Mayo Clinic Q & A Dr. Dawn Davis - Psoriasis and eczema

SUMMARY KEYWORDS

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SPEAKERS

Dr. Halena Gazelka, Dr. Dawn Davis, Narrator

- Narrator 00:00
 Coming up on Mayo Clinic Q&A,
- Dr. Dawn Davis 00:03

 Psoriasis and eczema are both skin reactions to the inflammation or immune system coming to the skin and causing a reaction.
- Narrator 00:11

Psoriasis is thought to be an immune system problem with the most common symptom being a rash on the skin, but at times it can involve the nails and joints. Eczema is a similar condition that makes the skin red and itchy. It's common in kids but can occur at any age, and this Mayo Clinic Q&A, we will explore both psoriasis and eczema and discuss the causes and treatments of these conditions.

Dr. Halena Gazelka 00:34

Welcome everyone to the Mayo Clinic Q&A podcast, I'm Dr. Halena Gazelka your host. When it comes to itchy red skin, it's possible that psoriasis or atopic dermatitis, also known as eczema, could be the cause. Both are long-term chronic conditions that don't have a cure but can be treated effectively. Here to help us understand the similarities, differences, and treatments is Mayo Clinic dermatologist, Dr. Dawn Davis. Thanks for being here today, Dawn.

- Dr. Dawn Davis 01:03
 - Hi, Halena. It's great to see you. Thanks for promoting dermatology and skin health.
- Dr. Halena Gazelka 01:08

Yes, well, it's a very important topic to all of us. You mentioned in another podcast that our skin is our largest organ, and so it's important to everyone listening.

Dr. Dawn Davis 01:17

Yeah, absolutely. We don't want to brag but dermatologists do have priority over the largest body organs.

- Dr. Halena Gazelka 01:24
 What is the difference between psoriasis and eczema?
- Dr. Dawn Davis 01:26

That is a common question and common misunderstanding. A lot of people think they are the same thing. They do have some commonalities and some differences. So, psoriasis and eczema are both skin reactions to the inflammation or immune system coming to the skin and causing a reaction. There are different types of immune system reactions, Th1 reactions and Th2 reactions. In general, psoriasis is a Th1 immune system reaction where the immune system comes to the surface of the skin, secretes inflammatory markers, and that causes the skin to overgrow, which then causes the skin to be red and scaly. The average skin grows, dies, and sheds in a 28-day cycle. But psoriasis skin grows, tries to die, and tries to shed in 72 hours. And so, you can understand that it's difficult for it to do so in such a quick amount of time, which is why those plaques of psoriasis look so red and scaly. A cousin to that is atopic dermatitis, which in general is a Th2 driven immune cell reaction where the immune system comes to the skin, releases its chemical inflammatory markers, and the skin gives in to the inflammation and breaks down causing the skin to be red, weepy, itchy and eroding, and it can scale and ooze because the brick wall of our skin is breaking down rather than building up, and that leads to itch and irritation.

Dr. Halena Gazelka 01:28

How common are these conditions?

Dr. Dawn Davis 03:02

Psoriasis and atopic dermatitis are both very common. Psoriasis is present in approximately 3% of children and 3% of adults. And about one out of every three cases of psoriasis emerges in childhood. Two out of every three psoriasis cases emerges in adulthood. Atopic dermatitis, on

the other hand, is more common. We believe it's present in 15 to 20% of children, and then as we age we can outgrow atopic dermatitis such that it's present in 2 to 3% of adults. However, I would be remiss not to mention that atopic dermatitis can start afresh or anew in adulthood. So, rarely an adult can have atopic dermatitis that did not start in childhood.

- Dr. Halena Gazelka 03:49
 Who is most likely to be affected by these disorders?
- Dr. Dawn Davis 03:53

 Atopic dermatitis and psoriasis are both polygenic. We believe there is a genetic predisposition based on various codes in the genome for predisposition for your skin to either overgrow with irritation or to undergrow or become irritated with inflammation, if you will, so we can see them run in families, but they are not directly inherited from a single gene. Psoriasis is common in all races and ethnicities, and in fact can be more severe in patients who are African American or patients who are of Latin X descendants. Atopic dermatitis is also present across all races and

ethnicities but can also be more severe in patients who are skin of color or of the Latin X

- Dr. Halena Gazelka 04:42
 Let's talk just a little bit more about psoriasis. How is that treated once it's diagnosed?
- Dr. Dawn Davis 04:48

ethnicity or races.

When psoriasis is investigated, I like to remind the public that while we think of it as a skin disease, it's actually imperative to understand that Psoriasis is a multi-system inflammatory disorder So, while you most often see psoriasis on the skin, and second most commonly in the joints with a disease called psoriatic arthritis, where we have the same inflammatory process that then erodes the skin of the joint synovium, if you will, to cause arthritis. Psoriasis, we now understand causes an inflammatory cascade throughout the whole body, so that we need to look for other factors. So, when you present to the dermatologist or primary care doctor, we will oftentimes give you prescription medications, anti-inflammatories, such as topical steroids or topical calcineurin inhibitors, which calm the inflammation on the skin, and then also topicals that help slow the growth of the skin because as I explained earlier, the skin is on overdrive. So, a topical that is common for this would be vitamin D. But there are other medications that do this as well. We like to prescribe more than one therapy for psoriasis because psoriasis is very smart, and it will become tachyphylactic or resistant to monotherapy. So, if we only choose one topical method to treat your psoriasis, oftentimes you will grow resistant to that therapy. Then when we see psoriasis patients, we educate them about the other concerns that go with psoriasis, such as the psoriatic arthritis, but also other concerns such as high blood pressure, obesity, lipid abnormalities, and things of that nature. Also, psoriasis patients are known to have an increased risk of mental health concerns, particularly anxiety and depression.

Dr. Halena Gazelka 06:30

That's very interesting, Dawn. I wasn't aware of all of the comorbidities or all of the disease states that went along with psoriasis and difficulties. What can patients expect long term with management of psoriasis?

Dr. Dawn Davis 06:46

Sometimes psoriasis can be an acute flare that then goes back into remission, but then we know those patients are susceptible to psoriasis over their lifetime. A common example of this would be someone who obtains or gets strep throat, and then they get a specific pattern of psoriasis we call Guttate psoriasis, which isn't necessarily limited to strep throat infection but is a common manifestation after strep throat. We can treat the strep throat, treat the psoriasis, and hopefully place it in remission, knowing that the patient is vulnerable to an outbreak again over time. For the other psoriatic patients, it's something that you control and not cure. I think that's the most important thing for the patient to understand. There's nothing that they did to cause this, it's not their fault, but now that they have it, it's something that will wax and wane over time. It's not something that we can fix and will have go away. So, we teach them medication regimens that when their psoriasis flares up, we give them medicines to dial it back down. So, anticipate a lifelong relationship with your dermatologist or primary care providers so that we can take care of your skin over time, but also so that we can track the internal systemic potential relationships and comorbidities of psoriasis to keep your overall health, you know in mind. Psoriasis is definitely something that requires multidisciplinary whole person care.

Dr. Halena Gazelka 08:06

Dawn, next tell us more about atopic dermatitis or eczema. How would a patient know that they might be experiencing this disorder, and then how do you treat it?

Dr. Dawn Davis 08:18

Well, occasionally psoriasis can it particularly in pediatric patients. A lot of times people suspect they have atopic dermatitis instead of psoriasis, because the rash is so itchy. Now there are a whole long list of rashes that can itch, but atopic dermatitis is definitely near the top of the list, particularly because it is so common. In fact, we often nickname atopic dermatitis the itch that rashes. While people don't necessarily like the appearance of the rash, if you could ask patients if they could only take away one thing about the rash, oftentimes, their answer is to address the itch because they are so uncomfortable in their skin. And we know that of all the human discomforts that itch is something that is really imperative and can really alter someone's quality of life, it's very difficult to be itchy. It's difficult to concentrate at work or at school, it's difficult to enjoy social functions. If you start to itch you want to scratch which then makes the itching oftentimes worse. It makes you look as though you could have something that's contagious when eczema is not contagious. And so, then people may not want to sit next to you or invite you to their birthday party, etc., and it can affect quality of life. And then last but not least, when you itch a lot, it's very difficult to get a good night's sleep. And if one person in the house is up, particularly if it's a child, no one in the house is sleeping well. And we know that sleep hygiene is so important not only to eczema care, but also for our overall health. So, if you see a rash that appears inflamed or red relative to your skin tone, tends to be slightly scaly or oozy, and is very pearlitic or itchy, please come to a primary care doctor or dermatologist so we can assess whether the rash that you have is atopic dermatitis.

- Dr. Halena Gazelka 10:03
 So Dawn, how would you treat atopic dermatitis?
- Dr. Dawn Davis 10:07

Atopic dermatitis treatment is based on severity and the location of the disease. So, first of all, in the office we talk about sensitive skincare, which is really something that we get into a habit of if you have a skin sensitivity. So, just like people with asthma learn lifestyle modifications such as maintaining a healthy weight, and for example, avoiding jobs that expose them to a lot of particulate matter or to smoke, there are corollaries for skin health so that we can keep our skin as protected from the environment based on our lifestyles as possible. After that, we move on to topical medications which often include topical steroids that help decrease the inflammation to the skin, or topical calcineurin inhibitors, which are anti-inflammatories, but not steroids that work through a similar mechanism. Once that, if you surpass that treatment, and then something advanced, we can do a wet dressings therapy, which is like a mummification with wraps for the skin. We can move on to do patch testing, where we put little discs on the back that have certain chemicals that we can be sensitive to, so that we can understand if there are products in your environment that is driving your dermatitis and making it worse. Then we can move on to phototherapy, which is a specific type of light used in a dermatologist's office that penetrates through the skin to a particular level to help with the inflammation response so that the skin can heal. And thereafter, we have systemic medicines that work on the immune system that can suppress dermatitis.

- Dr. Halena Gazelka 11:38

 And then what can patients expect in their management long term?
- Dr. Dawn Davis 11:43

When a patient shows up with atopic dermatitis to our office, we talk about the long-term relationship that we're going to have with them as dermatologists because atopic dermatitis occasionally can be a disease that you outgrow when your immune system matures, but it can also worsen with age as well. Also know that atopic dermatitis impacts the family unit, and the patient, and their quality of life. So, we talked about whole person care and having a multidisciplinary approach. Patients with atopic dermatitis have one of the atopic or sensitivity diseases, so we screen them for other atopic or sensitivity diseases including asthma or reactive airways, allergic rhinoconjunctivitis, also called hay-fever, and food allergies. And while they don't necessarily always go together, it is not uncommon for a patient with atopic dermatitis to have one of those other sensitivities. And then we need to share that patient with our colleagues in allergy or pulmonology, etc., so that they can get great whole person care because when one atopic disease is flaring, the other atopic diseases tend not to respond as

well to their treatment. So, the first thing is screenfing for ATD. The second thing is talking about the patient's environment. There are certain things that you can do in the environment to help your skin such as practicing sensitive skincare, using clothing that is soft and comfortable on the skin, certain bathing and showering practices to keep your skin moist, and then avoiding smoking and secondhand smoke, all of which can be bad for atopic dermatitis skin. I also like to give my patients a lot of empathy and validation. We know from quality of life studies that having atopic dermatitis is very impactful to a patient. In fact, it's just as impactful as having diabetes, for example, or a seizure disorder, or chronic severe asthma, which are all diseases that we as lay people in the public think of having a medical burden. And so, we like to empower atopic dermatitis patients, and let them understand that they too have a medical burden. Unfortunately, there's not a magic wand that we can wave that will magically make their atopic dermatitis go away.

Dr. Halena Gazelka 13:52

It sounds like connection with the right providers is really important in management of these diseases.

- Dr. Dawn Davis 13:58 Yeah, absolutely.
- Dr. Halena Gazelka 14:00
 Thank you for being here today, Dawn.
- Dr. Dawn Davis 14:02
 It's my pleasure. Thanks for inviting me.
- Dr. Halena Gazelka 14:05

Our thanks to Mayo Clinic Dermatologist, Dr. Dawn Davis, for being here today to help us distinguish between psoriasis and atopic dermatitis. I hope that you learned something. I know that I did. We wish each of you a wonderful day.

Narrator 14:20

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