

THE MOST MODERN METHODS OF TREATMENT OF ECZEMA DISEASE

Nasritdinova Nargiz Bahadyrovna

Department of Dermatovenerology, Andijan State Medical Institute, Uzbekistan

Annotation: Eczema has many causes and triggers. Learn more about the underlying causes and how to identify your specific triggers in order to learn how to avoid them, or, if they're unavoidable, how to be prepared.

Key words: Eczema, blood, neurodermatitis, nummular eczema, seborrheic dermatitis.

We don't know what exactly causes eczema (often known as its most common form, atopic dermatitis). The American Academy of Dermatology (AAD) describes atopic dermatitis as a complex skin disease caused by an interaction between a person's environment and their genes. People with eczema tend to have an overactive immune system that responds to topical irritants or allergens by producing inflammation. There are many risk factors for eczema, including stress, a family history of this condition or allergens. Having extremely dry skin, coming in contact with allergic substances in shampoo or cleansers, having certain food allergies, hay fever (also called rhinitis), living in cold mountainous areas or places that are cold and damp for at least part of the year or living in places that are swampy and hot: all of these environmental risk factors can contribute to the severity, intensity and frequency of an eczema flare up if you are genetically predisposed to this skin disease.

It is also important to recognize that eczema symptoms can be mistaken for a different skin condition called psoriasis. Read here to better understand the differences between eczema and psoriasis. For more information about the seven different types of eczema including atopic dermatitis, contact dermatitis, dyshidrotic eczema, neurodermatitis, nummular eczema, seborrheic dermatitis and stasis dermatitis, read our overview here.

One of the most common misconceptions about eczema is that it's contagious. Many people see the oozing or very dry skin and assume it's something you can "catch". But eczema doesn't work like the common cold or the flu — it's not viral or contagious. Instead, it's caused by a combination of genetics and environmental triggers.

Research shows that some people with eczema have a mutation of the gene responsible for creating filaggrin. Filaggrin is a protein that helps our bodies maintain a healthy protective barrier on the outermost layer of our skin. Without enough filaggrin to build and maintain a strong skin barrier, moisture can escape and then allow bacteria, viruses and allergens to enter the body; this exposed or "leaky" skin barrier can then lead to extremely itchy skin, dry scaly patches of skin, blisters, skin infections, red spots or bumps and other symptoms.

The most common type of eczema, atopic dermatitis, is often caused by a patient's genetics. It isn't contagious, but you might have to thank your parents if you have it since it runs in the family. You're more likely to develop atopic eczema if a close family member, such as a parent or sibling, has it too.

Specific materials and products in your surroundings can trigger eczema. Usually, these triggers cause contact dermatitis. This form of eczema is especially common for those who work in professions with many triggers, such as hairstylists, mechanics and custodians. Whether you

work in these professions or not, your surroundings may be causing your eczema to flare-up after touching specific dyes, cleaning products and other chemicals.



1 picture. Contact dermatitis

Your environment can also trigger eczema flare-ups, especially if you live somewhere known for environmental extremes. Folks who live in extremely cold and damp places or hot and swampy places may be at a higher risk of eczema. This can also be true for certain seasons. If summers where you live are particularly hot and sweaty, you may experience more eczema flare-ups in summer than in fall, winter or spring.

While eczema and allergies are two different conditions, they are often related. That's because certain contact allergens can cause allergic contact dermatitis, a delayed and itchy reaction after the skin is exposed to an allergen. Often this form manifests as a rash and it can take one to two days after exposure for symptoms to form, making it tricky to discover what the allergen is. Allergy tests can help discover the cause.

Contact allergens aren't the only connecting force between these two conditions. Having certain food allergies and hay fever (also called rhinitis) can also cause eczema to form. When either of these are present, eczema can manifest in a variety of ways, such as itchy skin, extreme dryness, scaly skin, hives or red, irritated skin.

The relationship status between eczema and immune health is complicated at best. While eczema is not an autoimmune disease, immune system problems can trigger more flare-ups. In an autoimmune disease, the overactive or dysregulated immune system attacks specific parts of the body, such as immune cells destroying the insulin-producing cells of the pancreas in type 1 diabetes. When it comes to eczema, immune system problems don't cause the disease, but it can inflame symptoms.

To make things even more crazy, eczema can also harm your immune system. During a flare-up, the skin barrier is broken down, leaving a patient susceptible to other skin conditions and immune diseases.

Regardless of vaccine status, Covid-19 (or the Coronavirus) is a potential trigger for eczema. The cause of this is still unknown and research is underway on the relationship between Covid-

19 and this skin condition. Some early theories suggest the stress of recovering from the virus or the body's heightened immune system response to the virus may trigger eczema in those who are genetically prone to the disease.

If you do have eczema and are wondering if you're at a higher risk for Covid-19, the answer is most likely no. Again, the research is still in its early stages, but so far, the available scholarship suggests that eczema does not increase your risk of getting Covid-19.

Similar to immune system dysfunction, mental health conditions don't cause eczema, but they can make them worse. Stress in particular can cause eczema triggers. The reason stress may cause eczema flare-ups is because when your body encounters a stressful situation, there's usually a physical reaction. Usually, this physical reaction includes inflammation in the body, one the known causes of eczema.

Other mental health conditions can also increase inflammation and may cause eczema, such as depression or PTSD. However, there are fewer studies on the relationship between these conditions and eczema than on the connection between eczema and stress.

Regardless of the cause, you will probably experience eczema triggers. Healthcare providers, including dermatologists, and people with eczema will refer to something that causes or aggravates their eczema as a "trigger." When trying to identify potential triggers, keep in mind that an eczema flare up can appear some time after exposure to a topical irritant or allergen. This lag time can make some triggers challenging to detect.

Common triggers include:

- Dry skin: when your skin gets too dry, it can easily become brittle, scaly, rough or tight, which can lead to an eczema flare up. Learn more about the importance of moisturizing skin with eczema-friendly ointments and creams to manage severe eczema flare ups.
- Irritants: everyday household products and even natural substances can cause your skin to burn and itch, or become dry and red. These potential allergens can include products that you use on your body or in your home, including: hand and dish soap, laundry detergent, shampoo, bubble bath and body wash, perfume or other items with added fragrances, or surface cleansers and disinfectants. Even some natural liquids, like the juice from fresh fruit, vegetables or meats, can irritate your skin when you touch them. Read how one mom helped her son's eczema by changing her laundry routine.
- Stress: emotional stress can be an eczema trigger, but it's not exactly known why. Some people's eczema symptoms get worse when they're feeling "stressed." Others may become stressed, just knowing they have eczema, and this can make their itchy skin flare up. Learn more about how stress and eczema are related.

Healthcare providers, including dermatologists, and people with eczema will refer to something that causes or aggravates their eczema as a "trigger." When trying to identify potential triggers, keep in mind that an eczema flare up can appear some time after exposure to a topical irritant or allergen. This lag time can make some triggers challenging to detect.

Eczema can affect anyone at any age, but it is often quite common in young children. When young children have eczema, family history is almost always the cause. Even if eczema doesn't

run in the family, genetics could still be at play; children who have family members with hay fever, other allergies or asthma are at risk too.

Baby eczema, on the other hand, is often caused when a baby's sensitive skin comes into contact with an environmental irritant. These irritants can include:

- certain cleansers, soaps and shampoos
- dry air or colder environments
- certain ointments and baby lotions
- home products with irritating fragrances
- food allergies

To learn more about what products can be used on sensitive baby skin or for children with eczema, check out these products that have the National Eczema Association's Seal of Acceptance.

Eczema affects everyone differently. One person's triggers may not be the same as another's. You might experience eczema symptoms at certain times of the year or on different parts of your body.

Symptoms of eczema are as varied as the potential environmental factors that can lead to irritation: everyone is affected by this skin disease differently. Regardless of vaccine status, Covid-19 (or the Coronavirus) is also a potential trigger for eczema, possibly due to the stress of recovering from the virus, or the body's heightened immune system response to the virus.

When identifying potential triggers, keep in mind that an eczema flare can appear some time after exposure. This lag time can make some triggers challenging to detect. Eczema affects everyone differently, so one person's triggers may not be the same as another's.

Here are some everyday things that can trigger an eczema flare or make it worse:

- Metals, including: chromium cobalt, chloride, copper, gold, nickel; eczema in response to a topical allergen is called "contact dermatitis." Read how one NEA Ambassador found her eczema trigger and eliminated all nickel from her environment.
- Environmental allergens, such as: cigarette smoke, cockroaches, dust mites, pet dander, pollen, insect bites, bee stings; allergic reactions to these triggers come in many forms.
- Climate factors, including: the change in season, extreme heat, extreme cold, dry weather or humid weather. Altitude can also trigger an eczema flare up. Other factors can include prolonged exposure to hot water, chlorine, salt water, skin yeast and overgrown Staph bacteria.
- The many list of chemicals that can trigger an eczema flare include: amidoamine, bacitracin, benzalkonium chloride, benzophenones, black rubber, cinnamates, cocamidopropyl betaine, colophony (tree resin), diazolidinyl urea, dibenzoylmethanes, hydantoin, epoxy resin, formaldehyde, fragrance glyceryl, thioglycolate, imidazolidinyl, urea, lanolin, methyl methacrylate, methylchloroisothiazolinone, methylisothiazolinone, methyl dibromo glutaronitrile, myroxylon pereirae (balsam of Peru), neomycin sulfate, octocrylene, paraben, para-aminobenzoic acid (PABA), paraphenylenediamine potassium

dichromate, propylene glycol quaternium 15, salicylates, tixocortol pivalate, tosylamide and formaldehyde resin.

- Materials can trigger eczema outbreaks, including non-organic materials such as polyester and latex. Organic materials that are rough in texture, such as wool, can irritate the affected areas of the skin as well.

Eczema often appears in the flexural areas behind the knees or elbows, where skin creases lead to rubbing and irritation or increased quantities of sweat that dries out the skin. It's especially important to keep these materials and chemicals away from the flexural areas to avoid flare ups.

Even if you haven't identified your specific triggers, there are a couple actions you can take to prevent eczema flare ups. These actions can include:

- Developing a comprehensive skin care routine
- Adopting an eczema diet which includes anti-inflammatory foods
- Explore the mind-body connection and ways to decrease stress
- Considering wet wrap therapy or phototherapy with ultraviolet lights
- Consulting with a dermatologist for a customized prevention plan

If you're looking for more ways to prevent triggers, check out these 20 eczema lifestyle hacks.

Certain treatment options are more effective for the eczema community than others. While routinely prescribed by healthcare providers, topical steroids, including topical corticosteroids and steroid lotions, can trigger complications and side effects for people with atopic dermatitis or sensitive skin. The National Eczema Association has created a more comprehensive guide of treatments, which you can read here.

Other options can include home remedies, such as light therapy, or over the counter medications, such as an antihistamine. These work too—though to varying degrees depending on the individual case and the type of treatment—and often don't have the same side effects as steroids.

It can often be helpful to visit a dermatologist or other healthcare provider to determine the cause of your eczema. More importantly, this healthcare professional should help you determine the type of eczema you have, the right treatment plan and ways you can prevent eczema from interfering with your daily life.

No matter the cause, there's no known cure to eczema. Because of this, your actions should focus on treating the symptoms and avoiding triggers. Treatment options are often a mixture of home remedies and over-the-counter or prescription medications. If you're interested in learning more about available treatment options, check out the NEA guide to eczema treatment.

Preventing eczema is nuanced, but it often boils down to living a healthy lifestyle. Reducing your stress, exercising consistently, eating an eczema-friendly diet and getting eight hours of sleep can ensure your body is prepared to fight eczema flare-ups before they even begin. To build an eczema-proof lifestyle, consider trying this eczema care routine that's as easy as 1-2-3.

References:

1. Piety., Boivin. Pandemics Throughout History. *Front. Microbiol.* 2020; 11631736. doi10.3389/ fmicb.2020.631736.
2. Facia's. Infectious conditions Considerations for the 21st century. *Clin. Infect. Dis.* 2001; 32675 – 685. doi10.1086/ 319235.
3. SpellbergB.Dr. William. Stewart Mistaken or blackened? *Clin. Infect. Dis.* 2008; 47294. doi10.1086/ 589579.
4. Nozimjon O'g'li, S. S., & Maksimovna, M. M. (2022). THE ORIGIN OF MIASTHENIA DISEASE AND METHODS USED IN TREATMENT. *Conferencea*, 31-33.
5. Nozimjon O'g'li, S. S., & Kasimjanovna, D. O. (2022, November). ORIGIN, PREVENTION OF MENINGITIS DISEASE, WAYS OF TRANSMISSION AND THE USE OF DIFFERENT ROUTES IN TREATMENT. In *E Conference Zone* (pp. 37-40).
6. Nozimjon O'g'li, S. S. (2022). CAUSES OF THE ORIGIN OF OSTEOCHONDROSIS, SYMPTOMS, DIAGNOSIS AND TREATMENT METHODS. *Conferencea*, 76-77.
7. Nozimjon o'g'li, S. S. (2022). INFORMATION ABOUT THE STRUCTURE OF THE MEMBRANE OF EPITHELIAL TISSUE AND GLANDS. *British Journal of Global Ecology and Sustainable Development*, 10, 65-69.
8. Nozimjon o'g'li, S. S. (2022). First Aid Medication and Remedies for Heart Failure. *Academia Open*, 7, 10-21070.
9. Nozimjon o'g'li, S. S., & Xasanboy o'g'li, A. A. (2021). Quantitative Indicators of Villi Cells in the Intraepithelial Part of the Small Intestine. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 1(2), 19-21.
10. Mavlonovna RD. Factors That Increase the Activity of Women and Girls in Socio-political Processes at a New Stage of Development of Uzbekistan. *JournalNX.*;7(07):61-6.
11. Mavlonovna, R. D. Participation of Uzbek Women in Socio-economical and Spiritual Life of the Country (on the Examples of Bukhara and Navoi Regions). *International Journal on Integrated Education*, 4(6), 16-21.
12. Mavlonovna, R. D. (2021, May). PARTICIPATION OF WOMEN IN EDUCATION AND SCIENCE. In *E-Conference Globe* (pp. 158-163).
13. Mavlonovna, R. D., & Akbarovna, M. V. (2021, July). PROVISION OF FAMILY STABILITY AS A PRIORITY OF STATE POLICY. In *Archive of Conferences* (pp. 34-39).