National Eczema Association

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Tips to help manage some of the trickiest flares to care for. **p14**

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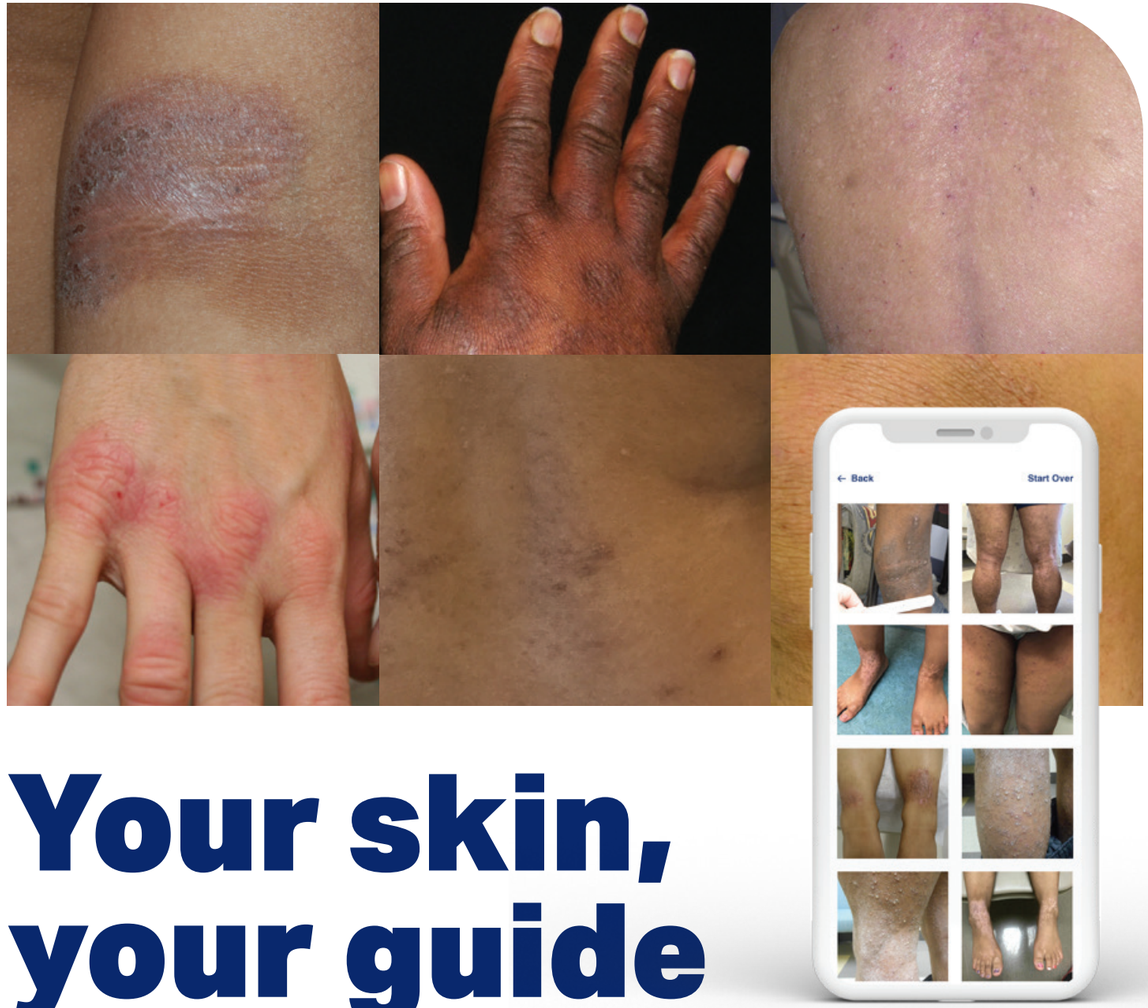
NEA Magazine

Research, Support and Education for Those Affected by Eczema

October is Eczema Awareness Month

Powerful words from our community paired with photos of real eczema flares showcase the meaning of Eczema Awareness Month. **p16**

Fall 2024 **NationalEczema.org**



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National Eczema Association

NEA Magazine

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High-Sodium Diets and Eczema

National Eczema Association-supported researcher, Dr. Katrina Abuabara, aims to discover whether dietary sodium triggers eczema outbreaks.

Letter from Kristin

I am honored and excited to join you as the new president and CEO at the National Eczema Association (NEA). I am thrilled to embark on this journey with such a dedicated and passionate team.

The work NEA does is very important to me as I am an individual who has lived with eczema for more than 20 years. I was diagnosed as an adult and it took almost 12 months to determine exactly what was happening and what treatment would be best. When I was initially diagnosed, the treatment options were minimal. There was quite a bit of trial and error and unfortunately a lot of sleepless nights with the itch-scratch cycle. To work for an organization that is working toward helping patients and people like me is inspiring.

I would be remiss if I did not thank Julie Block for her years of service and dedication to NEA as CEO. She has been integral to building NEA to what it is today and I know we will continue to build upon the foundation that she and the board of directors have built since NEA's inception.

At the start of this new chapter, my focus is to listen and learn from you, the eczema community. I am inspired by your passion to help find a cure for eczema through your advocacy and willingness to share your stories and resources. Your insights and experiences are invaluable, and I am keen to understand the opportunities that lie ahead for us as an organization.

I am especially excited to highlight this year's Eczema Awareness Month campaign taking place in October. On page 16, we're featuring real photos of eczema flares from our community paired with reflections on what it's like to live with eczema. Our hope is to showcase the range of eczema, from how it presents itself physically to the lasting emotional impact it leaves behind, in order to help each other and others better understand the true experience of living with eczema.

In this issue, you'll also find updates on new research from NEA, a guide to the skincare ingredient squalane, tips from experts on eyelid eczema and more.

I am extremely confident that together, we will achieve our vision of a world where everyone impacted by eczema has the care and support they need to thrive.

Onward and upward!

Warmly,

Kristin Belleson - President & CEO

Our Mission: NEA is the driving force for an eczema community fueled by knowledge, strengthened through collective action and propelled by the promise for a better future.

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National Eczema Association

TOPICAL NEWS

Our Latest Updates

Congrats to our philanthropy award winners

The National Eczema Association (NEA) recognized some of our most loyal donors with our first-ever philanthropy awards during Eczema Expo 2024 in Denver, Colorado. During the Ecz-travaganza gala event, Melody Sugg, vice president of philanthropy, honored four eczema community members for their ongoing support.

Christina Crowley received the Spirit of Philanthropy award, which recognized her for living NEA's mission through leadership and generosity. Crowley has been a member of the board of directors at NEA since 2017, a Cure Captain for Itching for a Cure since 2021 and a generous and loyal donor for many years.

Amy Chrnelich received the Itching for a Cure Super Star award. She began fundraising as a Cure Captain for Itching for a Cure in 2019 and has continued ever since. "We Itch for a Cure because our family decided to stop hoping for a better future for our daughter, Ella, and start fighting for one," Chrnelich said. She also serves as a member of the board of directors for NEA, and chair of the Itching for a Cure volunteer committee.

Rachel Bronstein and Alexis Smith both received the Flare Fighter MVP award. Bronstein and Smith were honored for their loyal monthly giving to NEA since 2019.

Congratulations to these four loyal donors! Your generosity helps fulfill our shared mission to create a world without eczema. Thank you for being heroes to the eczema community.

Spirit of Philanthropy award winner Christina Crowley with Melody Sugg

Itching for a Cure Super Star award winner Amy Chrnelich with Melody Sugg

Flare Fighter MVP award winners Rachel Bronstein and Alexis Smith with Melody Sugg

Pay attention to your open enrollment period

For people with eczema, it is especially important to have health insurance that will help cover expected and unexpected healthcare costs. If you're not happy with your health plan or your needs have changed, you need to pay attention to your open enrollment period. This is a set period once a year — typically late fall and early winter — when you can enroll in a new health plan or make changes to your existing plan. This window depends on your type of insurance, employer, where you live, etc. To help support you with some of these complicated coverage questions, we have several insurance resources — including insurance basics, choosing an eczema-friendly health plan and common insurance issues for people with eczema — on our website at **NationalEczema.org/insurance**.

NEA Ambassadors' Corner

Getting the word out!

Over the last few months, NEA Ambassadors continue to volunteer their time to raise eczema awareness and make a difference for the eczema community. For example, NEA Ambassador Sarah Millan, hosted an eczema booth at Learn2Derm, a skin health event for local residents in southeast Washington, D.C. in June. Held at the Pennsylvania Avenue Baptist Church, the event aimed to educate communities with limited access to dermatology care on early detection and management for common skin conditions. Millan passed out educational materials on eczema from the National Eczema Association.

In a completely different forum and audience, NEA Ambassador Maisie Wong-Paredes shared her family's experience with her son's eczema for a continuing education event for health insurance professionals. Wong-Paredes recorded a video sharing her unique caregiver experience, which was played at the in-person event in San Diego, California. This awareness work is important because it helps health insurance professionals understand the lived experience of people with eczema. It will help inform their health plan and coverage decisions as an insurer, so they consider their decisions in the context of real people with eczema.

Thank you to our Ambassadors for the important role you play in eczema education and awareness. We're excited to see the impact you make during Eczema Awareness Month this October. Learn more at **EczemaMonth.org**.

NEA Ambassador Sarah Millan

Medical students Nikita Menta, Jaya Manjunath and Lauren Forney at Learn2Derm

Brief Summary of Important Patient Information about DUPIXENT® (dupilumab)
(DU-pix-ent)
injection, for subcutaneous use

Rx Only

What is DUPIXENT?
- DUPIXENT is a prescription medicine used:
  - to treat adults and children 6 months of age and older with moderate-to-severe eczema (atopic dermatitis or AD) that is not well controlled with prescription therapies used on the skin (topical), or who cannot use topical therapies. DUPIXENT can be used with or without topical corticosteroids.
- DUPIXENT works by blocking two proteins that contribute to a type of inflammation that plays a major role in atopic dermatitis.
- It is not known if DUPIXENT is safe and effective in children with atopic dermatitis under 6 months of age.

Who should not use DUPIXENT?
Do not use DUPIXENT if you are allergic to dupilumab or to any of the ingredients in DUPIXENT. See the end of this summary of information for a complete list of ingredients in DUPIXENT.

What should I tell my healthcare provider before using DUPIXENT?
Before using DUPIXENT, tell your healthcare provider about all your medical conditions, including if you:
- have eye problems.
- have a parasitic (helminth) infection.
- are scheduled to receive any vaccinations. You should not receive a "live vaccine" right before and during treatment with DUPIXENT.
- are pregnant or plan to become pregnant. It is not known whether DUPIXENT will harm your unborn baby.
  - **Pregnancy Exposure Registry.** There is a pregnancy exposure registry for women who take DUPIXENT during pregnancy. The purpose of this registry is to collect information about the health of you and your baby. Your healthcare provider can enroll you in this registry. You may also enroll yourself or get more information about the registry by calling 1 877 311-8972 or going to https://mothertobaby.org/ongoing-study/dupixent/.
- are breastfeeding or plan to breastfeed. It is not known whether DUPIXENT passes into your breast milk.

Tell your healthcare provider about all of the medicines you take including prescription and over-the-counter medicines, vitamins, and herbal supplements.

Especially tell your healthcare provider if you:
- are taking oral, topical, or inhaled corticosteroid medicines
- have atopic dermatitis and asthma and use an asthma medicine

Do not change or stop your corticosteroid medicine or other asthma medicine without talking to your healthcare provider. This may cause other symptoms that were controlled by the corticosteroid medicine or other asthma medicine to come back.

How should I use DUPIXENT?
- **See the detailed "Instructions for Use" that comes with DUPIXENT for information on how to prepare and inject DUPIXENT and how to properly store and throw away (dispose of) used DUPIXENT pre-filled syringes and pre-filled pens.**
- Use DUPIXENT exactly as prescribed by your healthcare provider.
- Your healthcare provider will tell you how much DUPIXENT to inject and how often to inject it.
- DUPIXENT comes as a single-dose pre-filled syringe with needle shield or as a pre-filled pen.
  - The DUPIXENT pre-filled pen is only for use in adults and children 2 years of age and older.
  - The DUPIXENT pre-filled syringe is for use in adults and children 6 months of age and older.
- DUPIXENT is given as an injection under the skin (subcutaneous injection).
- If your healthcare provider decides that you or a caregiver can give the injections of DUPIXENT, you or your caregiver should receive training on the right way to prepare and inject DUPIXENT. **Do not** try to inject DUPIXENT until you have been shown the right way by your healthcare provider. In children 12 years of age and older, it is recommended that DUPIXENT be given by or under supervision of an adult. In children 6 months to less than 12 years of age, DUPIXENT should be given by a caregiver.
- **If your dose schedule is every other week and you miss a dose of DUPIXENT:** Give the DUPIXENT injection within 7 days from the missed dose, then continue with your original schedule. If the missed dose is not given within 7 days, wait until the next scheduled dose to give your DUPIXENT injection.
- **If your dose schedule is every 4 weeks and you miss a dose of DUPIXENT:** Give the DUPIXENT injection within 7 days from the missed dose, then continue with your original schedule. If the missed dose is not given within 7 days, start a new every 4 week dose schedule from the time you remember to take your DUPIXENT injection.
- If you inject too much DUPIXENT, call your healthcare provider or Poison Help line at 1-800-222-1222 or go to the nearest hospital emergency room right away.
- Your healthcare provider may prescribe other medicines to use with DUPIXENT. Use the other prescribed medicines exactly as your healthcare provider tells you to.

What are the possible side effects of DUPIXENT?
DUPIXENT can cause serious side effects, including:
- **Allergic reactions. DUPIXENT can cause allergic reactions that can sometimes be severe.** Stop using DUPIXENT and tell your healthcare provider or get emergency help right away if you get any of the following signs or symptoms: breathing problems or wheezing, swelling of the face, lips, mouth, tongue, or throat, fainting, dizziness, feeling lightheaded, fast pulse, fever, hives, joint pain, general ill feeling, itching, skin rash, swollen lymph nodes, nausea or vomiting, or cramps in your stomach-area.
- **Eye problems.** Tell your healthcare provider if you have any new or worsening eye problems, including eye pain or changes in vision, such as blurred vision. Your healthcare provider may send you to an ophthalmologist for an eye exam if needed.
- **Joint aches and pain.** Joint aches and pain can happen in people who use DUPIXENT. Some people have had trouble walking or moving due to their joint symptoms, and in some cases needed to be hospitalized. Tell your healthcare provider about any new or worsening joint symptoms. Your healthcare provider may stop DUPIXENT if you develop joint symptoms.

The most common side effects of DUPIXENT in patients with eczema include: injection site reactions, eye and eyelid inflammation, including redness, swelling, and itching, sometimes with blurred vision, dry eye, cold sores in your mouth or on your lips, and high count of a certain white blood cell (eosinophilia). The following additional side effects have been reported with DUPIXENT: facial rash or redness.
Tell your healthcare provider if you have any side effect that bothers you or that does not go away.
These are not all of the possible side effects of DUPIXENT. Call your doctor for medical advice about side effects. You may report side effects to FDA.
Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

How should I store DUPIXENT?
- Store DUPIXENT in the refrigerator at 36ºF to 46ºF (2ºC to 8ºC).
- Store DUPIXENT in the original carton to protect from light.
- DUPIXENT can be stored at room temperature up to 77°F (25°C) up to 14 days. Throw away (dispose of) any DUPIXENT that has been left at room temperature for longer than 14 days.
- **Do not** heat or put DUPIXENT into direct sunlight.
- **Do not** freeze. **Do not** shake.

Keep DUPIXENT and all medicines out of the reach of children.

General information about the safe and effective use of DUPIXENT.
Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. Do not use DUPIXENT for a condition for which it was not prescribed. Do not give DUPIXENT to other people, even if they have the same symptoms that you have. It may harm them.
This is a brief summary of the most important information about DUPIXENT for this use. If you would like more information, talk with your healthcare provider. You can ask your pharmacist or healthcare provider for more information about DUPIXENT that is written for healthcare professionals.
For more information about DUPIXENT, go to www.DUPIXENT.com or call 1-844-DUPIXENT (1-844-387-4936)

What are the ingredients in DUPIXENT?
Active ingredient: dupilumab
Inactive ingredients: L-arginine hydrochloride, L-histidine, polysorbate 80, sodium acetate, sucrose, and water for injection

Manufactured by: Regeneron Pharmaceuticals, Inc., Tarrytown, NY 10591
U.S. License # 1760; Marketed by sanofi-aventis U.S. LLC, (Bridgewater, NJ 08807) and Regeneron Pharmaceuticals, Inc. (Tarrytown, NY 10591)
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ECZEMA HERO

Why I Donate to NEA: Sarah Young O'Donnell

Sarah Young O'Donnell, from New York City, shares how she and her family discovered NEA and what it means to her to give back.

By Sarah Young O'Donnell, as told to Clare Maloney

Photos courtesy of Sarah Young O'Donnell

As the chair of the National Eczema Association's (NEA's) board of directors, I work closely with other board members, staff and our dedicated team of Ambassadors. Our purpose is to advocate for and to improve the lives of all people impacted by eczema.

My family's eczema journey began in the late 1980s when my father developed severe atopic dermatitis as he entered his 50s. Luckily, my dad was accepted into a clinical trial at the University of Michigan for an atopic dermatitis treatment. One of the dermatologists leading that trial was also involved with NEA, and he encouraged my dad to get involved. Thank goodness for that, as this was the pre-internet days, and my dad might not have found his way to NEA as quickly as he did!

At that time there really were no effective treatments for severe eczema. Those that provided some relief also came with significant and potentially very serious side effects. There was also little recognition of eczema as a serious disease and how debilitating it can be. For example, no one really acknowledged the impact of itch on eczema patients, nor the devastating effects that chronic lack of sleep has on those with eczema and their caretakers.

NEA was a lifeline for my family. The education NEA provides, the research it sponsors, the advocacy work it does on behalf of those with eczema are all incredibly important. I have seen firsthand year after year how the NEA community wraps itself around those suffering from eczema, as well as those caring for loved ones with eczema. NEA provides them with knowledge, support and hope in moving forward. This is why I donate to NEA. I want to help support this important work.

Over the past several years, NEA has performed incredible work in helping to galvanize the development of new therapies to address and treat eczema. We have raised far greater awareness of the disease.

There are more than 30 million individuals in the U.S. with eczema. I give to help NEA expand its reach and connectivity to more people with eczema and their families. I want all people affected by eczema to have a greater understanding of the disease and the best options for addressing it.

Donate today

Your gift changes the lives of the 31 million people living with eczema. Your generosity helps bring better therapies, better care, better outcomes — and one day, potentially, a cure.

COMMUNITY

Eczema Expo 2024: A Treat for All

The National Eczema Association's Eczema Expo was a treat for all who attended this year in Denver, Colorado.

By Clare Maloney

Eczema Expo is the largest gathering of the eczema community — including people with eczema, caregivers, healthcare experts and industry professionals. What began over two decades ago as a small patient conference is now a one-of-a-kind space for people with eczema and their families to feel seen and supported like never before.

This year, the National Eczema Association (NEA) hosted their annual Expo in Denver, Colorado from June 27–30, where over 400 attendees were invited to treat themselves to a weekend of education, connection and fun.

Living with eczema means more than just managing it. Expo '24 — where the theme was "Treat Yo' Self" — was all about learning how to expect more for ourselves, including better care and raising expectations of what it means to live well.

At the start of the weekend, excitement was palpable in the fragrance-free air. Eczema community members of all ages arrived — many of whom were about to experience the magic of Expo for the first time. T-shirts, tote bags and swag galore were available to all as the weekend got rolling with orientations and neighborhood rambles around downtown Denver. Later in the evening, attendees were invited to break the ice with their musical stylings at karaoke.

On Friday, Expo officially kicked off with a warm welcome and a keynote presentation by Dr. Katrina Abuabara, a dermatologist specializing in eczema at UCSF Health in San Francisco, on exciting new developments in eczema research and what increased quality of life can look like for people living with eczema. This set the tone for a weekend full of inspiring, educational, thought-provoking talks and support sessions led by world-class eczema experts and community members. We are truly living in the "era of eczema," and Expo is a way for the community to shed light on new advances in treatment, identify areas of unmet need and walk through what's next in the eczema world together.

Expo is also a family affair in more ways than one. Many attendees expressed how Expo is a homecoming for them, reuniting with fellow attendees from years past and welcoming newcomers into their circles where everyone there just "gets it." There were games played, memories made, stories shared — and many, many skincare product samples to go around.

Kids of all ages, whether they have eczema themselves or love someone who does, participated in Expo Camp activities tailored to their age groups, where they made new friends and shared new experiences.

The fun culminated in the annual Ecz-travaganza on Saturday night, which was red carpet-themed this year. All attendees were invited to look and feel their best at a dinner (full of allergen-conscious menu items, of course) and dance gala where everyone walked the red carpet before grooving the night away. More than a few people compared the feeling to crashing the best wedding. Not to be forgotten are this year's "Itchy Awards" winners, awards given during dinner to community members who went the extra mile to help make this year's Expo the best yet.

Finally, when it was time to say goodbye at the closing session on Sunday, an overwhelming amount of powerful words were shared by individual attendees and their loved ones about what Expo means to them. For many people, Expo was the first place they felt completely understood yet not solely defined by their condition. For many parents and caregivers, they acknowledged how their children with eczema reached new levels of confidence and self-assurance they'd never seen before.

Expo at its core is the embodiment of the eczema community. It's a place where people show up for each other and themselves, even when they're not feeling their best, to create a community so vitally needed — especially one affected by a disease that makes it so easy to be susceptible to physical and emotional isolation. This year's theme was all about stepping into a new reality, where "good enough" is no longer the baseline for everyday wellness. It was clear from day one of Expo '24 that this notion would become a permanent mantra for many to live by.

RESEARCH REVIEW

A Look at Current Guidelines for Topical Steroid Use for Atopic Dermatitis

By **Jodi L. Johnson, PhD,** research assistant professor of pathology, dermatology and medical social sciences at Northwestern University

If you have atopic dermatitis (AD), you are likely no stranger to using a topical corticosteroid. These over-the-counter and prescription-strength medications — also called topical steroids — are a frequent go-to treatment option for managing AD symptoms. Despite it being such a common treatment method, many people with AD still have questions about how to properly apply a topical steroid. For example, how much do you apply? When do you start and stop using a topical steroid for daily AD management? Does the potency of the steroid change the quantity that you apply to your body? Are there any side effects from topical steroid use? To help answer some of these questions, this article digs into the medical research to show the current guidelines for applying topical steroids for the management of AD.

How topical steroids are used to manage atopic dermatitis

Topical steroids have been used for over 60 years to treat skin diseases that are driven by dysregulation of the immune system.[1] More than 100 randomized controlled clinical trials have been conducted to evaluate the effectiveness of topical steroids to treat AD.[1]

While topical steroids have a role to play in eczema management, like any medication, their usage can result in adverse effects, including thinning skin, spider veins, hypopigmentation, as well as potentially, topical steroid withdrawal (TSW).[2]

"Topical steroids are one of our most effective treatments for AD and, when used appropriately, are safe and cost effective," said Dr. Kathryn Schwarzenberger, dermatologist and professor of dermatology at Oregon Health & Science University. "We prescribe topical steroids when good skin care and regular use of moisturizers have failed to control AD symptoms."

According to Dr. Amy Paller, dermatologist and chair of the department of dermatology at Northwestern University, "It is safe to use a strong topical steroid for a few weeks to get AD symptoms under control in an affected area, and then go down to a lower strength steroid or back to moisturizing. It is more long-term use of steroids that can be problematic because it can thin the skin."

Sometimes healthcare providers may prescribe topical steroids to help prevent AD symptom flares. For example, if there is one body area that continues to flare repeatedly, a provider may recommend using moderate or mild steroids for longer periods of time to keep that area in check.

"Proactive management with topical steroids can involve keeping small areas that are mostly clear in good shape," explained Dr. Paller. She advises her AD patients to "hit it hard [with topical steroids] once or twice a day, get it under control, then get it down to two to three times a week. But continue using it in a small spot, even when it looks good, if you have a spot that flares. This can be confusing to patients." She recommends that patients confirm with their healthcare provider how long they should keep using the steroid to avoid long-term issues like skin thinning.

There are potential side effects to topical steroids, but Dr. Schwarzenberger said, "We can mitigate the risk of these happening by limiting the time we use steroids. Steroids work so well to decrease itching and allow the skin to heal. Using steroids regularly for a short period of time can often get the skin under control quickly and allow us to move to maintenance, which might involve using steroids from time to time with breaks in between or use of other nonsteroidal medications."

Confusing instructions for topical steroid use

While topical steroids can be an effective treatment for AD, oftentimes the instructions for use can be confusing or really nuanced once you leave the doctor's office. One of the problems is that there are no standardized topical steroid guidelines for AD patients to follow — or the guidelines are lacking, confusing or even contradictory.[3]

"There are not good guidelines to help patients with steroid use and patients don't always understand how to use them," said Dr. Steven Feldman, dermatologist and skin pathologist at Wake Forrest University in North Carolina.

This information gap can have impacts on AD care because when patients don't know how to use a medicine, the likelihood of the medicine being used incorrectly goes up. "One of the biggest issues for AD patients using topical steroids is underuse," Dr. Feldman said. This even includes simply not picking up the prescription in the first place. Another issue he mentioned is not using it often enough or for long enough to get symptoms controlled.

"Patients really lose out on the ability to get their disease under control when they don't use enough medicine, and sometimes move to systemic medications because the steroids don't seem to work," Dr. Feldman said. Underuse of topical steroids can prolong the time over which steroids need to be used because the symptoms are not being controlled.[4]

There is also not a common understanding about the use of higher vs. lower strength steroids, and when to switch between strengths or go back to a normal daily skincare regimen of bathing and moisturizing only.[3]

Currently, there are seven recognized levels of steroid potencies available.[5] However, basically no steroids include the potency levels on the tubes or packaging.[5] As a result, many patients and caregivers are not familiar with the differences in potency between steroids and why one potency should be used over another for a particular area of the body or for a particular duration, which depends on the circumstances and severity of symptoms.

In a 2024 UK study, 95% of survey respondents wanted topical steroids to be clearly labeled with potency and said that this would help them use steroids more appropriately.[5] One study showed that using a labeling system of green for mild, yellow for moderate and red for potent steroids helped increase willingness of parents to use steroid treatment for children.[6] It's possible that potency labels on topical steroid products might help patients know how to use their medications better.

A lack of universal guidelines for topical steroids

While individual topical steroid instructions can be confusing for AD patients, another issue is that the medical field doesn't have clear-cut guidelines for healthcare providers either.[3] There isn't consensus around several aspects of topical steroid use for AD, including application amounts, potency, frequency and duration of use.[7] There are also many options related to topical steroids, with approximately 30 currently available by prescription in different formulations including cream, lotion, ointment and foam.[7]

For example:

- Some guidelines recommend starting with a short burst of high potency steroids while others recommend the lowest potency for a longer amount of time.[3]
- Some guidelines recommend tailoring potency to the severity of symptoms, meaning low strength for mild, mid-strength for moderate and high strength for severe symptoms.[3]

- Many guidelines indicate that considerations for recommended potency of steroids should include location of the affected body site. For example, less potent steroids should be prescribed for face, neck, genitalia and skin folds like the groin, while strong steroids should be prescribed for areas of thicker skin.[2,3]
- Guidelines are split on what to recommend when symptoms are more controlled, with 11 guidelines suggesting reducing frequency of topical steroid application and 11 suggesting reducing the steroid potency.[3]

The majority of guidelines suggest using topical steroids once or twice daily, but there is no clear evidence that twice daily is more effective than once daily.[8] This variability in recommendations allows flexibility in the use of topical steroids to address how AD symptoms vary over time for a single patient or are not comparable between patients. Yet the absence of specific guidance makes it important for healthcare providers to align with patients on individual treatment plans for usage in the short- and long-term as AD symptoms improve or worsen.

In terms of topical steroid application, the majority of guidelines recommend using a measurement called the "fingertip unit" (FTU) to guide how much steroid to apply (**see figure 1**).[3] Total body treatment for a 3-month old infant can be as little as 8-10 FTUs while treating the entire body surface area of a 12-year old child might require 40+ FTUs for each treatment.[9]

"Sometimes a lot of skin needs to be covered with steroids, like the entire body," said Dr. Paller. "Prescriptions recommend using topical steroids twice a day, sometimes for weeks, which would require pounds of steroids since a 30-gram tube of steroids will barely cover an entire adult body one time," she explained. "Physicians often also instruct patients to 'use a thin layer,' which is not very descriptive. Not having enough or not using enough topical steroid can contribute to their underuse."

The quantity of steroid can be confusing, especially when a patient doesn't feel like they have enough product to use. "For larger body surface areas that require treatment, you can try asking your provider to prescribe a larger quantity and then ask your pharmacy to give you one large container rather than several small containers," suggested Dr. Vivian Shi, professor of dermatology and director of clinical trials at the University of Washington in Seattle.

To help patients understand how much steroid to use, Dr. Schwarzenberger said she often pulls out a tube of Vaseline and demonstrates on her own skin how she wants them to apply topical medications. "This often has to be tailored for each individual, depending upon how severe their symptoms are at the time," she said. "Figuring out the right dose of a topical medication is not as easy as taking a pill, and patients are often surprised by how much medication I want them to use. So many patients miss out on the benefits of steroids by not using enough."

The pharmacy experience can also lead to confusion on how to use topical steroids for AD. A survey of pharmacists in eight countries

Figure 1: One fingertip unit or FTU is a unit of measuring how much steroid to put on a given body part.

found that while patient questions regarding topical steroid use are common, over 40% of pharmacist recommendations regarding topical steroid use contradicted the current guidelines for standard of care.[10] Another study in Japan showed that out of 300 pharmacists surveyed, only 36% described the FTU to patients, 52% used another unit of measure to describe how much steroid to use, and 39% instructed patients to use a thin layer. Many pharmacists in that study had not read AD guidelines for steroid use, but once they did read them, they changed their instructions to appropriate recommendations.[11]

Pharmacists themselves can have concerns about steroid use and may pass these concerns to patients or caregivers, leading to undertreatment or lack of adherence to the instructions given by the healthcare provider.[12] It is very important that pharmacists are knowledgeable about proper use of topical steroids, and that the message given by the healthcare provider is the same message that patients receive when they pick up the medication at the pharmacy.

Current ways doctors try to educate on topical steroid use

In addition to demonstrating the quantity of steroid to apply to the skin, many healthcare providers have created resources such as action plans to help their patients navigate their AD treatment regimens. Unfortunately, these tools vary by provider and aren't universal tools.[13]

Dr. Paller provides patients with instructional handouts when she first prescribes topical steroids. "I talk to my patients about what to look for in the first two weeks after starting [topical steroid] treatment, and then the next two weeks, etc.," she said. She also schedules follow-up appointments every couple of months with phone or video visits in between.

Patient and provider follow-up is an important way to make sure topical steroids are being used correctly. When Dr. Feldman puts a patient on a new prescription for steroids, he gives them his cell phone number. He asks the patient to call him in a few days to talk about how they are doing with the medication. "They can tell me exactly how their skin is responding, and I can answer their questions," he said.

Trust between the provider and patient is also important, especially when it comes to the topic of using topical steroids, where many patients and caregivers are afraid of the potential side effects. For

example, when caregivers express fear about starting steroids, Dr. Paller tries to have a long talk with them. "I remind them how much a child is suffering without treatments," she said. "My decades of experience practicing dermatological medicine helps patients trust and listen to me. As healthcare providers, we need to be straightforward and explain the benefits as well as the risks of topical steroids — or any treatment."

> *"As healthcare providers, we need to be straightforward and explain the benefits as well as the risks of topical steroids — or any treatment."*
>
> **~ Dr. Amy Paller**

New tools and resources to improve patient education

Patients and caregivers for patients with AD are requesting better educational efforts to help them understand the risks, benefits and principles for using topical steroids. In particular, parents want accessible educational information in various formats: verbal, electronic, printed brochures and education sessions offered by healthcare providers.[6]

One group in Thailand is currently working to develop educational videos to help inform people about the benefits and risks of topical steroids.[14] They assessed the beliefs and level of worry or fear in 150 caregivers of children with AD before and after showing the educational videos. Not only did the caregivers' worry and concern reduce after seeing the educational videos, they also expressed less fear of using steroids on sensitive body parts like eyelids.[14] They were also willing to use more steroid at first to get the disease under control, and because of this, the patients experienced decreased symptoms and were able to go off the steroids sooner.[14]

Some researchers are working to develop tools to help solve some of the lack of clarity around effective steroid use. For example, new tools are being tested to help physicians calculate how much body surface area is covered with AD lesions so they can prescribe enough topical steroids for each patient to use.[15] The Cutaneous Inflammatory Disease Extent Score is a picture-based tool that allows physicians and patients to circle all the different body areas being impacted by AD.[15] A digital tool is also being developed to allow physicians to draw a map of affected body areas to help them calculate how much steroid to prescribe. Tools like these may help bring more clarity to how much steroid should be used, but more testing on the effectiveness of these visual tools is still needed.[15]

Dr. Feldman would like to see more development of apps or tracking systems to help with topical steroids. For example, apps that could be used to help remind patients that it is time to use their steroids, or help patients know they used enough medication with each application. In the future, maybe an app could give patients an idea of how much of their tube of steroids should be used at various time intervals.

Currently, there are a few eczema apps available to help patients track their symptoms and communicate back to their healthcare providers between visits. For example, EczemaWise, an app by the National Eczema Association, allows you to track your AD treatments and set treatment reminders, alongside documenting AD symptoms, triggers and more. Apps like these are one way to help improve communication between patients and providers.

Key takeaways:

- Topical steroids have been used for over 60 years to reduce inflammation to help AD symptoms heal.
- It's important for patients to pay attention to the amount, frequency, potency and duration of steroid use in the first few weeks and to confirm medication instructions with their provider. The goal is to eventually reduce steroid strength and/or frequency.
- Talk to your healthcare provider and ask questions until you understand how much steroid to use, how long to use it for and when to stop or switch to a different treatment.
- There are no universal medical guidelines on how to use topical steroids for AD.
- Better instructions, guidelines and apps for how to use topical steroids should be developed to help patients utilize them correctly.

1. Eichenfield LF, Tom WL, Berger TG, et al. Guidelines of care for the management of atopic dermatitis: section 2. Management and treatment of atopic dermatitis with topical therapies. *J Am Acad Dermatol.* 2014;71(1):116-132. 2. Sidbury R, Alikhan A, Bercovitch L, et al. Guidelines of care for the management of atopic dermatitis in adults with topical therapies. *J Am Acad Dermatol.* 2023;89(1):e1-e20. 3. Van Halewijn KF, Lahnstein T, Bohnen AM, et al. Recommendations for emollients, bathing and topical corticosteroids for the treatment of atopic dermatitis: a systematic review of guidelines. *Eur J Dermatol.* 2022;32(1):113-123. 4. Jeziorkowska R, Sysa-Jedrzejowska A, Samochocki Z. Topical steroid therapy in atopic dermatitis in theory and practice. *Postepy Dermatol Alergol.* 2015;32(3):162-166. 5. Moss C, Haider Z, Proctor A. Do people with eczema and their carers understand topical steroid potency? Results of two surveys. *Clin Exp Dermatol.* 2024;49(3):267-270. 6. Wilson F, Harnik E, Gore C. A labelling system improves parental comfort and willingness to use topical corticosteroids for paediatric atopic dermatitis. *Skin Health Dis.* 2021;1(1):e11. 7. Stacey SK, McEleney M. Topical Corticosteroids: Choice and Application. *Am Fam Physician.* 2021;103(6):337-343. 8. Chiricozzi A, Comberiati P, D'Auria E, Zuccotti G, Peroni DG. Topical corticosteroids for pediatric atopic dermatitis: Thoughtful tips for practice. *Pharmacol Res.* 2020;158:104878. 9. Long CC, Mills CM, Finlay AY. A practical guide to topical therapy in children. *Br J Dermatol.* 1998;138(2):293-296. 10. Su JC, Murashkin N, Wollenberg A, et al. Pharmacist recommendations regarding topical steroid use may contradict the standard of care in atopic dermatitis: An international, cross-sectional study. *JAAD Int.* 2021;4:13-14. 11. Oishi N, Iwata H, Kobayashi N, Fujimoto K, Yamaura K. A survey on awareness of the "finger-tip unit" and medication guidance for the use of topical steroids among community pharmacists. *Drug Discov Ther.* 2019;13(3):128-132. 12. Koster ES, Philbert D, Wagelaar KR, Galle S, Bouvy ML. Optimizing pharmaceutical care for pediatric patients with dermatitis: perspectives of parents and pharmacy staff. *Int J Clin Pharm.* 2019;41(3):711-718. 13. Johnson JK, Loiselle AR, Butler L, Begolka WS. Action plans for atopic dermatitis: A survey of patient and caregiver attitudes. *JAAD Int.* 2023;12:184-185. 14. Sitthisan M, Wananukul S, Chatproedprai S, Tempark T, Chantawarangul K. Unveiling the potential: Enhancing caregiver knowledge through video education to address topical corticosteroid concerns in children with eczematous dermatitis. *Pediatr Dermatol.* 2024;41(2):221-228. 15. Speeckaert R, Hoorens I, Corthals S, et al. Comparison of methods to estimate the affected body surface area and the dosage of topical treatments in psoriasis and atopic dermatitis: the advantage of a picture-based tool. *J Eur Acad Dermatol Venereol.* 2019;33(9):1726-1732.

ASK THE ECZ-PERTS

A Guide to Eyelid Eczema

By Melissa Tanoko

The itching and inflammation of eczema can be aggravating at the best of times. When it affects the eyelids, it can be especially tough to deal with. Since eyelid skin is thin, sensitive and close to the eyes, symptoms may not only be magnified, but also more challenging to treat. The good news is that with a diagnosis and appropriate care, eyelid eczema can be controlled.

Types of eyelid eczema

Three types of eczema may occur on the eyelids: contact dermatitis, atopic dermatitis and seborrheic dermatitis.[1-3] Research shows that contact dermatitis is most prevalent, followed by atopic and seborrheic dermatitis.[1-4]

Contact dermatitis on the eyelids

Contact dermatitis occurs when the skin reacts to allergens or irritants in the environment. These can include airborne substances like animal dander,[2] personal care products such as cosmetics,[2-4] metals[2] or even topical medications.[2,4] Pinpointing the allergen or irritant causing your skin to react is the key to treating this condition.

Research shows allergic contact dermatitis is more common than irritant contact dermatitis on the eyelids.[1-3]

The best way to diagnose contact dermatitis is to see an allergist or dermatologist. This can also help you identify the irritant or allergen at the root of the problem. Once you know which substances are causing a reaction, you can take steps to minimize or avoid contact with them. If your contact dermatitis is caused by personal care products, stop using them or choose hypoallergenic versions.

Airborne allergens can be more difficult to avoid. Morgan Maier, a dermatology physician assistant at Seattle Children's Hospital in Washington, recommends washing your face or showering at the end of the day to minimize exposure to them.

"If it's a pollen allergy, I recommend trying to keep the allergen out of your house," said Maier. She advises patients with dust mite allergies to use mattress and pillow protectors.

Doctors may also recommend medication to control contact dermatitis, especially if the root cause has yet to be identified.

Atopic dermatitis on the eyelids

Atopic dermatitis is thought to be caused by a combination of genetic and environmental factors. Some common triggers are dry skin, irritants (e.g., laundry detergents or personal care products) and stress.

To treat atopic dermatitis on the eyelids, doctors may prescribe a medication. Keeping the skin moisturized and managing stress may also help prevent flares.

Seborrheic dermatitis on the eyelids

Seborrheic dermatitis can appear on the face, head, upper chest and back where there are oil-producing glands.

Like atopic dermatitis, seborrheic dermatitis is thought to be caused by genetic and environmental conditions. In some cases, it may be associated with an inflammatory reaction to a type of yeast (*Malassezia*) that grows naturally on the skin. Symptoms can be triggered by stress,[5] cleaning agents, hormonal changes, cold weather, specific medicines and other conditions.

"As of now, we don't have specific treatments for seborrheic dermatitis of the eyelids, and this can often present a challenge," said Dr. Zelma Chiesa Fuxench, a dermatologist at the Hospital of the University of Pennsylvania and assistant professor of dermatology at the University of Pennsylvania.

She also explained that seborrheic dermatitis can look similar to atopic dermatitis on the eyelids, making diagnosis difficult.

In terms of treatment, Dr. Chiesa Fuxench said medications are frequently prescribed off-label for seborrheic dermatitis. This means they have been approved for a different condition.

Medications for eyelid eczema

Due to the sensitivity and fragility of the eyelids, doctors must use extra caution when prescribing medications for eyelid eczema. The skin by your eyes is very thin. You also don't want to get medication in your eyes or cause damage to your eyes.

Dr. Chiesa Fuxench explained that prolonged use of mid- to high-potency topical steroids on the eyelids is associated with atrophying skin and developing cataracts or glaucoma. "It is preferable to avoid the use of topical steroids in this area," she said.

Luckily there are other options. Dr. Chiesa Fuxench suggests topical calcineurin, PDE4 and JAK inhibitors as alternatives to steroid treatments. She cautioned that some calcineurin and PDE4 inhibitors can sting when applied to flaring skin. She explained that ruxolitinib cream has "less risk of a burning or stinging sensation."

Applying medications to the eyelid area

Medicines should be applied with care to prevent them from irritating the eyes. Maier said to use a thin coat of ointment — a pea-sized amount or less. "If there's so much that it's goopy or there's a layer that you could remove with your finger, you're putting on too much," she said.

Maier tells patients to stop applying medical ointment one or two millimeters (the width of a cotton swab stick) from the lash line to ensure it doesn't get too close to the eyes. She also counsels them to avoid the area close to the tear ducts.

Maier recommends dabbing the medicine instead of rubbing it in, especially for parents applying it for their children. "Dabbing is more gentle for the eye," she said.

How to soothe an eyelid flare

In addition to your doctor's recommendations, there are other things you can do to manage itch and pain from an eyelid flare at home.

Maier recommends putting moisturizer in the fridge to cool and then dabbing it on the affected area. She also suggests laying a cold cloth compress filled with rice on the eyelids. Another option is to use a sock stuffed with rice and tied with a knot.

Eyelid eczema and moisturizers

Moisturizing can be a good way to prevent flares, but it's important to take special care when choosing and applying ointments or lotions to the eyelid area. Choosing products free of triggering ingredients is essential.

"I ask patients to look for keywords in the labeling or package that say 'fragrance and dye free' and 'dermatologist or ophthalmologist tested,'" said Dr. Chiesa Fuxench. "I also recommend patients look for the National Eczema Association's Seal of Acceptance™ as these products have been developed or intended primarily for use in people with sensitive skin, such as patients with eczema."

Maier recommends using an ointment, lotion or hypoallergenic eye cream twice daily.

Reach out for help

Above all, make sure you have a good healthcare provider in your corner. If you don't have a doctor who deals specifically with eczema, it's worth finding one in your area. And don't wait too long before seeking advice.

"I recommend that patients reach out to me as quickly as possible if they experience a flare or are not experiencing results with their currently prescribed topical medications," said Dr. Chiesa Fuxench. "This gives us an opportunity to act early on and quickly."

MEET THE ECZ-PERTS

Morgan Maier is a dermatology physician assistant at Seattle Children's Hospital in Washington.

Dr. Zelma Chiesa Fuxench is a dermatologist at the Hospital of the University of Pennsylvania and assistant professor of dermatology at the University of Pennsylvania.

1. Ayala F, Fabbrocini G, Bacchilega R, et al. Eyelid dermatitis: an evaluation of 447 patients. *Am J Contact Dermat.* 2003;14(2):69-74. 2. Guin JD. Eyelid dermatitis: experience in 203 cases. *J Am Acad Dermatol.* 2002;47(5):755-765. doi:10.1067/mjd.2002.122736. 3. Luz Fonacier, Mark Boguniewicz. Chapter 53: Contact Dermatitis. In: Leung DYM, Szefler SJ, Bonilla FA, Akdis CA, Sampson HA, eds. *Pediatric Allergy: Principles and Practice.* 3rd ed. Elsevier; 2016:467-481. https://www.sciencedirect.com/topics/immunology-and-microbiology/eyelid-dermatitis.
4. Landeck L, John SM, Geier J. Periorbital dermatitis in 4779 patients - patch test results during a 10-year period. *Contact Dermatitis.* 2014;70(4):205-212. doi:10.1111/cod.12157. 5. Misery L, Touboul S, Vinçot C, et al. Stress et dermatite séborrhéique [Stress and seborrheic dermatitis]. *Ann Dermatol Venereol.* 2007;134(11):833-837. doi:10.1016/s0151-9638(07)92826-4

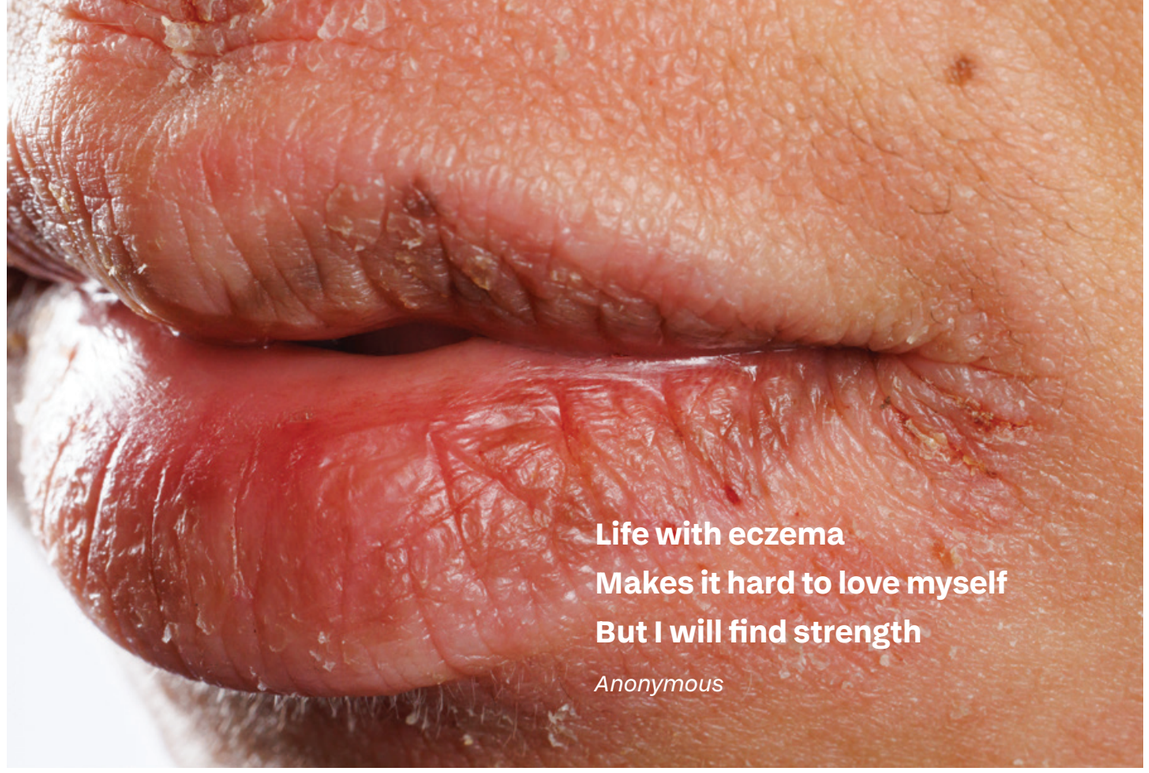
The Ecz-hibition

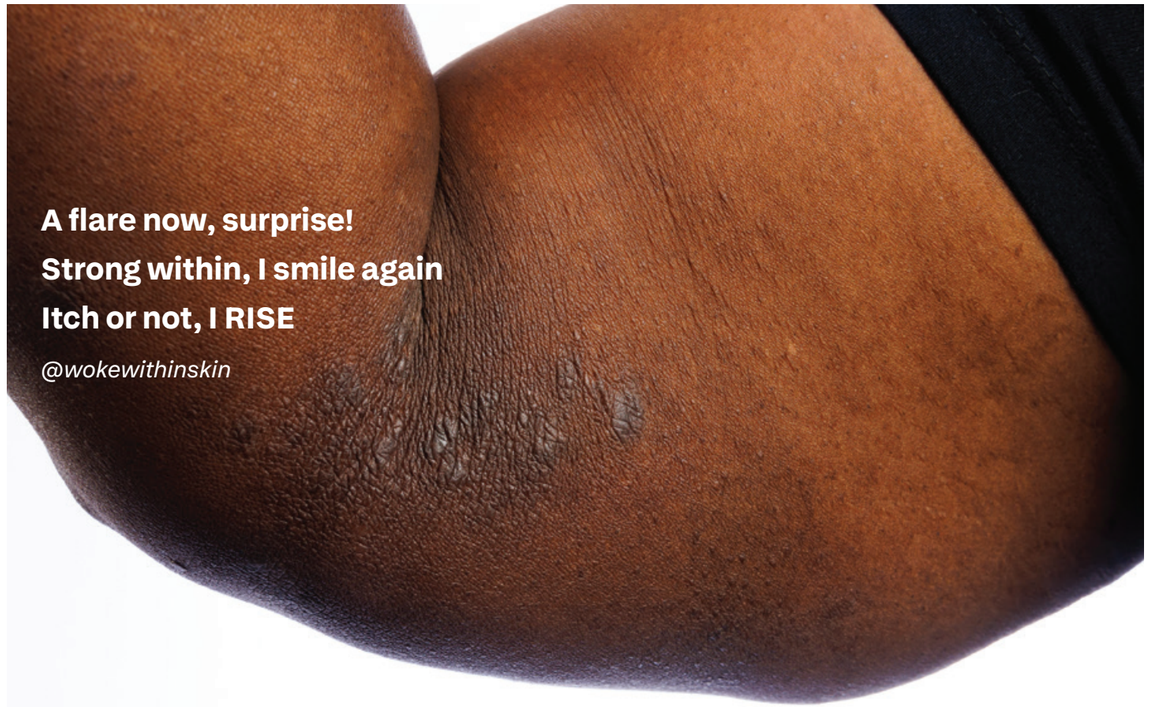
October is Eczema Awareness Month. More than 31 million people in the U.S. have eczema. For Eczema Awareness Month 2024, we are calling on our community to put their **#EczemaOnDisplay** and share their eczema experience.

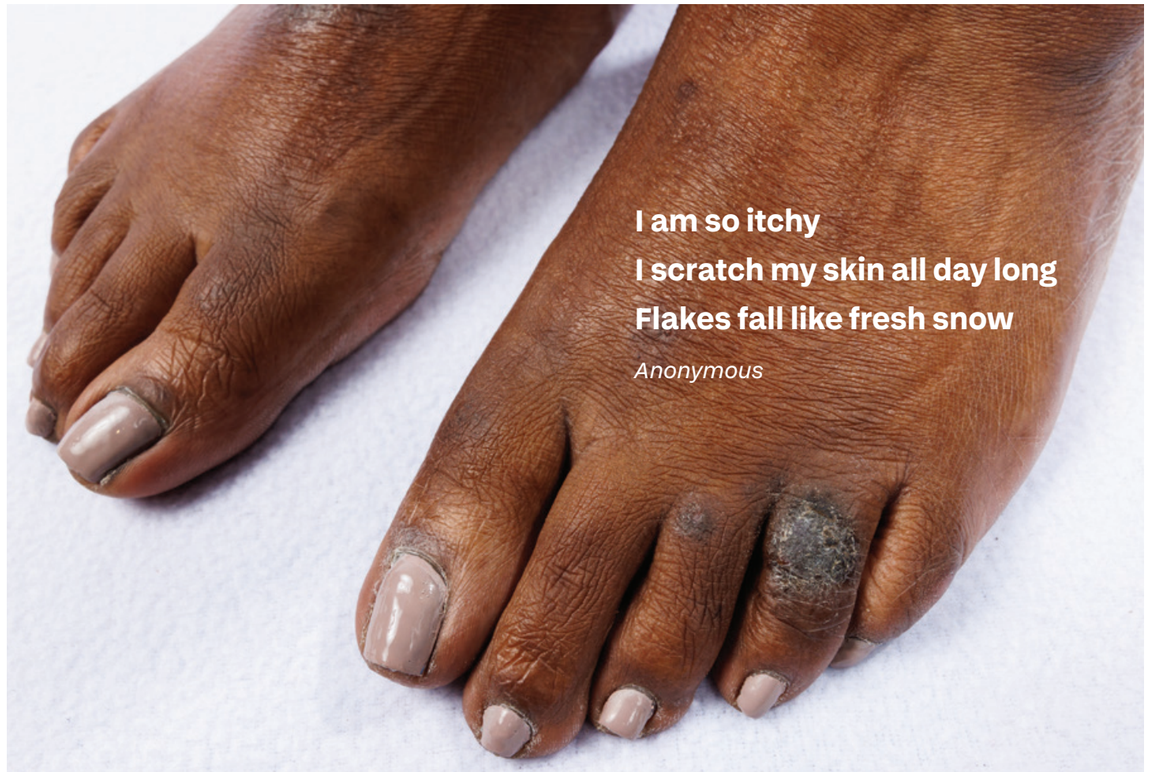
This year, we're hosting a social media-driven Ecz-hibition featuring real, up-close photos of eczema flares in our community from our Eczema Visual Guide, the largest online tool showcasing eczema across all skin tones.

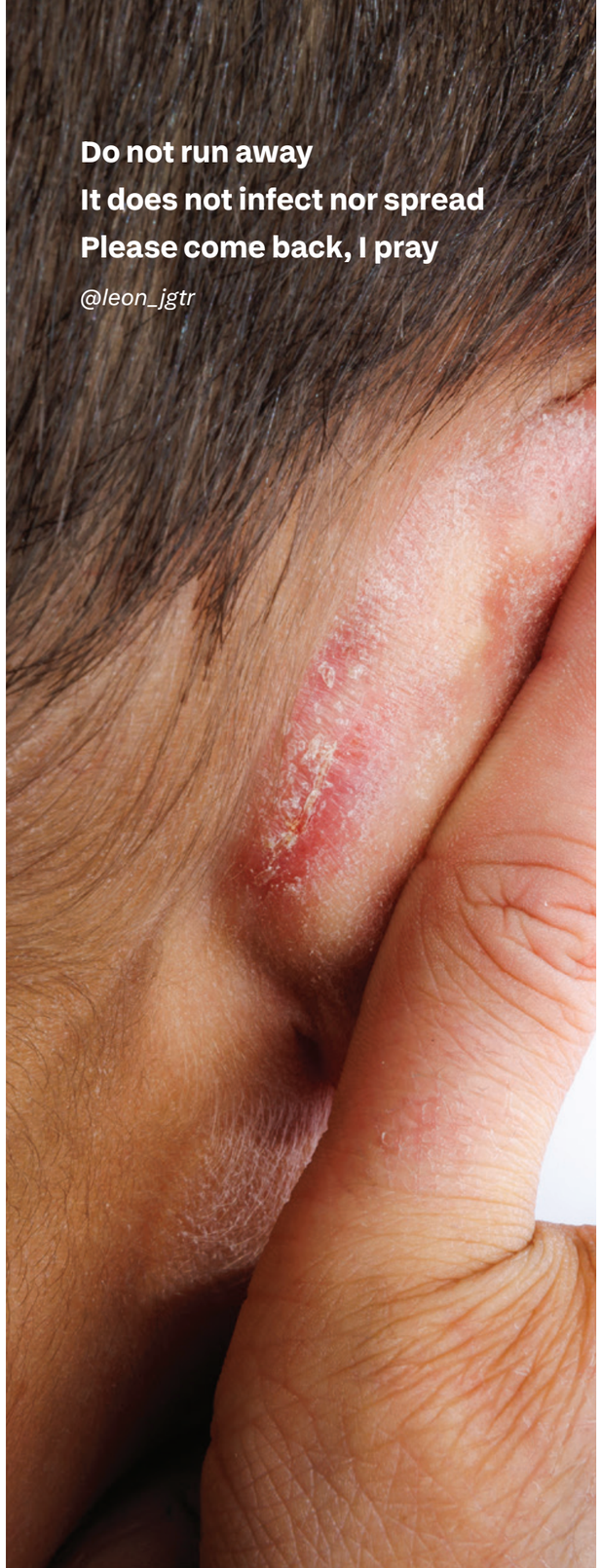
Each photo is paired with a poem from a community member reflecting on what it's like to live with eczema. Our hope is to showcase the range of eczema, from how it presents itself physically to the lasting emotional impact it leaves behind, in order to help others better understand the true eczema experience.

Not only are our words a powerful way to express ourselves, but also an outlet to help process what we're going through. By pairing clinical images of eczema with the raw words of our community, we hope to bridge the gap between eczema's appearance and the impact it has on those living with it. Our goal is to bring more awareness to the need to treat the experience as a whole.









Get involved

Join the conversation! Share photos of your eczema and haikus about your experience on social media to raise help awareness. Use **#EczemaOnDisplay** and tag **@NationalEczema**. Plus, learn more about Eczema Awareness Month at **EczemaMonth.org**

TRIGGERS

Common Metals That Trigger Eczema

By Erin Laviola

We are surrounded by metals in our everyday lives. There are hundreds of products and commonplace items with metal in them: everything from belts and jewelry to our phones and keys. Metals including nickel, chromium, cobalt chloride, copper and gold are common triggers for eczema, particularly contact dermatitis.

Contact dermatitis happens when the skin becomes irritated or inflamed after coming into contact with a substance that triggers an allergic reaction. The American Academy of Allergy Asthma & Immunology estimates up to 20% of people experience contact dermatitis.[1]

It's especially important for patients with atopic dermatitis (AD) to know whether they are sensitive to a specific metal. "If an allergic contact dermatitis to metal occurs on a person with AD, it can worsen skin inflammation and itch symptoms," said Dr. Vivian Shi, professor of dermatology and director of clinical trials at the University of Washington in Seattle.

Which everyday items have metal in them?

Here's a look at where these metals are found in everyday items.

Ni Nickel

Nickel is the most prevalent culprit, according to the American Academy of Dermatology (AAD), which estimates nearly 1 in 5 people in North America are allergic to it.[2] Nickel is found in accessories like necklaces, bracelets and belts; in clothing fasteners like zippers, buttons and bra hooks; and in electronics like mobile phones and laptops. It is also used in appliances like toasters, grills and irons; in kitchenware like pots, pans and silverware; and in kitchen sinks.[3]

"Nickel can also be found in dental devices like braces and dentures, which can cause oral lesions," said Dr. Shi. It can end up in food including green vegetables, legumes, chocolate and whole wheat products, as well as in drinks like red wine, beer and tea.[4]

Cr Chromium

"Chromium is typically found in paints, welding materials and pottery," said Dr. Shi. It is also present in many foods including grains, meats, fruits, vegetables and spices, although the amount can vary widely based on the manufacturing process or the amount of chromium in the soil or local water supply.[5] Multivitamin and mineral supplements may also contain chromium.[5]

Co Cobalt chloride

Items such as spray paints, wood stains, light brown hair dyes and makeup may contain cobalt chloride.[6] "Cobalt metal is the pigment used in blue tattoo ink, resulting in allergic contact dermatitis cases from new tattoos," said Dr. Shi.

Cobalt chloride is also used in bricks and cement and can be found in metal tools, orthopedic and dental implants, and items like magnets, keys and costume jewelry.[6]

Cu Copper

According to the U.S. Mint, pennies are coated with copper.[7] This metal is present in sterling silver and gold jewelry.[8] Electrical wires commonly contain copper, as well as the plumbing in your home.[8] Copper may also be present in dental appliances like crowns, dentures and veneers, and in intrauterine contraceptive devices (IUDs).[8]

Au Gold

In addition to its popularity in jewelry, gold has many other uses. Cosmetic products designed to reduce the appearance of wrinkles and brighten skin may contain gold nanomaterials.[9] Gold may be present in dental fillings and medical devices like coronary stents.[10] Gold salts are also used as a treatment for arthritis.[11]

What are symptoms of a metal allergy?

The exact trigger for contact dermatitis is not always obvious because the reaction isn't typically immediate. "In allergic contact dermatitis, the reaction can often take two to three days after the exposure," said Dr. Benjamin Ungar, dermatologist and director of the Alopecia Center of Excellence and director of the Rosacea & Seborrheic Dermatitis Clinic at Mount Sinai in New York.

Symptoms include itchy, red skin and rashes, swelling or bumps and blisters. The skin may become dry and scaly or feel like it's burning.

Dr. Shi said her patients often ask about metals triggering full-body reactions. "This is called systemic contact dermatitis and is usually a result of eating foods that contain traces of metal allergens, most commonly nickel," she explained.

"Rash from systemic contact dermatitis can appear in places previously exposed to the allergen or as a widespread rash," she said. "It should resolve with the removal of the allergen."

Why does metal exposure cause contact dermatitis for some people?

Researchers point to dermal absorption as a reason why metals can be troublesome for so many people. As described by the Centers for Disease Control and Prevention, "dermal absorption happens when a chemical goes through the skin and travels into the body."[12]

Metals like nickel may be corroded during direct and prolonged contact with skin, especially sweaty skin.[13] When that happens, the metal's particles may enter the skin, react with proteins[7] and initiate an allergic response.[14] While nickel is the most common trigger, chromium, copper, cobalt and gold can also elicit the same effect.[15,16,17]

"In people with allergic contact dermatitis, there are immune cells that recognize a specific chemical, such as a metal, and react to exposure of that chemical onto the skin," Dr. Ungar said.

"Not all people with atopic dermatitis will necessarily experience aggravation with exposure to metals," he added. "This is still an area of study, but overall, it is likely that people with AD, and potentially seborrheic dermatitis, may be at greater risk of experiencing contact dermatitis given that their skin barrier can be disrupted by their disease, which may contribute to the development of contact dermatitis."

How do you prevent flares from metals?

"It's not advantageous to avoid all common metals without known allergic reactions," said Dr. Shi. That's why she and Dr. Ungar both recommend patch testing to verify which metals prompt an eczema flare in a patient. Patch testing involves placing an allergen on the patient's skin and observing whether it triggers an allergic reaction within two to seven days.

"Once you know a certain metal triggers symptoms, the best prevention is to avoid the metal as much as possible," Dr. Ungar said.

> "Once you know a certain metal triggers symptoms, the best prevention is to avoid the metal as much as possible."
>
> **~ Dr. Benjamin Ungar**

The AAD recommends replacing metal pieces on your clothing, like buttons and zippers, with plastic-coated alternatives. Instead of costume jewelry, wear hypoallergenic pieces made from materials like sterling silver and titanium.[18] Dr. Shi also said she advises her patients to "always read product labels and if it's not available, you can reach out to the manufacturer for more information."

1. Contact Dermatitis Overview. Aaaai.org. Updated December 11, 2023. Accessed April 30, 2024. https://www.aaaai.org/tools-for-the-public/conditions-library/allergies/contact-dermatitis-overview. 2. Nickel Allergy: How to Avoid Exposure and Reduce Symptoms. Aad.org. Accessed April 30, 2024. https://www.aad.org/public/diseases/eczema/insider/nickel-allergy. 3. Consumer products: the role of nickel. Nickelinstitute.org. Accessed May 8, 2024. https://nickelinstitute.org/en/about-nickel-and-its-applications/consumer-products/. 4. Sharma AD. Low Nickel Diet in Dermatology. *Indian J Dermatol*. 2013; 58(3): 240. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3667300/. 5. Chromium. Ods.od.nih.gov. Updated June 2, 2022. Accessed May 8, 2024. https://ods.od.nih.gov/factsheets/Chromium-HealthProfessional/. 6. Cobalt dichloride. Smartpractice.com. Accessed May 8, 2024. https://www.smartpractice.com/dermatologyallergy/pdfs/allergens/Cobalt-Dichloride.pdf. 7. Fun Facts related to the Penny. Usmint.gov. Accessed May 8, 2024. https://www.usmint.gov/learn/kids/coins/fun-facts/category/penny. 8. Fage SW, Faurschou A, Thyssen JP. Copper hypersensitivity. *Contact Dermatitis*. 2014. https://onlinelibrary.wiley.com/doi/10.1111/cod.12273. 9. Liu C, Wang Y, Zhang G, Pang X, Yan J, Wu X, Qiu Y, Wang P, Huang H, Wang X, Zhang H. Dermal Toxicity Influence of Gold Nanomaterials after Embedment in Cosmetics. Toxics. 2022 Jun; 10(6): 276. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9228324/. 10. Hopkins K, Antelmi A, Dahlin J, Olsson K, Svedman C, Astrand J, Bruze M. Increased Rates of Gold and Acrylate Allergy in Individuals with Fibromyalgia tested with an Extended Dental Patch Test Series. *Acta Derm Venereol*. 2023; 103: 22336. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10726376/. 11. Gold Treatment. Orthop.washington.edu. Accessed May 8, 2024. https://orthop.washington.edu/patient-care/articles/arthritis/gold-treatment.html. 12. Skin Exposures and Effects. Cdc.gov. Updated January 18, 2022. Accessed April 30, 2024. https://www.cdc.gov/niosh/topics/skin/default.html. 13. Genchi G, Carocci A. Lauria G, Sinicropi MS, Catalano A. Nickel: Human Health and Environmental Toxicology. *Int J Environ Res Public Health*. 2020; 17(3): 679. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7037090/. 14. Yoshihisa Y, Shimizu T. Metal Allergy and Systemic Contact Dermatitis: An Overview. *Dermatol Res Pract*. 2012; 749561. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3369403/. 15. What Are the Physiologic Effects of Chromium Exposure? Atsdr.cdc.gov. Updated May 24, 2023. Accessed May 1, 2024. https://www.atsdr.cdc.gov/csem/chromium/physiologic_effects_of_chromium_exposure.html. 16. Hostynek JJ, Dreher F, Maibach H. Human skin penetration of a copper tripeptide in vitro as a function of skin layer. *Inflamm Res*. 2011; 60(1): 79–86. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3016279/. 17. Report on Carcinogens Monograph on Cobalt and Cobalt Compounds That Release Cobalt Ions In Vivo: RoC Monograph 06 [Internet]. ncbi.nlm.nih.gov/. Updated April 2016. Accessed May 1, 2024. https://www.ncbi.nlm.nih.gov/books/NBK580284/. 18. Markel K, Silverberg N, Pelletier JL, Watsky KL, Jacob SE. Art of Prevention: A piercing article about nickel. *Int J Womens Dermatol*. 2020. 6(3): 203–205. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7330428/

GET THE FACTS

Can Squalane Help Eczema?

By Celia Shatzman

Squalane is a popular ingredient that's been popping up in many skincare products. But is it helpful — and safe — for people with eczema? We went straight to the experts, in this case two dermatologists, to find out.

What is squalane?

Squalane is a hydrogenated version of squalene, a naturally occurring lipid found in human sebum, explained Dr. Marisa Garshick, a board-certified dermatologist at MDCS Dermatology: Medical Dermatology and Cosmetic Surgery in New York City and New Jersey. "It is used in skincare products for its moisturizing and antioxidant properties, making it stable and effective in various formulations," she said.

That might have you wondering what the difference is between squalane and squalene. "Squalene is naturally produced by sebaceous glands and is part of our skin's sebum, helping to keep the skin moisturized," Dr. Garshick said. "Squalane, on the other hand, is a hydrogenated form of squalene, making it more stable and suitable for use in skincare products without oxidizing when exposed to air."

How does squalane work on your skin?

Because squalane is a lipid and mimics squalene, it hydrates the skin and reinforces the integrity of the skin that will prevent water loss, explained Dr. Paul Yamauchi, medical director at the Dermatology Institute & Skin Care Center in Santa Monica, CA, and clinical assistant professor in dermatology at UCLA in Los Angeles, CA. "It is also non-comedogenic, meaning that squalane does not clog the pores and does not cause you to break out with acne," he said.

Dr. Garshick added that squalane works by mimicking the body's natural sebum, providing lightweight, nongreasy hydration. "It helps to moisturize, soften and smooth the skin," she said. "It also offers antioxidant benefits, protecting the skin from free radical damage, and can help reduce the appearance of fine lines and wrinkles. It helps to maintain the skin's barrier and prevent dryness without causing irritation."

Is squalane a good option for people with eczema?

Thanks to its moisturizing and soothing properties, squalane is generally a good option for people with eczema. "Squalane can be beneficial for various types of eczema, including atopic dermatitis and seborrheic dermatitis," Dr. Garshick said. "Its hydrating properties help manage dryness and support the skin barrier, which is essential in these conditions."

How do you know if squalane is good for your eczema?

Trial and error is typically the best way to see if squalane helps your eczema. "This would be a matter of trying products that contain squalane to see if it is compatible with your skin," Dr. Yamauchi said. "One can start with a light formula containing squalane and use heavier, thicker formulas if necessary, depending on how dry your skin is."

Starting with a patch test is always a good idea, because as with any skincare product, Dr. Garshick cautions that there is a small risk of irritation or allergic reaction. You can consult with a dermatologist if you have concerns, as well as to ask for product suggestions.

There are a few things to look out for when experimenting with squalane for eczema, specifically the skincare product's formula as a whole. "There are no known risks with squalane for people with eczema since it is derived from squalene, which is naturally produced in our skin," Dr. Yamauchi said. "However, be sure that the product you use containing squalane does not contain other ingredients you could be sensitive or allergic to, such as parabens."

How should you add squalane to your skincare routine?

If you want to add squalane into your skincare routine, you can use it in either your morning or evening routine. "It may also be found as an ingredient in various products like cleansers, moisturizers and serums or oils," Dr. Garshick said. "If in a serum, it is best to apply after cleansing and before moisturizing, or mix a few drops with your moisturizer for enhanced hydration. Follow the general rule of applying products from thinnest to thickest consistency."

Are there any other things to note about squalane and eczema?

Ultimately, squalane is typically safe for eczema and may help soothe your skin. "Squalane is a versatile and effective skincare ingredient suitable for most skin types, including sensitive and eczema-prone skin," Dr. Garshick said. "Always choose plant-derived squalane to ensure it is cruelty-free and environmentally friendly."

UNDER THE MICROSCOPE

High-Sodium Diets and Eczema

National Eczema Association-supported researcher aims to discover whether dietary sodium triggers eczema outbreaks.

By Hope Hamashige

The National Eczema Association (NEA) is the largest private nonprofit funder of research for adult and pediatric eczema, investing more than $4 million to date. Ever wonder what exactly our research grant recipients are working on? Under the Microscope is where we provide an inside look at research from one of our latest grant recipients, including what they are studying and its potential impact on the eczema community.

Is the salt in your food causing your eczema?

It is very clear that eating too much salt can send blood pressure soaring and damage the heart or the kidneys. But can too much salt also cause outbreaks of eczema for some people?

Although salt is generally not mentioned when dermatologists rattle off common eczema triggers, Dr. Katrina Abuabara, associate professor of dermatology and epidemiology at University of California, San Francisco, noted that there is some evidence that a high-sodium diet could be an overlooked cause.

Dr. Abuabara explained that one very small study of only eight people found that people with eczema have as much as 30 times the amount of salt in their eczema lesions than people without eczema. But whether there is a connection between salt in the diet, which is stored in the skin, and eczema has not been studied in a rigorous way using large and robust data.

Dr. Katrina Abuabara, recipient of an Eczema Champion Research Grant from NEA.

That was until the National Eczema Association funded Dr. Abuabara's research on eczema and high-sodium diets through an Eczema Champion Research Grant in 2021.

"I don't think it will explain every case of atopic dermatitis, which is a very heterogeneous disease, but it might explain some cases, particularly among people who are sodium sensitive," said Dr. Abuabara. "It may be that eating a low-sodium diet could be a fairly simple intervention for some people with eczema."

A rigorous examination

To evaluate the connection between high-sodium intake and eczema outbreaks, Dr. Abuabara is using data collected through the UK Biobank, a population-based cohort that includes over 500,000 participants in the United Kingdom. The biobank contains detailed records of sodium intake and through linked electronic health records, Dr. Abuabara can identify those people with an eczema diagnosis and determine the severity of the case.

Dr. Abuabara's preliminary conclusions, which will likely be published in 2024, show that people who consume high-sodium diets have a higher risk of developing eczema. The research also showed that people with the highest-sodium diets had a higher risk of severe eczema.

She is also evaluating whether the connection between salt and eczema is more prevalent among certain groups of people, including women and older adults, who are known to have higher sensitivity to excess sodium intake.

That same database also contains genetic information, which Dr. Abuabara plans to use in the next phase of her research, also funded by NEA in 2023. In the next phase, which she expects to begin in late 2024, she will look at genetic information as well as several lifestyle factors, including eating a high-sodium diet, to try to understand why and how several studies have found a connection between eczema and cardiovascular problems, such as hypertension and coronary artery disease.

Triggers remain an important research question

Even as new treatments for eczema have come to market in recent years, Dr. Abuabara said it remains important to understand the triggers that set off a flare of the disease in the first place. She noted that the new medications do not prevent outbreaks, only the resulting inflammation, and because the disease is so heterogeneous, the newer treatments do not work on every person.

Rigorous research into the lifestyle and environmental factors that trigger the disease can lead to relatively straightforward changes, resulting in positive outcomes for many people.

"One of the great challenges for most people with eczema is not having solid recommendations about keeping their triggers at bay," said Dr. Abuabara. "If we discover that a high-sodium diet can lead to outbreaks, for example, we can give patients a cost-effective, low-risk lifestyle modification that may help them prevent future outbreaks."

NEA grants and their impact

NEA is dedicated to increasing the number of scientists, research projects and research dollars devoted to eczema, in pursuit of better therapies, better care, better outcomes — and one day, potentially, a cure. Scan the code to learn more about our eczema research grants, their impact and how you can get involved.

FOR THE PARENTS

Sleep Medicines for Children with Atopic Dermatitis: What Parents Should Know

By Erlina Vasconcellos

Sleep is supposed to offer rest and rejuvenation, but for children with atopic dermatitis (AD) and their families, it often brings little relief. Up to 87% of children with AD between the ages of 2 and 10 experience sleep disruptions.[1]

Much of this has to do with children's shorter sleep cycles, which last about one hour compared to 90 minutes to two hours for adults. At the end of each sleep cycle, we wake briefly and typically go back to sleep, often without being aware of it. But for people with AD, this waking period can be when they feel the itch kick in and begin scratching, making it difficult for them to go back to sleep.

This nightly cycle of itching and waking can leave both kids and parents exhausted and in search of solutions, including sleep medicines.

A family's journey

For Stephanie Mejia, from New York, the struggle began last winter when her then 3-year-old daughter, Luna, who has AD, began intense scratching after falling asleep each night. "Winter seems to be a trigger because she doesn't really itch as much in warmer weather," Mejia said.

The itching became so severe and frequent that Luna could no longer sleep alone in her room and had to share Mejia's bed.

"When she'd start scratching, I would wake up immediately, grab her arms to stop her, and then moisturize her skin. And then I'd be up for a while," she said.

Even when Luna wasn't scratching, Mejia would wake up to check on her. Naturally, both were exhausted. Luna was often cranky and would fall asleep frequently at preschool. Concerned, Mejia reached out to their pediatrician, who suggested trying Benadryl.

"I wasn't comfortable with [the idea of using sleep medicines]," Mejia said. "There were just so many questions. How would they affect a child?"

They then met with an allergist who recommended measures to reduce itching triggers, such as removing stuffed animals that can trap dust from the bedroom, switching laundry detergents and using cotton fabrics. Stephanie also switched moisturizers for Luna, moving from Aquaphor, which contains lanolin (a potential allergen for some kids), to Vanicream.

While these measures have provided relief, Mejia is concerned that the nightly itching and sleeplessness might return, especially in the winter. As Luna, now 4, grows older, Mejia is becoming more receptive to the idea of using sleep medicines, but still has many questions and concerns.

Mejia's worries about sleep medicines are common among parents managing similar challenges. To provide more clarity and support for parents, we reached out to Dr. Rupam Brar, pediatric allergist and immunologist at NYU Langone Health and assistant professor at NYU Grossman School of Medicine (and Luna's allergist). We also talked to Dr. Jeff Yu, a board-certified dermatologist and fellowship-trained pediatric dermatologist at Massachusetts General Hospital. Here's what they had to say.

What are the general guidelines for sleep medicines for children?

Dr. Jeff Yu (JY): They should be used cautiously and only when absolutely necessary. And they shouldn't be used nightly for extended periods of time.

That said, there are several medications that can help improve sleep in children with AD. The most commonly prescribed ones are first-generation antihistamines, which can make children drowsy. Diphenhydramine (Benadryl) and hydroxyzine (Atarax) are often used, and some parents have seen improvements in their children's sleep with these.

Also, melatonin has been studied in a randomized controlled trial in children, which showed that 3 milligrams a day led to improved sleep onset and a decrease in eczema severity.[2]

Dr. Rupam Brar (RB): Sleep medicines should be used under the guidance of a physician. Be aware that some sleep medicines, like first-generation antihistamines, can sometimes make children more hyperactive instead of sleepy. Also, these medicines might not effectively relieve itching because itching can be caused by factors beyond histamine and can be quite complex.

Melatonin is a hormone naturally produced by our bodies, but taking melatonin gummies regularly might disrupt a child's natural sleep-wake cycle and affect their own melatonin production.

> "Melatonin is a hormone naturally produced by our bodies, but taking melatonin gummies regularly might disrupt a child's natural sleep-wake cycle and affect their own melatonin production."
>
> **~ Dr. Rupam Brar**

Are there any age-specific recommendations parents should know?

JY: I would check with your pediatrician, but antihistamines are usually recommended for children over 2 years of age.

For melatonin, the general guideline is to use it in children over 5 years of age. However, the clinical trial cited earlier used it safely in children over 1. While there is likely a wide range of safety, it is best to discuss this with your child's pediatrician or pediatric dermatologist. In the trial, no side effects were noted for children with AD.

RB: Melatonin should not be given to children under 3, as their brains are still developing. There's limited data on its use for AD, and while it may help with falling asleep, it is unlikely to address nighttime awakenings.

What are the potential risks and side effects of sleep medicines?

JY: The most common side effect of sleep medicines is drowsiness and sleepiness. There has been some discussion about a potential link between antihistamines and dementia risk, but these studies are inconclusive and mainly involve adults, not children. While using these medications on a limited, as-needed basis should be safe, longer-term studies are needed to confirm their safety.

RB: I mentioned previously that some antihistamines can make children hyperactive. They may also have a drying effect, which is not great for skin. Second-generation antihistamines, such as Zyrtec and Claritin, may not provide much relief for itching. They can help allergies, but not all children, especially young children, have allergies driving the AD.

What are the key points parents should discuss with their child's doctor?

JY: The main issue to address is the itch associated with AD, as it often disrupts sleep. Managing itching typically requires controlling the underlying AD with topical or systemic treatments. Oral antihistamines and melatonin should be considered only as supplementary options.

RB: It's very important to mention to your physician if AD is affecting sleep. If AD is severe enough to cause sleep disturbances, make sure you're also using treatments like topical steroids, wet wraps or prescription medications like Dupixent, all of which can improve sleep.

What's the most important piece of advice you would give to parents dealing with a child who has sleep issues due to AD?

JY: The key is to effectively and thoroughly treat the underlying AD to ease the itch.

RB: Establish a consistent sleep routine and practice good sleep hygiene. Avoid blue light and screens two hours before bedtime, and ensure exposure to sunlight during the day to support melatonin production. A warm bath with moisturizers or medications can help treat AD lesions and relax the child. Keep the room cool and use a fan if heat triggers itching. For nighttime awakenings, use cool treatments like refrigerated lotions and creams applied with a cool washcloth to soothe itchy skin.

1. Ramirez FD, Chen S, Langan SM, et al. Association of Atopic Dermatitis With Sleep Quality in Children. *JAMA Pediatr.* 2019;173(5):e190025. doi:10.1001/jamapediatrics.2019.0025. https://jamanetwork.com/journals/jamapediatrics/fullarticle/2725861. 2. Chang Y, Lin M, Lee J, et al. Melatonin Supplementation for Children With Atopic Dermatitis and Sleep Disturbance: A Randomized Clinical Trial. *JAMA Pediatr.* 2016;170(1):35–42. doi:10.1001/jamapediatrics.2015.3092. https://jamanetwork.com/journals/jamapediatrics/fullarticle/2470860#.

NEA RESEARCH

New Data Reveals Low Rates of Mental Health Support for Atopic Dermatitis Patients

The National Eczema Association research team published a new paper investigating referrals to mental health services for patients with atopic dermatitis.

By Angela Ballard, RN

Mental health can be a real struggle for people with atopic dermatitis (AD). Research has shown that AD is associated with anxiety, depression and social isolation.[1-5] With mental health being such a big factor in a patient's experience, the National Eczema Association (NEA) research team wanted to investigate what type of mental health support AD patients receive, or don't receive, from their primary eczema provider. The results were recently published in the *Skin Health and Disease* journal in June 2024. Read on to learn more about the findings.

Research methods

NEA researchers conducted an online survey of US-based adults (18 years or older) and adult caregivers of children and teens (8–17 years) with AD. Survey participants were recruited through the NEA website, email, social media and EczemaWise app. More than 950 people completed the survey.

Among those who completed the survey, the majority were adults (83%), women (68%), white (67%), from urban areas (89%) and people who saw a specialist (such as an allergist or dermatologist) for their primary eczema care.

Mental health services in the survey were defined as but not limited to: counseling with a mental health provider; cognitive behavioral therapy; social support groups; alternative mental health therapy (such as music or art therapy); and/or mental health medications.

Key takeaways

Important findings from the study include:

- **42%** of patients with AD and caregivers of children/teens with AD **never spoke about mental health** with their primary eczema care providers
- **50%** of patients were **never asked about mental health** by their primary eczema care provider during any visits
- **64%** of adult patients and caregivers of young patients with AD were **not referred to mental health resources**
- The patients more likely to be referred to mental health services included **children**, **men**, those with **limited education** and **people seeing nonspecialists**
- If patients were referred to mental health resources, the most common referrals were to **counseling services** (23% of referrals), **alternative mental health therapy** (15%), **cognitive behavioral therapy** (13%) and **peer/social support groups** (12%)
- Among those who received a referral for mental healthcare, **57% utilized the recommended services**
- The patients more likely to have never spoken with their primary eczema care providers about mental health included **women**, **people of low income** and **people seeing specialists** (such as dermatologists or allergists) for their primary eczema care
- Young adults 18–34 years old frequently reported **not being asked about their mental health but wanted to be**

Why this research matters

"This is the first study to explore the mental health support received by patients with AD from their primary eczema care providers," said Jessica Johnson, lead author of the study and director of community engagement and research at NEA.

This survey showed that a significant portion of patients are not being asked about or did not speak to their eczema care provider about mental health. Furthermore, most patients with AD are not receiving referrals for mental health support.

"We know about the emotional and psychological toll that AD can take on patients of all ages," added Wendy Smith Begolka, senior author of the study and chief strategy officer at NEA. "Ideally, patients and healthcare providers would feel comfortable discussing mental health during their visits. Our study highlights the opportunity to help this discussion occur more consistently."

More research is needed to identify the most effective mental health interventions for patients with AD, as well as current barriers to referring patients to mental healthcare. For example, do specialists need more training on screening for mental health or better screening tools? Future studies may also help us better understand the role of patient advocacy organizations, like NEA, in helping to mitigate the overall mental health burden of AD.

1. Drucker AM, Wang AR, Li WQ, Sevetson E, Block JK, Qureshi AA. The Burden of Atopic Dermatitis: Summary of a Report for the National Eczema Association. J Invest Dermatol. Jan 2017;137(1):26-30. doi:10.1016/j.jid.2016.07.012. 2. Kage P, Simon JC, Treudler R. Atopic dermatitis and psychosocial comorbidities. J Dtsch Dermatol Ges. Feb 2020;18(2):93-102. doi:10.1111/ddg.14029. 3. Cheng BT, Silverberg JI. Depression and psychological distress in US adults with atopic dermatitis. Ann Allergy Asthma Immunol. Aug 2019;123(2):179-185. doi:10.1016/j.anai.2019.06.002. 4. Yu SH, Silverberg JI. Association between atopic dermatitis and depression in US adults. J Invest Dermatol. 2015;135:3183-3186. 5. Silverberg JI, Gelfand JM, Margolis DJ, et al. Patient burden and quality of life in atopic dermatitis in US adults: A population-based cross-sectional study. Annals of Allergy, Asthma & Immunology. 2018/9// 2018;121(3):340-347. doi:10.1016/J.ANAI.2018.07.006.

HEADSCRATCHERS

Pop Quiz: 10 Questions to Test Your Eczema IQ

By Clare Maloney

You've got the basics down, but how much do you really know about eczema? Test your knowledge to see if you know these surprising facts about this complex condition:

1. When does Eczema Awareness Month occur?
A. November
B. October
C. July
D. March

2. Which condition is nummular eczema commonly mistaken for?
A. Ringworm
B. Psoriasis
C. Sunburn
D. Impetigo

3. Erythema is an eczema-related term meaning which of the following?
A. Red skin due to increased blood supply
B. Skin that's thick and leathery from scratching or rubbing
C. Patches of skin that are lighter than your overall skin tone
D. A split or crack in the skin

4. Which Olympic gymnast is known to have eczema (and can still crush their routines)?
A. Simone Biles
B. Stephen Nedoroscik
C. Suni Lee
D. Frederick Richard

5. Roughly how many people in the U.S. have eczema?
A. 1 in 2 people
B. 1 in 50 people
C. 1 in 100 people
D. 1 in 10 people

6. Which of the following metals is a known eczema trigger?
A. Nickel
B. Gold
C. Copper
D. All of the above

7. Petroleum jelly is a popular moisturizer made primarily using what two ingredients?
A. Oil and alcohol
B. Oil and water
C. Alcohol and water
D. Soap and alcohol

8. True or false: Contact dermatitis is the most common type of eczema.

9. What is the triangular area on the anterior side of the upper arm and forearm, a common place for eczema to appear, called?
A. Sebaceous gland
B. Antecubital fossa
C. Temporal fold
D. Patella

10. Which of the following is NOT one of the seven types of eczema?
A. Seborrheic dermatitis
B. Stasis dermatitis
C. Pruritus dermatitis
D. Dyshidrotic eczema

How'd you do?

To elevate your eczema IQ even further, check out our webinars led by world-class eczema experts at **NationalEczema.org/webinars**.

Answers:
1) B. Eczema Awareness Month is recognized in the U.S. every October. **2)** A. Ringworm and nummular eczema are commonly mistaken for one another due to their similar appearances. **3)** A. Erythema is the medical term for red skin due to increased blood supply, a common eczema symptom. **4)** C. Suni Lee has eczema. Welcome to the club, Suni! **5)** D. About 1 in every 10 people in the U.S. has eczema. **6)** D. Metals including nickel, copper and gold (among others), which can be found in everyday items like jewelry or children's toys, are all common triggers for eczema (particularly contact dermatitis). **7)** B. Oil and water are two of the main ingredients in petroleum jelly that help make it a great moisturizer. **8)** False, atopic dermatitis is the most common of the seven types of eczema. **9)** B. The antecubital fossa is also known as the "elbow pit." **10)** C. Pruritus dermatitis is *not* one of the seven types of eczema, but "bonus fact" "pruritus" is the medical term for itch.

Learn more and get involved
EczemaMonth.org