical Trial Data and Mechanism of Action

- SOTYKTU: TYK2 inhibitor
- 75% response rate vs apremilast
- 80% response rate maintained over time
- evaluate for active and latent TB and update immunization accordingly (shingles)

Functional Medicine Testing

Organic Acid Testing

- Diagnostic Solutions Lab
- There are metabolic benefits to ketosis

Amino Acid Metabolism- branched chain amino acids

Tryptophan

- 5HT is in the serotonin support pathway, this pathway can be involved in sleep which is what you can ask patients about if they are having trouble with sleep or mood.
- by looking at the enzymatic conversion you can see if there's B vitamin deficiency and then you
- secondary by products will be reported too
- it comes back to mitochondria with AcetylCoA, so if you have buildup on the way there might be some other issues

Nutrition:

- there are elements of the test that assess nutritional intake and you can potentially identify sugar intake

Nutrition and Hormone section:

- not as useful as the energetics section

Toxins section:

- there is a marker that can indicate pesticide exposure
- glyphosates are not included in this report though
- styrofoam exposure can be assessed
- plastics by numbers - poly styrene is number 6. 3, 6, and 7 are not safe, 2 and 4 are safer. You can look up the plastic number and how it leeches in. More of a risk with leaching into food if it's in a hot container.
- the more fiber and chlorophyll intake, it can help the body handle these toxins better and remove them from the body

Microbial Metabolites section

- aracinaol indicates the presence of Candida, if you have a heavy load of psoriasis there can be candida overgrowth in the gut
- the testing is \$180 through diagnostic solutions but can range up to \$300

Do you recheck? - yes you do a baseline and then can re-test over time but some patient's will already feel better and don't want to spend the money to re-test. A lot of patients will feel better and more energetic.

With Rupa Health, there are more videos on the tests as well.

Cases:

HS candida vulvovaginitis, testing indicated increased carb intake and switched her on a diet with more protein and lower glucose.

Mold can influence cytokine production and can be involved in psoriasis, eczema, and HS. Main source of contamination can be food, environment, etc.

Gut Testing Session:

- Reference ranges are still being worked out, there is still not a set picture of what a healthy microbiome is
- BiomeFX is Whole genome sequencing and gives information on metabolism and functional activity.
- P/A ratio elevated in acne, seems to be a marker of inflammation
- P/B ratio can be shifted by changing diet, there is evidence for higher P/B ratio is more

Herbs Oil Science Formulation/Tasting

- Cooling herbs reduce stimulation and circulation
- Heating herbs tend to increase stimulation
 - Rosemary increases blood flow and may help stimulate hair growth

Turmeric with oral JAK inhibitors to help with lichen planus

- it can have blood thinning effects so it's important to screen if patients are blood thinners

Neem

- some patients may bring up how it works as a pesticide, but you can mention how it's a great antimicrobial, antifungal and it was used in treating humans first and then they discovered it could be used as a pesticide.
- may want to recommend people to be off of neem if they are trying to conceive since it may cause lowered sperm directionality
- 500mg BID

Gotu Kola

- is a calming nervine and can increase collagen production
- can help with venous stasis and hypertension
- safe to use in pregnancy at a low amount, in ayurveda it has been used a lot during pregnancy
- 60mg daily up to 750mg daily

Triphala

- can help with digestion and the gut microbiome

Ashwagandha

- the more you take it, the more it helps ground and become more resistant to stress

Bacopa

- have gotten others to reduce gabapentin after using bacopa

Case Based Practicum + Ayurveda Typing

Ether - space = feelings of isolation/loneliness

Vata is air and ether

Manjistha reduces sebum production, it is a red color

Bhringraj - 500mg 2x a day for hair loss, it will shift the hair into the anagen phase

Hair loss - DIM can use up to 600mg

Module 20: Autoimmune, Autoinflammatory, and Pediatrics

Guest Speakers: Melissa Mondala, MD & Micah Yu, MD

micahyumd@gmail.com melissamondalamd@gmail.com

Social Media:

@myautoimmunemd

@drmelissaskitchen

Referrals:

www.drlifestyle.org ←Clinic website

It's important to be careful with salt intake and autoimmune patients on biologics.

Q: What about the omega content in farm raised fish?

Dr. Yu: Wild raised is likely better as farm raised will have a higher omega 6 profile and also the food they eat is not as good and there are other toxin exposures in farm raised fish.

[YUKA.ap](#) contains info on products and their impact on health

Reverse osmosis water filter to remove toxins but it does take out minerals so you need to supplement with minerals- AquaTru

Heavy metals can contribute to autoimmunity as well

Q: Fiber supplement? Psyllium husk

Q: What is the evidence of red meat causing dysbiosis? did they differentiate between highly processed red meat vs grassfed/organic red meat? what do you tell patients who want to try a carnivore diet? do these diets help simply by avoiding processed food rather than the meat being helpful?

Dr. Yu: There is not specific evidence but it's likely that organic is better than red meat. If a patient wants to try I will tell them there isn't evidence only anecdotal so they can try if they want and that it could be do more to the reduced processed foods in the diet.

Q: I have heard grass fed beef is a high omega 3/6 profile compared to grain fed beef. could the cow's diet be a confounder in red meat studies?

Dr. Yu: This could be a confounder in the studies

Apple: The stress around the time of slaughter may have increased cortisol levels and if that is being consumed

Q: What are safe testosterone enhancers (foods and meds) for females to deal with low testosterone and low energy etc. Side effects? PCOS any issue?

Dr. Mondala: The research is still developing, but I've had personal experiences with nutrition and lifestyle being the driver of hormones. The liver health as well can impact testosterone and estrogen levels. Some supplements may have endocrine disruptors in them as well.

Q: are there data that show what types of lifestyle modifications if any (meditation, breath work, etc) can result in the same effects on TLR or opioid receptors that LDN achieves?

Dr. Yu: not sure about exact studies but Tai Chi is on the rheumatology website to help with pain, and these techniques definitely can help with pain relief

Q: or mold testing, can you quickly review the next steps when a patient has a positive result?

Is there a panel of common molds that are usually tested for?

Why do you use blood testing vs other modalities?

Dr. Yu: I use realtime lab and Dr. Shoemaker has a protocol for mold, tests for 5 types of mold - urine tab

MyMycoLab is a blood test. This space is evolving because there's not a ton of funding for research. About 20% of people exposed to mold will develop illness and 80% can resist it due to genetic. Neal Nathan I am in a mentorship with

Q: Is a time in menstrual cycle when fasting is best to do for females?

Dr. Mondala: during menstruation you don't want to add more stress with fasting, you want to have enough reserve, especially during ovulation either. Anytime away from that. 21 wellness app tells women everyday what they can focus on, mind-body breathing, slowing down or fasting, etc

Chapter about Lichen Planus: <https://academic.oup.com/book/40206/chapter/342652294>

"This trial, in addition to several other studies, concluded that purslane is both a safe and efficacious treatment for oral lichen planus. Recommended dosage is 235 mg per day.

In addition to purslane, curcuminoids have been found to be efficacious in the treatment of lichen planus. A randomized, double-blind, placebo-controlled clinical trial was recently conducted in which individuals with oral lichen planus were treated with 6,000 mg per day of curcuminoid product in three divided doses (Chainani-Wu et al., 2012). Symptoms were qualified using the Numerical Rating Scale and signs were determined using the Modified Oral Mucositis Index. After the year-long trial, it was determined that curcuminoids at this dose have an acceptable safety profile, with few adverse effects, and provide benefit in improving the signs and symptoms of oral lichen planus."

Start at 4,000-6,000mg of curcumin for FFA, and eventually bring down to 2,000mg

"Crosslinked alkyl acrylates are crosslinked polymers in which the co-monomers consist of at least one of the following: acrylic acid, sodium acrylate, methacrylic acid, or alkyl acrylate. Whereas polymers consisting purely of acrylic acid are often referred to as "carbomers," copolymers comprised of mixtures of acrylic acid and alkyl acrylate monomers may sometimes be referred to as "alkyl carbomers." In that vein, most of the ingredients in this report could be classified as crosslinked alkyl carbomers. For example, dodecyl (C12 alkyl) acrylate, acrylic acid, and methacrylic acid could be copolymerized and crosslinked with diallyl sucrose to form an acrylates/C10-30 alkyl acrylate crosspolymer with the internal structure:"

<https://uridus.com/wp-content/uploads/2015/07/Crosslinked-Acrylates-Final-Safety-Assessment-2011.pdf>

Pediatric warts -

-garlic rub

-use a hand warmer (battery packed one), gently put the warmth on the face, or heat dish to heat up ceramic for adult



New

Human Creations EnergyFlux G3 Rechargeable Hand Warmer - Electric Hand Warmer with Powerbank - Wrap-Around Hot Pocket Warmer - Warm Hands for Men and Women (Black, 5200mAh)

by [Human Creations](#)

★★★★★ ~ 58 ratings | 3 answered questions

List Price: \$29.99

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Controlled Localized Heat Therapy in Cutaneous Warts

P Stern ¹, N Levine

Affiliations + expand

PMID: 1626962

Abstract

Background: Controlled localized heating as a method of superficial tissue destruction has been used in veterinary medicine for the treatment of benign and malignant tumors. The rationale for its use is that the diseased tissue being treated is more sensitive to the effects of heating than is normal tissue. This technology was applied to the treatment of common hand warts in a placebo-controlled study.

Observations: Twenty-nine warts were treated one to four times (median, two times) at 50 degrees C for 30 to 60 seconds. Twenty-five (86%) of 29 treated verrucae regressed completely while seven (41%) of 17 control warts resolved during the course of the study. No wart that regressed regrew during the follow-up period (mean, 15.6 weeks).

Conclusions: Controlled localized heating can cause the regression of hand warts. The 86% regression rate compares favorably with other wart treatment modalities. The mechanism of action and the effect of heat on these virally induced tumors is not known but may involve direct antiviral effects, physical destruction of the tumor, or the promotion of an inflammatory response that ultimately eradicates the lesion.



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Have one to sell?

Onion juice for alopecia areata was shown to be more effective compared to tap water

Lavender or tea tree as an endocrine disruptor? Diluted and lower concentrations shouldn't be enough to cause an issue. There were two case reports of preadolescent male teens developing gynecomastia after using lavender essential oil.

Student comment: Here is the article for tea tree and lavender in relation to hirsutism:

[PMID: 23211454](#) DOI: 10.3275/8766

Student comment: [Ruby Blue Bunny](#) is a Certified Endocrine Disruptor Free brand for infants.

Can you please talk about how we use berberine for candida and other fungus? is there a topical form.? Dr. Bodemer: I have only used it when treating gastrointestinal conditions

Infantile hemangioma treatment: Ophthalmic solution (Timolol), 1 drop daily on pediatric skin, if there is ulceration watch for lethargy

Student comment: Tendon streaks, SLE or mixed connective tissue overlap

Mold:

Question: How do I handle a positive mold test with a patient?

Dr.Lio: There are some practitioners where extensive workups and supplements are questionable. Student comment: if they aren't showing any symptoms or history of mold in the house then you can probably discount it. If they have fibromyalgia symptoms, I would look into it more. [VCS questionnaire](#) can be used to test contrast sensitivity. If it's positive in conjunction with symptoms (more than 6) then there may be a higher chance of mold causing issues. If a lot of review of systems are positive then I may think something is going on here.

[Survivingmold.com](#)

Genetics can predispose to being susceptible to mold, lyme disease

Sometimes urine mycotoxin tests can be helpful but it is very complicated.

Book called [Toxic-on Lyme](#) by Neil Nathan

30% of people diagnosed with Alzheimer's disease have mold toxicity that can be reversed

Module 21: Nail Health

Barefoot Shoes: Vivobarefoot shoes, Belenka, Splay shoes etc

https://www.vibram.com/us/brand/FiveFingers_Move.html

<https://www.posturalrestoration.com/> - if your teeth are a certain way it will affect how you are grounding as well

Built to Move book: [Amazon.com: Built to Move: The Ten Essential Habits to Help You Move Freely and Live Fully: 9780593534809: Starrett, Kelly, Starrett, Juliet: Books](#)

Foot workshop on postural/movements at next IDCP

Q: I'm sorry i missed the part about acclimating to these shoes. what about plantar fasciitis? Plantar fasciitis is inflammation of the fascia and can be improved by allowing for more flexibility to this fascia which gets stuck. Simply said. Instead of overprotecting this, the fascia needs flexibility...

this mexican community made famous "bare foot running" all big brand running shoes showed these tennis:

<https://www.runnersworld.com/runners-stories/a20954821/born-to-run-secrets-of-the-tarahumara/>

Urea 40% at night with a bandaid and sock for toenail fungus, you can buy it over the counter or get it prescribed as well

CO2 Laser - drug delivery methods using a motor tool, laser coorks and you can use a cold pulse as well and the patient doesn't feel anything at all

CL: Does vinegar soaks or a dilute solution and saturate it an applied directly to the nail, after a few weeks it looks a lot better

[https://www.jaad.org/article/S0190-9622\(17\)32448-9/fulltext](https://www.jaad.org/article/S0190-9622(17)32448-9/fulltext)

THERAPEUTIC CHALLENGE Onychomycosis and tinea pedis are exceedingly common conditions experienced by patients. In addition to itch and cosmetic concerns, they increase the risk for cellulitis and diabetic foot ulcers.¹ Although nightly 50:50 vinegar soaks can increase the efficacy of topical antifungals because of the fungicidal effects of acidic pH,² the inconvenience of tub soaks limits compliance. SOLUTION Each evening, patients go to a bathroom or other place with a vinegar-resistant floor, don old cotton socks, pour a few spoons of plain or apple cider vinegar and a few spoons of water over the toes, and sit and read for 10-15 minutes. They then doff the socks, apply topical antifungals, and go to bed. In our experience, compliance, efficacy, and satisfaction are high, with most patients achieving complete clinical responses within a year.

There is this uvc instrument that you can put inside shoes to disinfect called Shoezap uv sanitizer [PediFix® ShoeZap® 15 Minute UV Shoe Sanitizer](#)

Spray shoes with lamisil or take shoe inserts out and then replace them

<https://egoscue.com/> The Egoscue Method of Health Through Motion: Revolutionary Program That Lets You Rediscover the Body's Power to Rejuvenate It

<https://www.amazon.com/Pain-Free-Living-Strength-Happiness/dp/1402786433>

[Antibiofilm Treatment for Onychomycosis and Chronic Fungal Infections](#)

Gupta AK, Carviel J, Shear NH. Antibiofilm Treatment for Onychomycosis and Chronic Fungal Infections. Skin Appendage Disord. 2018;4(3):136-140. doi:10.1159/000480023

[Topical cholesterol/lovastatin for the treatment of porokeratosis: A pathogenesis-directed therapy](#)

Products for Nail Health:

- [Kerasal Fungal Nail Renewal](#)
- Thymol
- [Urea Cream](#)
- [Genadur](#) or [Nuvail](#)
- [Elon Nail Conditioner](#)
- [DermaNail Conditioner](#)
- [Footlogix Anti-Fungal Spray](#)

Cases:

Dr. Sachdev's case

40yro man, sees an integrative primary care doctor

- new onset of skin cracks and redness on hands, on the knuckles and sides of hands - started with sides of hands, started on non dominant hand
- some hair thinning but negative for anything else in review of systems
- takes CoQ10, fish oil, no other meds
- has been going on for 6 months

TPO elevated, other thyroid values normal, his dad had thyroid cancer (papillary type)

- clobetasol and almond and coconut oil tried but hasn't helped much
- removed gluten made it a little better after 1 week but then he ate it and didn't have symptoms

Dr. Bodemer: elevated TPO at risk for thyroid disease, some autoimmune indicated. Photos look like it may be contact dermatitis, with a low exposure. The cracks could also just be allowing for more exposure of allergens.

- works on the computer all day, uses dove unscented soap

Dr. Jensen: liquid dove soap has an additive, maybe vanacream could help?

He is on hair supplements, and depending on biotin level-may influence TSH results, will bring in supplements next visit

Dr. Bodemer: a biopsy may be helpful, if he's taking less than 5mg a day that shouldn't effect labs but if higher may want to speak about lowering

Could gluten be causing it? Dr. Bodemer: it's not worth going down the celiac pathway unless he has other symptoms or family history. Sensitivity may be an issue if gut is impaired, without doing testing you could increase gut health by increasing fiber, hydration levels, l-glutamine, etc. Potentially do an elimination diet to completely remove gluten for 6-8weeks and then slowly re-introduce to see what threshold might be.

Dr. Sundlass: Potentially test for a tissue transglutaminase antibody before recommending a gluten free diet to test to see if their not a celiac. Dr. Bodemer: I typically will check if they have symptoms before testing and check IgA too.

Dr. Tye: It does look like it could be contact dermatitis, patch testing may be helpful

Dr. Bodemer: dyshidrosis and an oral low nickel diet may be a possibility

Dr. West: would flare after firewood chopping and discovered after patch testing it was something in his gloves causing contact dermatitis

Dr. Bodemer: Bakers, food prep, and planters usually may have contact dermatitis flares. Might be good to ask his hobbies. Dr. Sachdev: He mentioned it did get worse after baking a flatbread, he thought it was from eating it but maybe it was from baking.

Dr. Jensen's Case

29 year old WM with 25 year history of psoriasis, high functioning autism

-Reported over 30%BSA

-right now his skin is completely clear

-Family Hx of autoimmune disorders, psoriasis

-is on a long list of supplements, does a lot of research and thinks if we go back to the diet of ancestors is best, but he can't get through diet so takes supplements

-very high doses of fish oil and on vitamin A

-broccoli sprouts for sulforaphane but is looking for an oral supplement, asking for dimethylfumarate (Tecfidera Rx) would like it for antiaging and for autism

Planning to do lipid panel, CMP, CBC with differential, etc.

Dr. Bodemer: I would check bleeding times on him due to the high omega dose, might be helpful to focus on omega ratio 4:1 instead of 20:1. May be helpful to drop omega 3 dose due to cost, bleeding time, and balancing omega (3 & 6 ratio).

-Also retinyl palmitate is very high may cause liver toxicity. If he wants to be on high doses- beta carotene and mixed carotenoids are best.

-Sulforaphane, inactive form is glucoraphin and is activated when exposed to myrosinase (an enzyme in plants released when plants are damaged/chewed). Dose is not clear but there does seem to be a lot of benefits from non-human studies. May be helpful for neurological and psychiatric disorders, cardio disorders as well.

- concentration is highest in the seeds (broccoli)

- may be helpful to put seeds in smoothie, and use the sprouts like he is doing, with supplements it's still a non-standardized thing

- too high can cause sedation or impaired motor fxn

For the Magnesium, might be helpful to check his levels and potentially lower the dose

Selenium dose may be fine if he keeps it at that level

Most other things he's on are at standard doses

2g of creatine seems a bit high, another expensive supplement (Dr. Tie: 3-5g a day is okay)
Vitamin A may be contributing to receding hairline so may want to mention to get him to lower the dose

Low dose naltrexone may also be helpful for him, can also inhibit microglial cells and may help tone down nervous system and help with anxiety and depression

May be following Rhonda Patrick APO carrier, PhD is in sulforaphane foundmyfitness.com

Last year's notes:

Garden of Eden -food based Zinc supplement

-not as worried with copper deficiency in food based supplements

If supplementing with 25-30mg zinc, supplement with 2mg of copper to avoid deficiency

High zinc doses used in warts as well 10mg/kg zinc sulfate per day

- definitely want to supplement with copper in these patients
- for 1-2months up to 4months

Q: Do you need to supplement with something else such as quercetin to help get the zinc into the cells?

Apple: Has used 24mg elemental zinc but does not add in additional supplements, will change formulas if there are no changes.

Q: Any experience with topical zinc for warts?

Apple: I have seen some studies for intralesional warts but I have not tried topically. Topical zinc is thick (40% zinc oxide). Mamina: I have used topical zinc on raw skin if there is a wart still there after liquid nitrogen.

Q: Any personal experience with topical botanicals for nail fungus?

Raja: I will do topical listerine (have patients pour listerine into a container and dip foot into it for about 15mins 3-4x a week) and vicks vapor rub (clearance similar to Jublia). Fotona laser can be used to drill holes into the nails and help with topical penetration.

Apple: I will use urea at night in a sock, or use urea and then put a topical on top. With essential oils, it's mostly suppressive. If discontinuing the essential oils, it may come back.

Compound with urea: 2% itraconazole and 2% ibuprofen in DMSO (ibuprofen is a prostaglandin inhibitor-fungus will release prostaglandins and create biofilm like meshes, so ibuprofen may help break this up and help with itraconazole penetration) Have not seen miraculous results but it is affordable.

Raja: Individuals with brittle nails may have a higher risk for osteopenia .

Apple: Omega 3 fatty acid supplementation-if a patient comes in with a lot of dry symptoms (dry skin, hair, etc) Hemp oil is high in omega 3 and may be good to massage into the nail.

Peter: [GLR-6](#):supplement to help the gut lining. (has marshmallow root powder)

Apple: marshmallow root powder

- Let powder sit into 1-2cups of water in the fridge overnight and use as a swish and spit or swish and swallow to be soothing.

- Acupuncture may help with GERD and getting off PPIs

SM: [Lily of the desert](#) product

SIBO can be linked to GERD

Module 22 & 23 : Hair Health

New herbal topical with a paper on CCCA <https://ugro.com/>

There can be diffuse alopecia areata, there isn't always discrete round patches

In a patient with a family history of cancer with someone who has PCOS, myo inositol is safe that could help, metformin may help regulate her hormones or blood sugar

CL I have found ashwagandha to be very very helpful for post covid telogen effluvium
1000-1500mg/day

Blood sugar being elevated influences a lot of systems, (IGF1)

1.25mg for oral minoxidil, there is facial hair growth that occurs (Apple)
2.5mg for men (Raja)

Q: Have you seen any ankle swelling? or other side effects besides facial hair?

Raja: have seen tachycardia in the first week and I warn patients about it, some people can get headaches on it too

Ashwagandha can increase testosterone levels

I will add Shatavari instead 500mg 2x a day (Raja), in men it may cause odd smelling sweat, for women it can increase let down in women who are breast feeding and increase milk production.

Q: I have a 40 yo female patient who developed painful breast cysts on regular Nutrafol women's. unclear if caused by ashwagandha, maca, or saw palmetto.

Nutrafol offers a hair analysis for \$60 and then 15min consultation with an ND.

RupaHealth has some information on the HairElements lab test for heavy metals.

Lactobacillus reuteri and bhringraj herb will shift into the anagen phase.

BioGaia Osteofortis has the exact L. Reuteri strain

Intralesional kenalog and topical JAK inhibitor still isn't signaling hair to grow.

Are there any contraindications to the healthy hair tablets by banyan botanicals that has the bringaraj in it

NYT Article August 2022:

<https://www.nytimes.com/2022/08/18/health/minoxidil-hair-loss-pills.html>

Uptick in patients requesting since

Ladder of care - more cautious based on degree of impact / lack of evidence

LDN - literature supports 4.5mg helps 80% of patients

If thyroid issues, .25-.5 with goal of escalating to 3-4.5mg rates to avoid GI interruption (diarrhea)

Product: Contrave

Do you have this compounded into tablets or in liquid for dose adjustment?

Do the vivid dreams recur with each dose adjustment? No, just initially

Change dosing timing

Chronic myalgia or Lyme patients often get worse at time of initial treatment

Take off for 2 weeks and reintroduce at lower dose, start at 0.5 and escalate

Check TH every 3 months

LDN is stable - often prescribe 4 months of supply at a time (liquid)

Capsules easier

You may have said this but can you prescribe if the patient is on opioid pain meds?

What about for hair loss? Same dosing protocol?

Yes

You mentioned free online resources for mindfulness based stress reduction in your scarring hair loss lecture? Can you share the specific resource.

<https://www.uclahealth.org/programs/marc/free-guided-meditations/guided-meditations>

<https://palousemindfulness.com/>

<https://www.mindfulnesscds.com/>

https://www.youtube.com/playlist?list=PLFkyCuB_GvYlpkqScFgA9bCn0sV1q-mH4

Scalp Health: Massage with Jojoba Oil or Pumpkin Seed with some Rosemary Seed Oil (AB)
[Spironolactone use does not increase the risk of female breast cancer recurrence](#). (JAAD)

Products:

- [Dermmatch](#) waterproof cosmetics
- Wiglets
- Microlinks

Supplements for Hair Health

- Biotin can help strengthen the hair you have, but it won't help it grow. If someone is having breakage, biotin may help. Biotin can also really help strengthen nails. At high doses above 10mg/day it can alter lab readings (pregnancy test, TSH, troponin)
- It is a water soluble vitamin, studies support 3-5mg daily for nail strengthening, I generally recommend 3mg (AB), I found it helpful for individuals to be on it for 1 year
- Vitamin D can restimulate hair follicles to re-enter growth phase
 - Code for malnutrition screening to get it covered by insurance
- L-glutamine -when is best to give it? And there's a maximum amount to give? Duration? 4-6months to see how they are doing, it's more to support gut health. Pairing it with dietary changes and increased fiber is important.
- Can you comment on Viviscal or nutrafol? -

Metformin has been shown to decrease androgens in women with PCOS.

2 cases with CCCA using topical 10% metformin 3x a week and then daily for 6months showed significant regrowth. The other patient continued minoxidil and ILK. Main side effects seen were scalp dryness and irritation.

[Nutrafol](#)

[-Women's formula](#)

[-Women's balance formula \(for peri and postmenopause\)](#)

[-Postpartum formula](#)

[-Men's formula](#)

[-Booster products \(exclusive to physicians, can be added with core products\)](#)

[-Hairbiotic](#)

How does ashwagandha work topically?

-plant exosomes extracted from the seeds of ashwagandha help with cellular communication and act as an antioxidant.

-Dr. Sivamani: Circadian rhythm of hair follicles-melatonin topically can stimulate the “clock” genes and work as an antioxidant.

Q: Viviscal over the counter, any thoughts between viviscal and nutrafol? Do nutrafol products delay hair greying?

-Dr. Anzelone: competitors may look at nutrition only, but nutrafol looks at stress, nutrition, environment, hormones, etc. Pigment stem cells can be used up when cortisol levels are high, when those are reduced it may cause grey hairs. Nutrafol’s products can help with stress management that may help prevent greying.

-Dr. Sivamani: Fo-ti can help with hair greying.

Q: Concern regarding estrogen receptors and patients with cancer?

-Dr. Anzelone: phytoestrogens used in nutrafol stimulate the phytoprotective estrogen receptors

Q: After stopping the supplement, will hair shed?

-Dr. Anzelone: recommend to take the product for 6 months, when discontinuing the hair may digress back. It would happen over time, not as abruptly as pharmaceutical discontinuation.

Q: Dr. Bodemer: Have you done any studies on telogen effluvium?

-Dr. Anzelone: might not take on a study targeting a specific condition due to the FDA supplement regulations and not being able to make claims regarding disease. The products can help with stress, with the dose dependent relationship with cortisol. We focus on the mechanism of action on the ingredients and the clinical improvements.

-Jennifer: Has had positive experience using nutrafol for chronic TE, her hair stopped shedding after one week of use.

Q: Some research shows ashwagandha can have androgenic effects, do the DHT ingredients offset this?

-Dr. Anzelone: the androgen relationship is dose dependent and nutrafol products do not reach the dose that causes increased androgens but the saw palmetto could definitely offset these effects.

-Dr. Bodemer: the maca can also help offset androgens as well.

-Dr. Sivamani: Shatavari can help with hormonal balance and stress

Dr. Sivamani: Device to measure hair density and thickness of hair can help with a trackable endpoint to measure progress. The device is about \$5,000-6,000.

Q: Does nutrafol increase hair strength or the diameter of the hair shaft?

-Dr. Anzelone: Hair shaft increased in diameter and improvements in hair quality and texture.

-Dr. Bodemer: Horestail (*Equisetum arvense*) herb may provide extra strength due to its silica content. Can also help with nail strength.

Dr. Sivamani: something that works well for adult female acne, may work for hair as well due to the androgen mechanisms (ex: pumpkin seed oil).

Raja:

Bhringaraj 500mg twice daily will increase anagen, was studied in mice. (If the patient is on blood thinners, this may increase its effects) Banyan Botanicals uses whole herbs, philosophy at Banyan Botanicals is to use tablets so the effect starts at the tongue.

Botanical companies: [Banyan Botanicals](#), [Athreya herbs](#), [Organic India](#), [GaiaHerbs](#) might have it.

Ashwagandha 600mg, will also increase libido, finasteride with ashwagandha is a good pairing

Shatavari 1000mg increases phytoestrogens (is in the asparagus family, so may cause strong smelling urine you may want to warn patients about)

Turmeric as an anti-inflammatory

Biotin for hair strength and collagen

Q: Have you used a compounding pharmacy to put formulas together?

Raja: yes, I work with one in California and he will start doing oral compounding and distribute them

Probiotics studied for hair: lactobacillus reuteri and lactococcus lactis (maybe) in male and female mice stimulated the anagen phase.

Q: Does Saw palmetto interfere with bioidentical hormones or hormone therapy?

Raja: Saw Palmetto does alter CYP450 so may alter metabolism of bioidentical hormones and will reduce the efficacy of oral contraceptives.

Q: Any concerns with maca root and bioidentical hormones?

Raja: I don't think it as much of a concern because the mechanism acts on the hormones differently than saw palmetto.

Q: Can anything be used preventatively for hair loss?

Raja: anything that can be used to treat could be used prophylactically

Lichen planopilaris-turmeric or curcumin 4,000-6,000mg

Controversy over LPP and sunscreen, study showed titanium dioxide present in the hair follicles of individuals with LPP, might make more sense that it's the chemical sunscreens since they can penetrate deeper. Raja tells people he doesn't recommend leave-in conditioners because of all of the chemicals included.

Shower filters

Steve: recommends them for eczema

Stacy: [ewg](#) provides information on water quality, shower filters \$30 on amazon

[Ruby Blue Bunny-endocrine disrupter free shampoo product](#) that Stacy has seen help with seborrheic dermatitis

Student comment:

Medical tattoo supply-[PainfulPleasures](#)

If you are using it for hair, make sure to get the bugpin needles, they are the smallest gauge. I also do a nerve block for PRP, to make it more comfortable.

<https://www.painfulpleasures.com/cheyenne-sol-nova-unlimited-wireless-tattoo-machine-4-0mm-black.html>

Q: Where do you tell patients to get topical oil formulations?

Raja: I give them the recipes and sometimes have them mix Bhingaraj with pumpkin seed oil.

Q: have you been using your laser for hair growth?

Raja Has used the urbium setting on the Fotona laser to cause micro-injury which stimulates the hair to grow.

Red light therapy can increase the anagen phase.

Q: Have they done studies comparing prp with putting needles into the scalp in case it's just the

needles with pro helping hair growth?

Raja: Yes, there have been split scalp studies where one side was injected with saline and the other side with PRP and the PRP side showed more improvement.

[Characterization of inflammatory infiltrates in male pattern alopecia: implications for pathogenesis](#)

Week 32 & 33 Holidays and New Year

Module 24: Wrinkles and Collagen Breakdown

Q: Do sunscreens with zinc oxide help with Melasma?

Raja: Yes, it does.

Vitamin C breaks down pretty quickly topically

Acetyl zingerone helps the stability

If you use something, you should use a stable phytochemical like ECGC, astaxanthin

[Dermal Radiance - Anirva](#)

-mix of 3 antioxidants: lycopene, astaxanthin, lutein at appropriate ratios

-this may also protect against blue light as well

Q: Vitamin C dose - what is the threshold for activity? Does liposomal at a smaller dose absorb more or is it more of a marketing thing?

Raja: I think it gives activity to buy the supplement, you need about 500mg-1000mg so anything lower may not be effective. I'm not sure about the liposomal factor, will need to look into it, there may be a higher bioavailability.

Astareal is the supplier of astaxanthin [What is Astaxanthin | Astareal](#)

NOW brand [NOW Foods, Astaxanthin, 4 mg, 60 Veggie Softgels \(iherb.com\)](#)

Q: Does Zinc help botox last longer?

Raja: Not sure, maybe make sure to have copper too.

Dr. Cruz: There are a lot of factors involved like exercises, etc. with what makes it lasts.

[Jeuneau – UNAPOLOGETICALLY YOU, FEWER FROWN LINES \(evolus.com\)](#)

Fo-Ti (Polygonum multiflora (Chinese medicine) internally do along with milk thistle since it may cause liver issues) and bhringraj (1000-2000mg internally no liver issue)topically for gray hairs or vitiligo

[Resistance training rejuvenates aging skin by reducing circulating inflammatory factors and enhancing dermal extracellular matrices - PMC \(nih.gov\)](#)

Last year's notes:

Dermatologic Care for the Transgender Patient

-Collaborating with other physicians and surgeons is helpful when navigating treatments such as accutane (Ex: if a transgender male patient has a lot of acne but is planning to have top surgery soon, it would be important to discuss with the surgeon to see their style and preferences regarding accutane use)

Q: How do you rephrase "Do you have sex with men, women, or both?"

Dr. Ginsberg: I would rephrase to "What are the genders of your sexual partners?", it opens it up for them to fill in the blank, they could say they are pansexual, etc

Questions:

1. What about spironolactone for acne in a patient who is biologically female and transitioning (forgive my lack of terminology—see second question)? I deferred to her physician managing this but I wish I knew better when I saw "her" at the visit. Seems an anti androgen would go against the transition therapy.

Dr. Ginsberg: The most important thing is that you genuinely care about the patient and they know that. They likely won't be offended if they know you have their best interest.

2. Do you have a good book or reference for docs like me (in the Midwest who do not experience a lot of trans care) but want more comfort and ease in talking about such care and know the terminology with those we do encounter?

There are a lot of good resources today, type in pubmed "Transgender dermatology", spironolactone would likely interfere, the primary care and endocrinologist would know as well. For Acne and hair loss there are great review articles with charts listing each gender and any considerations with medical.

Phrasing preferred for "assigned female at birth" instead of "biologically" or "biological sex" the best way to get comfortable is to practice talking about trans stories and actors, talk to staff, staff training can have artificial patients to practice discussing with. If you accidentally misgender a patient, just apologize "I'm so sorry you were misgendered we are working on this and will make sure it doesn't happen again"

2-part CME on Gender and Sexual Minorities:

Yeung H, Luk KM, Chen SC, Ginsberg BA, Katz KA. Dermatologic care for lesbian, gay, bisexual, and transgender persons: Terminology, demographics, health disparities, and approaches to care. J Am Acad Dermatol. 2019 Mar;80(3):581-589

Yeung H, Luk KM, Chen SC, Ginsberg BA, Katz KA. Dermatologic care for lesbian, gay, bisexual, and transgender persons: Epidemiology, screening, and disease prevention. J Am Acad Dermatol. 2019 Mar;80(3):591-602

Acne: Young, H, et al. Treating Acne in Transgender Persons Receiving Testosterone: a Practical Guide. Am J Clin Dermatol. 2022 Mar;23(2):219-229

Hair: Gao JL, et al. Androgenetic alopecia in transgender and gender diverse populations: A review of therapeutics. J Am Acad Dermatol. 2021 Oct 28;S0190-9622(21)02574-3

Evidence that laser hair removal impacts mental health: Lee M, et al. Association Between Gender-Affirming Hair Removal and Mental Health Outcomes. JAMA Dermatology 2021 Sep 1;157(9):1120-1122

Laser hair removal guidelines for pre-operative care: Carter E, et al. Presurgical Laser Hair Removal: Protocoling a Safe and Effective Procedure for Transgender Patients. Transgender Health. 2021;6(4)

Facial aesthetics: Ascha M, Swanson MA, Massie JP, Evans MW, Chambers C, Ginsberg BA, Gatherwright J, Satterwhite T, Morrison SD, Gougoutas AJ. Nonsurgical Management of Facial Masculinization and Feminization. Aesthet Surg J. 2019 Apr 8;39(5):NP123-NP137

Q: Do you have specific intake forms with examples?

Dr. Ginsberg: When looking at demographics, think what do I need to know legally and what do I need to know to make them comfortable filling out the form: legal name,

preferred name - benefit to having both can apply to cis patients as well. When asking about gender, we have gender identity and sex assigned at birth, drivers license and insurance ID will give info on their legal demographics as well. In terms of history, make sure gender is removed from it "For female patients only; date of last menstrual cycle, are you pregnant" instead rephrase to "To those who are relevant.." or just ask the question directly

Q: Accutane and pregnancy test. How do you approach these scenarios?

Dr. Ginsberg: now they've removed gender from Ipledge, so when you register a trans man, now you can register them as individuals with child bearing potential. I say the FDA mandates that I register you from a program called Ipledge that makes sure there would be no unintended pregnancies." and then I specifically define the term abstinence to them, because the FDA requires you to be on some form of birth control, and I want to make sure it's clear that abstinence is any sexual activity that could result in pregnancy. I do not require birth control on these clients, I won't put a trans man on OCP. Most patients know they have to get the pregnancy test by law, but there's still discomfort with getting the test, ex: if a male goes into lifelabs and requests a pregnancy test that may cause hate response. After covid they started adding home pregnancy tests as an option and I will ask my patients to send me a picture, and when I practice telemedicine I still do that. I also offer them in my office so the patient can do them discreetly.

I address the association of depression like I would with any other patient. If they do have a history of suicidal thoughts that it is in their past and not in their present or they have caregivers that are actively present. A lot of patients will say they have had these thoughts before but it's in their past and usually it's in the beginning before they were able to transition I just make sure they are fully informed.

I make sure that I inform that just because they are on testosterone and don't get their period, they could still get pregnant.

Some feelings of discomfort with not having the patient go on birth control when going on accutane. Dr. Ginsberg: I wouldn't recommend referring to another dermatologist because it may make them feel neglected by the system.

Dr. Kilcline: We still allow home upreg as well for our telemed patients: use a sharpie to write date on the Upreg stick to avoid re-use of tests (had that happen once) and they send a pic of the test to us

Raja: We used to do at home tests but then someone re-used an old one and it got caught and legal got involved so we stopped doing it altogether.

Dr. Ginsberg: I still offer at home tests but it's up to the practitioner and their comfort levels of course. You can have tests in your clinic to offer patients.

Q: How does acne respond to accutane with individuals on longterm testosterone?

Dr. Ginsberg: Most people do well on one course of accutane, most of the literature shows the negative effects of testosterone are done after 2 years. It's best to start accutane in the beginning right when they have the testosterone surge to prevent acne scarring, etc.

Q: With someone with a history of nodulocystic acne would you start prophylactically?

Dr. Ginsberg: I don't start prophylactically but if I start to see it I am very aggressive and act fast with it because it will always scar if not treated.

Dr. Ginsberg: JAAD had a really good CME on cultural competency I was an author on

Acne, hair loss, and aesthetics there are a lot of great summary articles in the primary literature if you search transgender dermatology you'll find them

Q: Hair loss, when do you start treatment?

Dr. Ginsberg: I recently started prescribing a lot of oral minoxidil. Mostly dealing with trans men (for trans women they usually already had hair loss occur), first thing to do is figure out if they care- some patients like the hair loss because they think it's more masculine. Then we have 2 options, finasteride or minoxidil. With finasteride we don't know enough, so would wait until 2 years on hormones. Starting on it won't reverse once characteristics are formed, same dose, I like to wait for secondary sex characteristics to show or 2 years. For non binary patients they may be comfortable starting earlier since they are non-binary. In terms of minoxidil I love it because you can start it immediately and it won't interfere, it's the same dose as well 2.5mg.

Q: Are there any issues with granulomas interactions and aesthetic injections, or differences between trans and cis population?

Dr. Ginsberg: I've never seen testosterone or estrogen have any impact on outcome. The big issue is a large amount of these individuals are getting illicit things injected elsewhere which can cause issues.

Cosmetic Acupuncturists

Is there a point we can suggest for patients to press to relieve anxiety during a procedure instead of giving them a stress ball?

Ear shen men - earseeds.com

Codex Beauty: Barbara (Barb) Paldus: Barbara.Paldus@codexbeauty.com

Research based ethnobotany for skin

Protecting from UV radiation + environmental pollution

Topical adaptogens : can you upregulate natural anti-oxidants to be in a “prime” state?

Upregulate superoxide dismutase, catalase, glutathione

Increase in hydration AND drop in TEWL

[Brightening serum](#): affects stratum corneum, AND gets into the epidermis

[Brightening moisturizer](#): may help provide a shield for the skin (occlusive nature of antioxidants can help provide protection against pollutants)

[Eye Cream](#): Micro-circulation restoration for under-eye region

Products are microbiome-friendly.

Pollution protection: can provide shield against environmental pollution for 4-10hrs.

Practically like you would see with a sunscreen.

Anti-oxidants in the products are split between the occlusive layer and the penetrative component.

Zero waste, environmentally friendly

Q: Are the products okay for acne prone skin?

A: Dr. Sivamani: has used these in patients with acne

Q: Are these products available to retail in office?

A: Barbara Paldus: yes, if interested email Barbara.paldus@codexbeauty.com

Protein Powder Recommendation by student: Ka’Chava

-vanilla is her favorite and she also likes the chocolate flavor

Q: Question- from the last section, it was briefly mentioned a compound with minoxidil, melatonin, bimatoprost for hair growth. Where do you get that compound?

A: Dr. Sivamai works with a compounding pharmacy. (Dermasave labs recommended by Dr. Lio)

ISDIN [Melatonin](#) product (Bakuchiol, vitamin C, and melatonin)

-melatonin overnight increases catalase dismutase

<https://www.isdin.com/en-US/face-care/antiaging/>

Eryfotona Actinica

Eryfotona Ageless

Dr. Bodemer: Bakuchiol (2%) mixed with nicotinamide (4%), and green tea extract (2%)-whole compound not just EGCG (go to combination for rosacea patients) in a clarifying agent may help with inflammation

-can use twice per day

-with bakuchiol there is a slight erythema response at 4 weeks of use

[Bakuchiol study](#)

Dr. Sivamani uses: Hexylrescorcinol, acetyl zingerone and white curcumin for rosacea

Expiration date can be 30 days after compounding

Anhydrous base can last longer up to 180 days

IDCP Facebook group: <https://www.facebook.com/groups/1036616830088512>

Student comment: Patients with rosacea have a hard time tolerating retinol, sometimes will get papular pustular breakouts, some of her patients benefit from glycolic exfoliants

Dr. Bodemer: has used [Qet exfoliant products](#) in rosacea patients, you don't have to rub them in too much

Dr. Bodemer Hair product recommendations for patients with LPP: stick to 1-2 products and avoid sprays, mousses, dry shampoos since risks are unknown for LPP, avoid chemical based sunscreen on the face or near the scalp. Thinks hair spray may be an issue in the population of patients with LPP.

Module 25: Melasma

Barefoot shoes companies: Belenka, Xero, Splay, Feelgrounds

Tamanu oil for rosacea GK had a patient try this with refractory rosacea and it worked great and he is off the other treatments

Pribowo A, Girish J, Gustiananda M, Nandhira RG, Hartrianti P. Potential of Tamanu (Calophyllum inophyllum) Oil for Atopic Dermatitis Treatment. Evid Based Complement Alternat Med. 2021 Dec 26;2021:6332867. doi: 10.1155/2021/6332867. PMID: 35069754; PMCID: PMC8782620.

Study about Candibacter AR & BR vs Rifaximin for SIBO

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4030608/>

For hair Horsetail can be used as a tincture - it should be standardized to 10-15% silicon. Otherwise the dried herb can be used as a tea: 2-3tablespoons of dried her steeped in hot water. Drink this 2-3 times per day

Sensate - [Stress Relief Technology for Meditation & Relaxation | Sensate \(getsensate.com\)](https://www.getsensate.com/)

For perianal dermatitis:

Dermeleve: <https://dermeleve.com/>

Canno Cream: <https://psiderm.com/product/greenway-therapeutix-canno-cream/>

Case: 36yro female rosacea, hasn't had SIBO testing, is on omeprazole and can't go off it to take the SIBO test. Previously had a colonoscopy and said she had SIBO, has 10 cans of diet soda a day for the caffeine. She has ADHD and says this is why she needs the caffeine. On several medications.

Apple: Would be beneficial for her to switch the diet soda for a different caffeine source. Carbonation can cause a lot of gas in the stomach as well. Is she having enough fiber?

SJ: Aspartame in diet sodas may break down into formaldehyde, it may be worth it to do a trial to cut it down. I've also done H. pylori testing through Quest labs.

Apple: I might test her even if she is on the omeprazole, even though she should be off it. I have a resource to reduce PPI use.

Raja: Some demulcent herbs like slippery elm, marshmallow, or licorice can help with getting off of PPIs

For TioSmart SIBO testing, if it's lactulose you have to e-sign for a prescription or provide the patient with a prescription. Just send them with a small amount (2.5mL). There is a CPT code. We have them send the kit to the patient and have our team prior authorize the code. If they can't get SIBO testing, rifaximin can be expensive. There are some motility agents that are herbal and pharmaceutical. If you can't get rifaximin you can get Candibacter AR & BR, there was a study on it's use for 4 consecutive weeks.

CandiBactin AR: <https://www.metagenics.com/candibactin-ar>

CandiBactin BR: <https://www.metagenics.com/candibactin-br>

Topically I've been using ivermectin with 2% white curcumin for pain with rosacea, a lot of patients are liking it. You can get it from sabinsa.

EW: What is she concerned about? CT: the pain EW: Gabapentin might help with the nerve pain

Raja: Another alternative for nerve discomfort is bacopa moneri 300mg daily it's considered a nervine sedative. I've had patients want to get off the gabapentin due to the drowsiness and I've transitioned some patients off it and switched it. Sedation is not an issue for bacopa. May help with ADHD too. The main interaction would be with Warfarin.

Banyan botanicals, Ayush herbs, Athreya herbs, Gaia herbs, have good quality bacopa products. Verdure Sciences has it available for compounding.

Apple: Low dose naltrexone is another thing I would consider.

Raja: Topical CBD may help too.

Apple: CannO Cream, can help with perioral or peri facial as well twice a day up to 3-4x a day [Greenway Therapeutix](#)

Raja: Email Michael to get CannoCream sourced for your clinic:

michael.milane@greenwaytherapeutix.com

Tranexamic acid

-derivative of lysine

-topical 2% applied daily for 12 weeks was shown to improve melasma in 22 out of 23 patients

-3% TA compared with 3% hydroquinone + 0.01% dexamethasone, no significant differences only with side effects - TA side lower side effects

-250mg BID daily or 500mg BID daily orally

-for post inflammatory hyperpigmentation - some case studies in the literature, usually a combination not just TA alone

-Systemic risks: GI, headache, tinnitus, menstrual irregularities, screen for thromboembolic risks

Apple's TA Concoction for Melasma

- 3-5% TA
- 4% Niacinamide
- 0.5% licorice root extract
- +/-0.025% Tretinoin or 0.5% Bakuchiol

CA: Favorite formulation is called "Faded" as a maintenance or prevention serum everyday

Apple: Not sure about any risks with longterm TA use, most studies only go for 3 months (specifically with oral) if they take for 4-6 months orally and if they are stable, then switch to topical

Raja: Microneedling is another option 1.7-1.9mm that might help, I don't push topicals in with it but after microneedling I add it in. Within 30mins to 1hr the microneedles close.

SO: The 1927 thallium is supposed to be good for melasma too. Haven't tried it myself yet

CT: <https://pubmed.ncbi.nlm.nih.gov/25607696/>

Any good products that address the vascular component of melasma?

Tranexamic acid does (IK)

There was a cool study that actually showed histology before and after tranexamic acid that reduced rascality:

-"Incidence of exogenous ochronosis is directly related to both dose and duration of use, although occurrence with 2% topical hydroquinone treatment has provided emphasis of

duration more than dosage”

https://www.researchgate.net/profile/Luke_Maxfield/publication/281776705_Exogenous_Ochronosis_with_Use_of_Low_Potency_Hydroquinone_in_A_Caucasian_Patient/links/563a5e9008ae405111a58653.pdf (PL)

Sunscreen Brands:

- [Aveeno Ultra Calming Sunscreen](#) + [Dermablend](#) with Iron Oxide
- [La Roche-Posay's Mineral Tinted Sunscreen](#)
- [Isdin Eryfotona Ageless](#)
- [Clinique Liquid Mineral](#)
- [MyChelle](#)
- [Cyspera](#) (smells bad, expensive)
- EWG - Skin Deep App (AB)

Favorite Peels:

- [Vi Peel](#)
- Jessner's Plus
- [PCA](#)
- Enlighten Peel
- [Cosmelan](#) - safer/more predictable/more controllable
- [Skin Medica Peels](#)

Module 26: Sun Protection

Guest Speaker: Dr. Keira Barr on Mind-Body Modalities

www.drkeirabarr.com

Email: hello@drkeirabarr.com

Instagram: @drkeirabarr

Trauma can break a person and separate the mind from the body, or the mind and soul. There can be traumatic experiences that can result in the onset of dermatological disease, or the dermatological disease may cause trauma.

Window of tolerance is between hypoarousal and hyperarousal. Can come in waves. Hyperarousal is the tipping point, may experience different trains of thought, increased heart rate, may feel numb, want to get away/off the rails. This is when trauma occurs.

Polyvagal theory - similar to the previous model. We are wired for connection, our first survival instinct is social engagement. When that attempt fails we activate our more primitive response - fight or flight. When that fails, the most primitive is freeze/collapse/flop and drop. It keeps us alive using the least amount of energy possible.

Connecting= ventral vagal response

Protect = sympathetic nervous system activation

Freeze= dorsal vagal response (Ex: burnt out physician)

In a trauma cycle individuals get stuck and are not able to complete the normal stress response. The skin also has an HPA axis and the skin and the brain are communicating at the same time

Chronic activation of the stress response plays a significant role in skin cancer. Tumor cells have beta adrenergic receptors on them, increased catecholamines and stress hormones can influence the response to treatment.

Adverse childhood events and recent events can impact susceptibility to skin cancer and can promote the aggressive nature of melanoma.

By helping people connect to things that make them feel safe, supported, protection, etc. This is important when seeing patients and giving them a sense of choice, not too much to overwhelm but allowing choice is important.

Resources that may help people feel safe: family of origin, family of choice, friends, environment, spirituality, work, community, hobbies, music, dance, pets, movement, inner resources and strengths: humor, playfulness.

On the spot resources:

- Movie memory (reflecting on a time in your life that was happy and brings a smile to your face, daydreaming a little bit)
- 3-2-1 senses (3 things you can hear, 1 thing you can see, 1 thing you can feel)
- Hand tracing (tracing the outline of your fingers to connect to your own body)
- Grounding (feeling the ground beneath you)
- Compassionate touch (hand to chest/thigh/pocket)
- Breathing tools
 - Bringing awareness to your breath - identifying chest/belly breathing

- Balance breath - inhale for count of 5 exhale for count of 5
- Double exhalation - rest and relaxation response on exhale inhale count of 4 exhale for count of 8
- Ring of fire breath - if in a collapsed state, it's more of an energized breath inhaling and exhaling through your nose

Q: How do you address stress with patients without triggering them/not having resources for them?

Dr. Barr: Just asking about how their condition affects them or how they are sleeping without directly asking are you stressed. Ex: "How are you doing with all of this?" and it's not necessarily up to you to provide all the things but it may give some inkling into what resources may be helpful to them.

Most people's basic needs are to feel seen, heard, and validated and just asking how they are doing may be enough for them to open up.

MG: I often ask 'What do you do to relieve stress?' Before suggesting any specific stress relievers

Most people under-apply sunscreen.

Careful to call coconut oil a natural screen. Instead, recommend sun protective clothing. According to a study by the International Journal of Cosmetic Science, coconut oil has an SPF of 1.

We don't have a good way to measure UVA protection... it is very likely that blocking the UVB allowed for extended UVA exposure.

Is there actual data showing sunscreen application reduces skin cancer incidence?

- Studies esp in Australia have reported reduction of nevi and melanoma incidence with sunscreen
- <https://www.mdpi.com/2079-9284/6/3/42>
- Pro-sunscreen and skin cancer: <https://pubmed.ncbi.nlm.nih.gov/26437734/> and controversy if it helps: <https://pubmed.ncbi.nlm.nih.gov/30447006/> so the jury is still deciding which is why SPF can't be your BFF and we need a comprehensive strategy. Learn more at Keira's lecture on "[SPF Isn't Your Real BFF: The 3 True Secrets to Sun Protection.](#)"
- <https://www.outsideonline.com/2380751/sunscreen-sun-exposure-skin-cancer-science>
- [UVA and Blue Light Protection LearnSkin Course](#)

Sunscreen Physical Blocking Products (generally avoid chemical sunscreens):

- [Badger](#)
- [Blue Lizard](#)
- [Suntegrity](#)
- [Isdin](#)
- [Skin Medical - Total Defense](#)
- [Eclipse Sun Glove](#)
- [No Zone Clothing](#)

L-histidine supports the synthesis of natural moisturization factor.

Module 27: Practice of Medicine

Guest Speaker: Susan Etheridge susan@alternativehealthlaw.com

Paul Prince: prince@prince.law

Telehealth

- Unlicensed professionals in the US are practicing medicine online at reduced prices
- Insurance companies are trying to determine where to go, there has been some fraud in the telehealth space (billing when they haven't offered services)
- Emergency authorization is gone but a lot of people are being reimbursed at different rates, it's a bit of a transition period and they're trying to figure out how to handle the telehealth space
- Quick visits billed at high rates is causing an issue, but most insurance companies are liking the telehealth model

Mental Health

- The pandemic highlighted the need for better care of mental health

Concierge model

- not as accessible but practitioners like it better because they can spend more time and better quality of care

Data Privacy

- There are websites domain not in service, see what you were searching and sell the info to marketing agents

- Policy hasn't caught up yet, but hoping to bring more control in data privacy

Drug Pricing

- Increasing drug costs, some proposals include allowing medicare to negotiate pricing, online pharmacies – good rx is making medication cheaper and more accessible.
- Bringing in drugs from other countries is another avenue to try to reduce the price of drugs
- 2021 walmart provided coverage to 1.2 million people, companies providing more care for their employees

Non-physicians being able to provide

- Ex: NPs, they are pushing the limits of their scope a little

Med Spas and IV Infusion bars

- Telehealth visit with a physician onsite at the medspa or infusion bar, so then they approve the procedure and then the procedure will take place. Have to be careful with these arrangements
- Some people doing infusions aren't allowed to be doing infusions

Q: What about trying to do a hybrid practice cash pay and insurance. It seems just too difficult to do. But I hear of docs charging a fee to stay a patient. Like a membership. But also still take insurance payment.

Susan & Paul: Seeing more of both these days. It's going to depend on your 3rd party contracts with payers on what is allowed and what isn't allowed. This is the same as a concierge model.

Q: What do physicians need to do to protect ourselves from liability when it comes to med spas and selling products like skin care and supplements?

Susan & Paul: You can do these things but you have to put the proper structure in place. You have to follow the laws and rules, having an attorney will help guide on the rules. If you're trying to do the right things, the regulatory people will understand but you have to still be aware of the laws and stay within them.

Increase in non-pharm tx options

- Increased demand from patients and physicians
- Cannabis addiction is on the rise, insurance and federal dollars will start going towards this
- There are risks associated with certain botanicals and it's important to educate patients on the risks, interactions, etc.

Outsourcing

- Ready to rent services to
- Services being sent abroad, Africa is on the rise

HSAs and FSAs

- If you're creating products that may not be covered under insurance, you have to be a little creative
- Corporate wellness programs

Metaverse

- 3d virtual space , a massively scaled and interoperable rendering of 3d worlds
- cryptocurrency

FDA Updates

- Exemption from IND for certain drugs on food and cosmetic products. Provides for certain IND exemptions which would expand the scope on food and cosmetics without an IND for drug uses. Currently food and cosmetics for non-drug use does not require an IND. Claims would still not be able to be on labels
- Green guides have been revised (if product is sustainable)
- FDA is going to look more at product claims across the board (ex: clean beauty claims) originally released in 1992, if making claims make sure they are FDA substantiated
- Endorsements and testimonials, social media influencer guides are coming

Q:States rules regarding providing care across state lines?

Susan & Paul: States have an interest in protecting their citizens. It's governed by state law, not only where the physician is located but also where the patient is located. Interstate compacts coming up, it just depends on the state laws. I was in California and my doctor in NY they are providing medical advice into California and that's technically a violation. I can't imagine someone would come after my doctor though. A lot of practitioners are saying what do I do but I would say hold on, it's not allowed since the emergency authorization went away but we are going to get there. Some states with the interstate compacts may not be an issue.

Dietary Supplements must be GMP certified - ask for third party audit reporting

3 types of claims: nutrient, health, structure/function

Recommendations:

- 1) Have a lawyer review your agreements with product companies to be sure they don't violate state healthcare laws
- 2) Know more about the products you are selling and using in practice
- 3) Avoid unsubstantiated claims
- 4) Disclose relevant facts and information to patients (ie if you're making money in a way that isn't clear or are an owner, if it's not covered by insurance, etc),
- 5) Secure proper insurance coverage

Modules 28 &29: Running an Integrative Dermatology Practice

Guest Speaker: Dr. Rachel Day

Email: drday@oneskinderm.com

Handout:

<https://learnskin-ebooks.s3.us-west-2.amazonaws.com/2023PreparingtoOptoutAnIntroductory+Guide.pdf>

Best Practices

- Create patient consent form with lawyer for every patient outlining CAM practices
- Go through local associations or lawyers to find out about alternative medicine practitioner regulations
- COVID relaxation of laws allows treatment of patients across state lines
- Registered agents are service organizations or lawyers who provide registration in the state(s) you are doing business

Recommended Products:

- [Chandika](#)
- [Mountain Rose Herbs](#)

- [St John's Botanicals](#)
- [Traditional Medicinals Tea](#)
- [Now Foods](#)
- [Laboratory of Flowers](#) - owner will provide info on essential oils
- [Floracopeia](#)
- [Herbalist & Alchemist](#)
- [Pure Encapsulations](#)

Gradutaion

Peter:

Our Indigo Cream Label (made from Tedd Neenan):

Directions: Apply thinly into affected areas 2 or 3 times a day. Indigo Naturalis is a plant proven to help alleviate problematic dry skin. The blue appearance is temporary and will wash off.

Contains: Water, Ceteraryl & Ceteareth-20, Glycerin, Shea Butter, Beeswax, Coconut (Cocos nucifera) Oil, Dimethicone, Glyceryl Stearate & PEG-Stearate, Jojoba (Buxus Chinensis) Oil, Sunflower (Helianthus Annus) Oil, Phenoxyethanol, Tocopherol (Vit. E), Carbomer, Sodium Citrate, Caramel, Indigo Naturalis.