

## The Mind & Body Connection with Scarring Alopecia

## CARF Webinar Originally Aired on May 11, 2020

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This webinar presentation was given by Dr. Maryanne Senna, the Director of Massachusetts General Hospital Hair Loss Clinic and Research Unit and was hosted by Jean Pickford, Executive Director of the Cicatricial Alopecia Research Foundation. The main topic of this presentation was discussing stress, how to handle it and the mind body connection for those with scarring alopecia.

Stress is a normal part of life. Biologically, stress causes a fight or flight response in our bodies, which is a way our body adapts to stressors that arise in our daily life. However, prolonged, and unmanaged stress has negative effects on our health, particularly in people predisposed to inflammatory and autoimmune conditions.

One important fact: Patients with severe hair loss and/or a recent diagnosis of scarring alopecia tend to have higher levels of stress!

What do we do once we get stressed? Most often we,

- 1. Turn to the internet,
- 2. Develop poor eating habits,
- 3. Drink alcohol,
- 4. Hide due to shame or embarrassment,
- 5. Count all the hair strands we have lost,
- 6. Spend lots of money hoping for a solution.

All these maladaptive traits further contribute to our stress!

Management of stress is dependent on the ability and willingness to make changes necessary for a healthy lifestyle, which includes having adequate social support. Meditation and mindfulness can improve health conditions. Research data was shared to provide evidence that meditation and mindfulness really do work in improving mental and physical health.

High Blood Pressure - A study conducted in 2017 showed that patients with high blood pressure who meditated over an 8-week period had a drastic change in 172 genes that regulate inflammation, metabolism, and circadian rhythm. These changes were also associated with a decrease in blood pressure as well.

Citation for the research article: Bhasin MK, Denninger JW, Huffman JC, Joseph MG, Niles H, Chad-Friedman E, Goldman R, Buczynski-Kelley B, Mahoney BA, Fricchione GL, Dusek JA, Benson H, Zusman RM, Libermann TA. Specific Transcriptome Changes Associated with Blood Pressure Reduction in Hypertensive Patients After Relaxation Response Training. J Altern Complement Med. 2018 May;24(5):486-504. doi: 10.1089/acm.2017.0053. Epub 2018 Apr 4. PMID: 29616846; PMCID: PMC5961875.

Psoriasis - Up to 70% of people with psoriasis report more severe skin presentation when they are undergoing emotional stress. In a clinical trial of 37 psoriasis patients with moderate to severe disease, half of the patients were treated with light therapy and the other half were treated with light therapy in addition to meditation audio recording for 13 weeks. Results showed that those who were treated with light therapy and meditation cleared their psoriasis faster and more completely compared to those who did light therapy alone.

Inflammatory Bowel Disease - In a study with 48 patients, all of which were enrolled in a 9-week mind body intervention, patients reported that their quality of life and symptoms improved significantly after the program and reduction in genes associated with inflammatory response.

A Massachusetts General Hospital study conducted by Dr. Senna showed that out of 77 patients, 63% cited stress as an inciting factor for alopecia areata onset as well as for flares and 45% had stress related disease and had more severe alopecia.

So how might this happen? Immune privilege is likely a part of it.

What is immune privilege? It is a natural protective mechanism of the body, prevents immune attack and damage to vulnerable body sites which include the eyes, the brain, the ovaries and testes, the maternal fetal unit (when pregnant), and hair follicles! Loss of immune privilege is thought to contribute to many conditions including multiple sclerosis, autoimmune eye disease, fetal rejection during pregnancy loss and inflammatory hair loss conditions.

Hair follicle immune privilege says, "I am not dangerous, please don't attack me!" Collagen and elastin create a physical barrier to immune cells trying to get to the hair follicle. But when stress happens, increased signaling from the nervous system causes hair follicle immune privilege to collapse. Two important points:

- 1. When trying to find the best treatment for scarring hair loss, it is important to evaluate the effects of the treatments on stress induced hormones and their relationship with inflammation.
- 2. Stress reduction should be a part of every treatment regimen.

What are some ways to reduce stress?

Social engagement,

- Adult coloring books (interestingly enough, this is a good way to relieve stress),
- Exercise your body and/or mind,
- Meditation (apps like Calm, Headspace, Painting by Numbers, Mindfulness and Insight Timer are great suggestions),
- Enjoying your hobbies
- Make time for yourself, listen to your mind and body,
- Try to relax and wind down before bedtime to get adequate rest.

It is extremely important to find ways to reduce your stress. Do not think you need to follow a specific rulebook for stress relief. If you like to read books, do that! If you prefer to take a nice walk and look at nature, do that! It does not always have to include exercising or yoga. Everyone is different, find what works for you and change as needed. Practice self-care, even if it is just for 1 minute a day! You will be surprised at the difference this small effort makes in your overall health.

## Q&A Session with Dr. Senna

- Q My LPP was exasperated with a move. A dime size spot has gotten so much bigger. I do injections/doxycycline, Rogaine, clobetasol and took Plaquenil- nothing works- can it be the environment?
- A Allergens and the environment can play a role and contribute to the exacerbation of scarring hair loss. It is important to give hair loss treatments 6-8 months to assess for effectiveness.
- Q I noticed that itching and discomfort increase at night. I do not notice scalp discomfort during the day. Is this normal? How does the itching and burning sensations relate to stress? A During the day we are distracted, which masks the symptoms we experience. At night you are less stressed and are trying to wind down for bed, so you notice these symptoms more!
- Q Living in the time of COVID has exacerbated my FFA symptoms, primarily with scalp itching. How can I best manage my emotional wellbeing to the point it benefits my physical wellbeing with FFA?
- A Mindfulness. Give yourself a break, use tips from this session. We are all extremely hard on ourselves, give yourself grace. Connect with the CARF community to uplift each other and support each other during this difficult time.
- Q I am embarrassed and ashamed by my hair loss. I work as a flight attendant and I feel very ugly and self-conscious. I had a gorgeous head full of hair and while I can hide my bald spot for now, I do not know how much longer I can continue to do so. How can one get over being so self-conscious?
- A This comes down to self-love...our self-value is more than skin deep. We are always our hardest critics. Practice mindfulness and self-care. There has been so much advancement in the hair loss

community about treatment and alternative options, so please be hopeful. Do not be afraid of the unknown because we know so much more now and have the tools to help you!

- Q Is it possible for scarring alopecia to burn itself out and stop? And if the scarred part of the scalp will never regrow hair, and the rest has a lifetime for each strand, will I lose it all as I lose each piece that does not grow back?
- A Yes, scarring alopecia can burn itself out. It is very unpredictable. When it happens, if it happens, or how treatment will respond is variable. Treatment should be for a minimum of 2-5 years to get scarring under control. After this happens, you and your dermatologist can revisit to think about modifying treatment. The longer a period without scarring, burning, itching and inflammation, the more likely you are to be in a "safe zone." Then you can think about hair transplant and other available options.
- Q I would like to know if my hair will grow back by taking vitamins, using different oils that cause hair growth and by eating foods that aid in hair growth?
- A The main thing you can do is avoid potential allergies and products that cause irritation. It is less likely that diet will make a difference. There is no current data that shows that vitamins and oils will be of benefit for patients with scarring hair loss.
- Q What are some measurable results you have seen in patients with CCCA after using meditation and mindfulness techniques?
- A HUGE results! Patients feel better and respond better to medication. It makes a big difference. It is not only going to help prevent further exacerbation of hair loss, but it will help other areas in your life. Stressors can have a negative impact on your health and hair.
- Q Do you recommend supplements to help our bodies better deal with stress? I am anxiety prone and could use natural solutions to better mitigate stress.
- A There is some data on omega fatty acids 3 and 9 being extremely helpful for anxiety and depression.



## **CICATRICIAL ALOPECIA RESEARCH FOUNDATION (CARF)**

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