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Eczema

It makes perfect sense to have viewed the documentary "Inside the Living Body" at the start of our Pathology class. With pathology being the study of causes and effects of diseases, having a good understanding of how the body should function at an optimal level will help to more easily identify when a disease or illness is present. Even though most massage therapists will not have the necessary license to diagnose their clients, we still will need to have the ability to recognize abnormal functioning within the human body. The documentary "Inside the Living Body" provides a great presentation of how the human body is formed, how it functions, and the degenerative process that everyone experiences over time through the aging process. With this understanding, the therapist is able to treat their client with more safety, being able to distinguish the abnormal from the normal.

One common pathology one would often come across as a massage therapist is atopic dermatitis, also known as eczema. This is a condition that typically presents itself as irritation of the skin with a dry, patchy rash that is usually red or brown, depending on skin tone. Eczema can be found just about anywhere on the body, but it is usually found on the inner arm opposite the elbow, the back of the leg behind the knees, on the chest and neck, the back, and even on the face.

The cause of eczema is still unknown. However research exists that supports the possibility that there is a connection between those with eczema and a mutated gene, FLG. This FLG gene is what dictates the instructions needed to produce a protein molecule called Profilaggrin. This large protein molecule makes 10 to 12 "copies" or "cuts" of itself depending on one's genetics. These "copies" are called Filaggrin. It should be noted that the protein profilaggrin is found on the outermost layers of the skin and is essentially the starting point for other proteins that this particular protein processes. Those proteins that are later produced are responsible for helping the skin to stay hydrated and function as a protective barrier. Filaggrin also has a role related to the functioning of other structural molecules that cause the skin to be flat and strong, it helps the skin to retain moisture and remain hydrated, and it aids in maintaining the pH balance of the skin.

Unfortunately, according to the National Institute of Health's Medline Plus "Twenty to 30 percent of people with atopic dermatitis have an FLG gene mutation compared with 8 to 10 percent of the general population without atopic dermatitis."[1] This also means that having this gene mutation does not mean one will definitely have eczema, but rather that one has a greater chance at developing the condition.

[1] https://medlineplus.gov/genetics/gene/flg/#conditions

The mutation of the FLG gene causes the profilaggrin molecules that are produced to be too short. As mentioned previously, the profilaggrin molecule needs to be able to make 10 to 12 cuts to help maintain a healthy skin barrier. Those individuals whose profilaggrin molecules only produce 10 filaggrin molecules are more likely to develop eczema.[2]Not enough filaggrin proteins would mean it is more difficult for the skin to retain moisture and remain structurally adequate.

This gene mutation alone is not the cause of eczema, but it is clear that with our skin being the first level of defense against outside pathogens, and with the nature of the condition being dry, inflamed skin, the normal production of this protein is evidently very important.

There are a few ways to treat eczema but unfortunately there is not yet any cure for the condition. Corticosteroids are usually prescribed as a topical ointment. For more severe cases, one may be prescribed an oral steroid like prednisone.[3]There are scenarios where antibiotics may need to be prescribed to fight infection. Because of the inflammation, dryness and likely scratching, the skin can crack and bleed. This is an obvious entry point for bacteria, viruses, and toxins. If the rash is so bad that it becomes infected, the affected person will not only have to fight the normal symptoms of the condition, but the secondary problem of infection due to the compromised state of the skin barrier.

There are also naturals remedies that can help combat the symptoms of eczema. Colloidal oatmeal is very popular in helping to relieve the itching associated with eczema. Coconut oil can also be used as a moisturizer and natural antibacterial agent. Witch hazel is yet another option for soothing relief for the condition.[4]

Eczema is a vicious condition that unfortunately affects people of all ages. Luckily there is research to support successful treatment options for the condition, and there will hopefully one day be a way to cure the problem. It is very important for the massage therapist to understand the nature of this pathology being that it is a disease of the skin and your average massage therapist will almost always be making contact with the skin. People with eczema can still benefit from massage within the limits of safe practice. Lotions and oils can easily irritate and burn the skin, even if the client is not experiencing an active flare up. Depending on the severity of a flare up, the rash could be cracked and open. These areas should obviously be avoided. But with the right lotions, oils, techniques, and safety measures, one could find some relief from massage through relaxation and possibly soothing oils and lotions.

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[2] https://medlineplus.gov/genetics/gene/flg/#resources section “Health Conditions Related to Genetic Changes” subsection “Atopic Dermatitis”

[3] https://www.mayoclinic.org/diseases-conditions/atopic-dermatitis-eczema/diagnosis-treatment/drc-20353279 section “Treatment” subsection “Medications”

[4] https://www.healthline.com/health/natural-remedies-to-reduce-eczema-symptoms#witch-hazel