Transcript Details

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ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Taking Action in Moderate to Severe Pediatric Atopic Dermatitis: Patient- and Caregiver-Centered Approaches to Improve Outcomes

Announcer:
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Dr Schoch:
We are going to start with talking about managing pediatric atopic dermatitis: Patient-reported and caregiver-reported outcomes in practice.

Another poll. According to surveys, what proportion of caregivers and children report sleep disturbances because of atopic dermatitis? Maybe we could skip the poll, because we have got it bolded there, in the interest of time.

Speaker:
We will let people vote.

Dr Schoch:
Okay. People can vote. Go right ahead.

Speaker:
That might sway people a little bit. Five more seconds for incoming answers. Thank you. We will close the poll and share the results.

Dr Schoch:
Okay. Still split. Yes, we will talk about this as well. There is really a difference between sleep disturbances in patients with mild atopic dermatitis compared to severe atopic dermatitis. That actually does make this question a little bit tricky.

Okay. We are going to hear from a caregiver about the burden of pediatric atopic dermatitis.

Nitin Dogra:
In terms of as a caregiver, one thing is sleep. It impacts the quality of our sleep, because depending on how your child's symptoms are, if he is not sleeping well, you cannot sleep well. Then it starts impacting your work, your health. Other thing is that, as a caregiver, compared to a normal child, you have to do a lot more things. You are always on the go. You have to plan a lot. You also have to make sure that the moisturizers that you need to put them on, you have to put them. Everything adds up. In terms of clothes, since you are moisturizing, you need to wash them more often. If somebody is washing once a week, you are doing 3 times a week. Everything then adds up. It is almost like you are in an emergency battle situation all the time.

Dr Schoch:

As you can hear, atopic dermatitis has a significant impact on the quality of life of children and families. It is also a really common problem. Trying to better treat atopic dermatitis is really important.

It affects up to 20% of children. The onset is most common between 3 and 6 months of age. Of those diagnosed with atopic dermatitis, 60% develop the condition in the first year of life. 85% of patients develop it by age 5.

Most people, if they have eczema, they have eczema in childhood and in early childhood. Up to 60% of cases persist into adulthood. Although, usually, for most patients, it is more mild in adulthood. The disease course is very variable. It ranges from transient disease to relapsing remitting atopic dermatitis, to chronic never goes away atopic dermatitis.

There are 2 theories for the pathogenesis of atopic dermatitis: the inside-out and the outside-in theory. Really, they are probably both true on a certain level. There is probably a loop here.

The inside-out theory is that there is a pro-inflammatory environment, both locally within the cutaneous immune system and then activating the more widespread systemic immune system that leads to skin inflammation, which causes the inflammation. The cytokines cause barrier dysfunction.

The outside-in theory is kind of the opposite, where there is a barrier dysfunction, which leaves the patients more vulnerable to exogenous insults, exposure to antigens, which results in induction of inflammation. Again, there is probably a bad cycle going on here. It is definitely a chicken or the egg issue. I do not think it really matters which of these theories is more true so much as understanding what components of the immune system are involved and the barrier and the skin microbiome to understand areas we can intervene to treat or prevent eczema.

The patient burden. We heard from a father of a patient. We are going to talk a little bit about the burden on the patient and on the families. For these graphs, you will see that the green boxes are patients with mild atopic dermatitis. The yellow are moderate atopic dermatitis. The orange are severe atopic dermatitis.

We see here that patients with eczema report significant pain actually with their atopic dermatitis. This is particularly true. It increases with severity. Particularly common to have significant pain in patients with moderate to severe atopic dermatitis.

The burden of sleep is significant. This graph has a lot of information. The shortcut is that green is no days out of the week that sleep is affected by eczema. Then all the way to purple, where every day sleep is affected by eczema. You can see, in our severe patients of all ages, a significant portion of them have everyday affected sleep because of their eczema. Our moderate patients have at least some days of the week that their eczema is disturbing their sleep.

Again, this is just reason to understand the burden a little bit more so we can be a little bit more proactive about treatment.

The quality of life impact also, not surprisingly, increases with the severity of disease. The increased severity is associated with lower quality of life and increased school absences. This is, again, true for all age groups. Six months? Yes. Maybe not school absences, but a lot of impact on sleep and other domains of the quality of life for the family.

How do we diagnose pediatric atopic dermatitis? Because to provide a treatment, you generally have to know that you have the right diagnosis. It is a clinical diagnosis. We go off of historical symptoms and features. It is basically the presence of 2 things. One is the typical morphology and distribution of skin lesions. It looks like eczema. It is in a typical pattern of eczema. The patterns tend to change over time with specific ages.

Then the other symptom that is required for atopic dermatitis is itch. It is typical look of eczema and itch. The differential diagnosis is pretty broad. Most of the time, in my clinic, I can tell eczema is eczema. Every once in a while, it is a little trickier there. Sometimes patients have more than one thing going on. Trying to tease out what is what, which is which is important in terms of making sure you have the right treatment. The differential diagnosis includes scabies, tinea for the pruritus of eczema.

For the appearance of eczema, patients can have seborrheic dermatitis with atopic dermatitis. We particularly see that in infants. They can have impetigo or contact dermatitis. Then that chronic or relapsing behavior we also see in things like psoriasis, photosensitivity, immune deficiencies. Making sure that we have the right diagnosis is key to providing the right treatment.

I talked a little bit about that variability based on age. This can be important when I am unsure about the diagnosis. If I am trying to weigh 2 different diagnoses, then one thing that would be pro, yes, this is eczema would be is the pattern what we would expect for the age?

In infants, we see a lot more involvement of the cheeks than in the other ages. We also see more forehead and scalp involvement because of that overlap with seborrheic dermatitis. My theory on this is that the Malassezia that is normally on our body is kind of

triggering atopic dermatitis early on. That is why we see them together a lot early in infancy. Then we see that those babies continue to have more typical atopic dermatitis.

We also see extensor extremity involvement in infants as well as flexural creases. The extensor extremities are a little bit more prominent in infants because it is the areas that they can scratch or rub on a surface.

In adolescents, we see more facial involvement compared to adults. We see neck involvement, especially the extensor neck. We start to see more palm and sole and ankle involvement, as well as that typical flexural crease involvement of atopic dermatitis. Adults still can have the flexural creases, but tend to have a lot more hand and foot eczema, particularly hand eczema. It is very common for a patient to go through all these stages. Start off with widespread involvement, seborrheic dermatitis and atopic dermatitis overlap, and end up as an adult with chronic hand dermatitis.

The other thing that is important in terms of making the diagnosis is understanding that eczema looks different on different skin colors. On dark skin, we see more papular and follicular eczema, so more small dots of eczema. We see more post-inflammatory hyper- or hypopigmentation, so more pigmentation changes in general.

The erythema is not as obvious. It is more obscured by the thickening of the skin, the lichenification of the skin, and then just the darker color of the skin. Instead of looking bright red, the skin may look deep purple or purple-brown. It is important to not underestimate the eczema and the active inflammation.

In light skin, this is what we see in a lot of the textbooks, pink and red erythema. A little bit easier to see from the door that this is eczema until you get really comfortable with all the different colors of skin and how eczema looks a little bit different.

In olive and medium-brown skin, we tend to see still some of that pink erythema and pattern that we see in white skin. However, the erythema tends to be a little bit more purply compared to lighter skin.

We hinted at this in the pretest. We are going to just briefly talk about 4. The first is the Eczema Area and Severity Index. It is kind of a complicated score. You can do it by hand. However, there is online calculators. It is something that you cannot just quickly do by hand. You cannot just estimate it on your feet in clinic.

It is what percentage of each body area is involved and then how much erythema, lichenification, thickness, edema. It is something that is used a lot for research or when we are trying to monitor progress of a patient. For example, if they are on biologic therapy and we want to show insurance that gradual progression of improvement.

Investigator Global Assessment is something you can do quickly on your feet. The scale is from 0 to 4 with 0 being clear, 1 being almost clear, 2 being mild, 3 being moderate, and 4 being severe. That is something that we can quickly do in clinic and add that to our charts to have a general gestalt of where the eczema is at in that moment.

SCOREAD is very similar to EASI. It is used a little bit less commonly. It is used in some research studies. Then all 3 of these we can do just by looking at the patient without talking to anybody. We can do it after the patient leaves a clinic visit, as long as we saw all of their skin.

The one we cannot do without patient participation is Patient-Oriented Eczema Measure. This looks at how the eczema has affected the patient within the last week.

Post-test 1. Which tool is best suited to integrate patient-reported outcomes into the assessment of disease severity in pediatric AD?

Speaker:
Poll is open. Five more seconds for incoming answers. Thank you. We will close the poll and share the results.

Dr Schoch:
Okay, perfect. The Patient-Oriented Eczema Measure does include the input of the patients. It is the only one that we cannot do without talking to the patient. It focuses on, again, their frequency and severity of the symptoms over the past week. It is a valuable tool for integrating the patient-reported outcomes into severity assessments.

Sometimes this is really important too when we are trying to escalate therapy for a patient, because sometimes things like itch and quality of life are significantly more than what we are actually seeing on the skin. We do not want to underestimate that in our treatment.

I talked about the IGA. It is important to understand, kind of everybody be on the same page about what is mild, moderate, and severe atopic dermatitis.

Mild atopic dermatitis is patches of dry skin, some itching, minimal impact on quality of life or sleep. It is usually patches that come and

go that are not particularly persistent but just here and there without significant cracking or fissuring of the skin.

Moderate atopic dermatitis tends to be more diffusely dry skin, frequent itching, and excoriation. Skin redness is more obvious. There is significant impact on quality of life and sleep. We tend to see more body surface involvement and more persistence of atopic dermatitis.

Severe eczema is large areas of dry skin, large areas of involvement of the atopic dermatitis, constant itching, redness, and excoriation. At this point, this is strongly interfering with the daily routine and sleep.

Severity can be body surface area, the quality of life impact, or you can also have focally severe eczema, where it is so thick and open and bleeding in specific areas. That is what we call focally severe.

The foundation for every patient for nonpharmacologic therapy is what we just call gentle skincare. Gentle skincare is trigger avoidance. Some patients do have environmental allergies that can trigger the eczema. However, most patients who have eczema, you are not going to find an allergy that is going to cure their eczema. It is very important that we help patients understand the distinction between those 2 things.

We do recommend baths or showers daily to every other day with a non-soap or mild cleanser, so a non-irritating cleanser. We do want patients to bathe actually a little more frequently than was historically recommended because of this interplay with the skin microbiome, which can cause more inflammation if it is unbalanced.

In a similar vein, bleach baths can be helpful. Honestly, the research is plus or minus for bleach baths. Some patients really like them. For the patients who have a lot of open areas and for the patients who have that constant disturbance of the skin microbiome or frequent infections, then we can offer bleach baths.

Moisturizers, everybody has to do it, because whether it is inside-out or outside-in, there is a skin barrier problem. We have to protect that skin. We recommend applying it liberally immediately after bathing and reapply throughout the day. Ideally, in kids, we want to see twice a day moisturization after the topical medications are applied. Practically, I know it is really hard to do. At least that time after the bath is really important.

Ointments in general are thought to seal in hydration and decrease evaporation more than a thinner product like a lotion. We recommend a thick cream or an ointment.

In 2024, the AAD updated their algorithm for treatment of atopic dermatitis. You can see in the key up at the top that the blue circles are recommendations that they supported. The green circles are going to be recommendations against.

To start, for baseline management, like we just talked about, we have talked about:

- Assessing for signs of disease;
- Assessing the severity;
- Talking about the quality of life;
- Identifying any relevant triggers.

Then the baseline therapy strongly recommends moisturizers and emollients. Then you can see the conditional recommendation for bathing practices. Because like I said, with bleach baths, overall, we are leaning towards more frequent bathing. However, there is not great data that says clearly this is the best way to bathe.

When we move on, within the recommendations to topical therapies, from mild to severe, pretty much every patient who has atopic dermatitis, unless it is contraindicated for some reason, they should have a topical therapy as part of their plan.

The standard is topical corticosteroids. They have been around for a long time. They are safe when used appropriately. We also have topical calcineurin inhibitors, that includes pimecrolimus and tacrolimus. They have also been around for a long time.

Crisaborole is a little newer to the market. Ruxolitinib also a little newer to the market for atopic dermatitis. We have a harder time getting those sometimes with insurance coverage. Wet dressings. You can see that there is a conditional wishy-washy recommendation. I do not think they are harmful. We used to do them a lot in my practice before we had biologics. That is where you apply a medication or a moisturizer followed by a damp clothing or gauze. The idea is to push the medication into the skin from the occlusion.

Again, though, there is not really research that supports that there is a significant difference when you do that. It is just more anecdotal in what we see in clinic.

Then we have 2 new treatments coming to the market that we will talk a little bit more about later. They are not on the guidelines from 2024 yet because they have come out since the guidelines were produced.

Then maintenance therapy. We talked about this a little bit in terms of gentle skincare and continuing to do that. The reactive treatment is applying the topical therapies when there is an actively inflamed area. We also recommend proactive application, we will talk about that a little more detail, to maintain control in recurrently inflamed sites. That means if the eczema is like a fire, when that fire is blown up, yes, you need to apply the topical medicines twice a day, for example, or once a day, whatever the recommendation is for that specific topical.

Then when the eczema goes away, if we know it is chronic, then we can apply medication intermittently to keep that fire from even starting to come back.

Shared decision-making is important for long-term treatment. You cannot get a family to adhere to a treatment plan if they are not on board. Any inadequate control with what we have talked about so far, you should always reconsider the diagnosis. Is there something else we are missing? Then consider going to the next step.

The next step is phototherapy and systemic therapy. Phototherapy, you can see the conditional recommendation. It has been around for a long time. It is very safe. However, it is just practically very difficult for patients to do. It is usually offered in our offices.

Then systemic therapies, we are going to talk about more. The biologics: dupilumab, tralokinumab, and lebrikizumab. Then the JAK inhibitors: upadacitinib, abrocitinib, and baricitinib. Then we have the older medications that were around before we had the biologics and JAK inhibitors: methotrexate, azathioprine, cyclosporine, and mycophenolate mofetil.

You can see that there is a strong recommendation for all of the newer therapies. There is a conditional, if you really have to, recommendation for the older immunosuppressants. In general, as dermatologists, we do not recommend systemic corticosteroids for atopic dermatitis, because of the tendency to flare after you stop.

Okay. What proportion of caregivers of children with moderate to severe AD are satisfied with available treatments?

A. 30 to 39%;

B. 40 to 49%;

C. 50 to 59%;

D. 60 to 69%; or

E. Greater than 70%.

Speaker:
Poll is open. Five more seconds for incoming answers. Thank you. We will close the poll and share the results.

Dr Schoch:
Okay. I did not give it away this time that it was bolded. Yes, 40 to 49%. Less than half of caregivers are satisfied with the available treatments for moderate to severe atopic dermatitis. That is a huge gap that we need to address.

Let us hear from patient perspective about her experience with topical therapies.

Hannah Sur:
I am not exactly familiar with the name of the drug. When I was little, my father took me to this allergy doctor place where they gave me shots. However, after a few months, I stopped going there. I later transitioned into topical steroids. I would say topical steroids help with the appearance, but it does not really do anything for the itch in my experience. Because of these topical steroids, I would not exactly know how much is the right amount to put on my skin. Sometimes when I put too much of the steroids on my arm, it would be white scars. I actually have a scar on my arm now.

Dr Schoch:
That was one patient perspective. I do not think that topical steroids leave scars. That is just a good example of patients really making sure that they understand what the risks and benefits are of the treatments that we are offering and know how to use them. Because you could hear her hesitation with, “I was not sure how much to use or when I should be using it.”

Our available topical therapies, again, the standard is corticosteroids first line with nonresponse to that gentle skincare and moisturization routine. Applied once to twice a day. It is important to address steroid phobia and assess adherence up front.

In general, like we just heard from this patient, there is not a lot of evidence to support the amount of fear that we have around topical steroids. I have used topical steroids in thousands and thousands of patients and have seen only a couple of cases of skin thinning, for example.

Calcineurin inhibitors: tacrolimus ointment and pimecrolimus second-line. They have been around for a long time. One of the problems here is that they are approved for patients only down to age 2, which is just the FDA approval. It is really tricky. They are commonly used in younger children. Sometimes this is an issue where we are trying to avoid using a topical steroid in a younger child, for example, on the face or around the eyes. Then it is just not approved for a child that is less than 2, so it is not available.

The other thing that is tricky about the calcineurin inhibitors is they can burn or sting on actively inflamed skin. They are really better for working them into the topical regimen once the topical corticosteroids have quieted down the inflammation. There is a theoretical risk of secondary infections and rare cases of malignancy. However, multiple studies have been done that debunked this myth. There is just a black box warning on there. It has been removed in Canada, but we still have it in the United States. Again, practically, in clinical practice, I have not seen that.

PDE inhibitors. This is crisaborole and roflumilast. Safe and effective options for mild to moderate atopic dermatitis. Crisaborole is approved for down to 3 months. Roflumilast is approved for 6 years and older. That one is just more recently approved. It was not in the 2024 guidelines like we talked about.

The PDE-4 inhibitors are tricky because sometimes the insurance coverage is an issue. They are indicated for mild to moderate atopic dermatitis. They are not indicated for moderate to severe atopic dermatitis. They are under treatment for moderate to severe atopic dermatitis. My experience is they are a little bit of a crapshoot. For some patients, they work well. Other patients, they do not work well.

JAK inhibitors, topical ruxolitinib. It is approved for adolescents 12 and older. It is reserved for patients who do not respond to other treatments. It is approved for short-term and non-continuous treatment. You have to watch if there is a lot of body surface area. You are not supposed to exceed 20% body surface area or a certain amount of the medicine per week. This is super tricky because our patients who maybe have gotten to the point where they want to use a JAK inhibitor topically, because they failed topical corticosteroids, they usually have a lot of body surface area of eczema.

Then finally, we have tapinarof cream, which is approved for patients greater than 2. Have not had a lot of chance to use this with the insurance approval yet. The most common side effects included upper respiratory infection, folliculitis, headache, asthma, vomiting, pain in the extremities. For me, there has not been a place to mix this in yet just, again, based on insurance approval. So to be continued.

The financial burden of topical therapy is not insignificant. The patients report and parents report significant out-of-pocket cost spending on topical medications, those moisturizers we talked about, cleaning supplies. The first patient perspective, the father that we heard from, touched on this, all the burden of having to wash the clothes more frequently, things like that.

The yearly median out-of-pocket cost is around $600, but almost half of patients spend more than $1,000 a year. Emollients are universally recommended, but they can range from very cheap like plain Vaseline, plain petroleum jelly to being up to like $10 an ounce. Only 12% of the top recommended moisturizers are free of contact allergens, which not every patient with atopic dermatitis has contact dermatitis. However, sometimes our patients with atopic dermatitis do have concomitant contact dermatitis. It can be really hard to tease those out if you do not know what moisturizer they are using.

Safety concerns with topical corticosteroids. Again, they are commonly used. We use them for a lot of pediatric dermatologic conditions. The reported adverse drug reactions are rare. They are generally associated with higher potency. We have 7 different strengths to 7 different potencies of corticosteroids. They are mostly associated with the Class I and II steroids and with longer treatment duration. That is really important.

The most common clinical scenario where I see topical corticosteroid side effects is when a patient just got refills of a medication without somebody stopping to realize, and they were just applying the medication even when the condition was gone for months and months. Those side effects that we could see include telangiectasia, striae, hypopigmentation, and skin thinning.

They are usually applied twice a day, but once a day might be considered for some patients and for some topical steroids. Practically speaking, I tend to tell my patients to use them twice a day because, practically speaking, as a parent, I feel like if I try to do something every day and I skip a day here or there, then sometimes there is 48 hours between doing it right. Versus if you try to do it twice a day and you miss here and there, you are probably at least getting the medicine on once a day. But every patient and family is different, so sometimes that might not be needed.

Phototherapy we talked about as part of that maintenance therapy or as part of stepping up from the mild to moderate atopic dermatitis

to the moderate to severe. The access is an issue. It is becoming increasingly difficult for us as dermatologists to maintain these machines based on how much we are using them, because there are newer medications like biologics.

Then it is a little tricky in terms of us dosing the phototherapy, how much dose they get. Then if they go on vacation and come back. That is a little bit tricky. It is not as standard as a biologic that just comes in a prefilled pen.

Clinician-directed home therapy is possible. We used to do a lot more of this 10 to 15 years ago. Now we do not need it as much, but it is an option. The potential side effects would be the accumulation of the chronic sun damage, although it is a focused UV wavelength. We would expect less actinic damage than just being in the sun for the same duration. However, you can still burn. You can become itchy, stinging. Phototherapy is not for everybody. Then again, practically speaking, just coming in to do phototherapy is tough.

When do we initiate systemic therapy in children with atopic dermatitis?

We talked about the mild to moderate atopic dermatitis patients. We talked about the non-pharmacologic measures, the gentle skincare, the moisturizers for everybody, and then optimizing topical therapy.

For moderate to severe atopic dermatitis, we are going to do all of those things. Then a lot of times we are going to end up adding systemic therapy if our patients are not under control with the non-pharmacologic and topical options.

Candidates for systemic therapy. About one third of pediatric patients with moderate to severe eczema are inadequately controlled with topical therapies. That is too big of a number. We have too many options now for us to still have a third of patients that are inadequately controlled.

The decision to initiate systemic therapy should be collaborative between the health care provider and the patient caregivers. We consider systemic treatment for children with atopic dermatitis with inadequate response to or intolerance of topical therapies. However, it is a big step because whenever we go from topical therapy to systemic therapy, everything involves needles, so either injections or lab monitoring. There is a big leap between there. However, it is also something that is necessary for treatment success.

Before we do that, before we jump, because everything after this includes needles, we check. We are not ever getting the patient clear, then we have to go to systemic therapy. They are having a hard time adhering to the treatment because of the frequent and the widespread application of the topical. Then we have to go to systemic therapy if there is frequent environmental triggers or ongoing severe eczema. Sometimes we just have to take that leap. We want our patients to have a better quality of life.

When we are deciding on a systemic therapy with the family, we take a few things into consideration. The first is what eczema do they have? Again, some patients have focally severe eczema. Some patients have widespread eczema. Some patients have itch that is disproportionate to their eczema. Those things can affect the treatment decision.

Patient comorbidities, for example, if they also have asthma. Sometimes that aids us in terms of leaning towards a biologic because, for example, dupilumab is also indicated for asthma. Risk-benefit profile of the available treatments, of course. Patient preferences, of course. Oral therapies versus giving themselves home injections. Some people just are not able to do home injections. Drug interactions and clinical monitoring and access to treatment.

Traditional systemic therapy before we had biologics and JAK inhibitors. We would use the old immunosuppressants that I briefly touched on earlier: cyclosporine, azathioprine, methotrexate, mycophenolic acid. We would continue the topical therapies. We try really hard to avoid systemic steroids, like I talked about, because a lot of times we see that flare after we stop. It is not a helpful cycle.

The problem is, for traditional systemic therapies, everything except for cyclosporine takes a while to kick in. If patients are really, really miserable, one of the things we can do is we can do a temporary bridge with cyclosporine. These other options I used to use a lot 6 or 7 years ago. Now I use them fairly infrequently.

Safety considerations. We would not get into all of this. All of these medications have side effects that are either hard on the kidney or hard on the liver, or can cause bone marrow suppression. They do require lab monitoring. We do not have an oral medication that we can give patients that is safe for long-term use that does not require lab monitoring. That is why I said there is no needle-free option really.

Thankfully, we have biologics. They do still involve needles in one way or another. However, they are more targeted. We are not turning down the whole immune system. We are focusing on a part of the immune system that we know is active in atopic dermatitis.

For dupilumab, that is acting on IL-4 and IL-13. For the newer ones, lebrikizumab and tralokinumab, it is activating or acting on IL-13. Then the JAK inhibitors, of course, are active acting on JAK1 or JAK1 and JAK2.

The newer FDA-approved systemic agents. We are going to go through them individually. This is just an overview of what is approved

for each age group. Dupilumab is the only one that is approved for down to 6 months. It is the most common one used in our practice in terms of the first-line for systemic agent. Fairly easy to get from insurance when it is appropriate and indicated. Then the JAK inhibitors, tralokinumab and lebrikizumab, are approved for 12 years and up.

Biologic therapy use in atopic dermatitis has a lot of benefits. It can be done at home. It can be self-administered. The reason this is important, because sometime in the past, things like omalizumab were tried. That needed clinical monitoring at the beginning. It is nice to have a biologic that we do not have to do an infusion in the office, and it can just be done at home. They work well. We will talk about that. They are really well tolerated in trials and in real life. There is no routine laboratory monitoring needed for dupilumab and the other biologics.

Safety considerations are the same amongst the 3 of them. There is this kind of strange conjunctivitis that happens that I have seen a few times. It is usually temporary right after you start the medication. You can treat with artificial tears or over-the-counter mast cell stabilizer drops. If it is severe, you can refer to ophthalmology. However, again, usually it is temporary, thankfully.

Of course, injection site reactions, headache and upper respiratory infections, which are non-specific but were reported with the biologic use. Then vaccinations are a little tricky because there are not really guidelines right now on what to do with vaccinations in children who are on biologic therapy. In general, pediatric dermatologists feel that because dupilumab, for example, is not largely immunosuppressive, that it is appropriate to continue with the vaccination schedule. However, the current recommendation is to withhold vaccines. That is, again, another to-be-continued issue that will hopefully be sorted out soon.

Let us talk a little bit about the trial data that allowed us to have these new tools. The first is dupilumab, which, again, acts on the IL-4 receptor alpha inhibitor. It inhibits the signaling of IL-4 and IL-13. It is approved all the way down to 6 months now. Thank goodness. You can see in the studies here, the efficacy was pretty high. The EASI 75 means that there is a 75% improvement in that EASI score that I touched on earlier. Then the 90, same thing, 90% improvement in that score.

IGA 0 or 1, as a reminder, is either clear or almost clear. That is a really high goal for patients that have moderate to severe atopic dermatitis, to be completely clear or almost clear. These numbers, although the IGA 0 to 1 looks a little bit lower, those are actually pretty good numbers considering the severity of the disease that kids usually have if they are put on these medications.

Then the other thing that has been explored for dupilumab is the long-term efficacy and safety, up to 52 weeks, so up to a year. It continued to be safe and effective throughout the entire time. It is not something where we are seeing that patients are typically losing efficacy shortly after they start the medication.

Then tralokinumab was next. it is an IL-13 inhibitor approved for the treatment of moderate to severe atopic dermatitis. You can see that the numbers are a little bit lower on the IGA 0 to 1 and the EASI scores. Again, this is a little bit different depending on the age groups that are studied and the design of the trial. This is approved now down to age 12. Very similar dosing strategy to dupilumab.

Then finally lebrikizumab, which acts on actually exon 3 IL-13. It is approved for the treatment of moderate to severe atopic dermatitis just recently in kids down to 12. Again, you can see the outcomes from the study is pretty good, EASI 75 and EASI 90 at 16 and 52 weeks. The IGA 0 to 1 at 52 weeks of 63% is pretty good.

Again, a good safety profile with some generic upper respiratory infections, headache, atopic dermatitis. We have not really seen, with these drugs, significant scary side effects that have limited their use.

JAK inhibitor. JAK inhibitors are used for a wide variety of diseases versus the biologics we talked about are a little bit more focused. JAK inhibitors were studied for atopic dermatitis in the JADE REGIMEN study. They were ultimately approved for adolescents 12 and up. You can see really pretty good numbers similar to the biologic data for adolescents. IGA 0 to 1 of 60% is great, at week 12. Then the EASI 75 of around 72%.

Not significant serious side effects. However, you can see in the adults some more serious side effects and some serious infections.

Then upadacitinib was also studied and approved down to age 12, with overall similar data and similar concern for some serious adverse effects and serious infections.

The systemic therapy is approved for use in patients with inadequate control or contraindications to other therapies, including biologic agents. For patients who are not able to give themselves a shot at home, JAK inhibitors can be a good option. Or for patients who lose the response to the injected biologics, this can be a good option.

The potential benefit of JAK inhibitor is there is concern that patients that are on the biologics will eventually develop antibodies to it. Some patients prefer oral therapy over injecting themselves. Then the potential for long-term use to control the disease if tolerated well.

I think this is true for both the biologics and the JAK inhibitors. However, the side effects of the JAK inhibitors are a little bit more concerning. We have to watch the CBCs, the LFTs lipids, watch for signs and symptoms of infection. There is a little bit more of a malignancy and thrombosis risk compared to placebo. That is something that we are seeing in real life.

Okay. Post-test 2. Which of the following pediatric patients with moderate to severe AD would be the best candidate for a biologic therapy? This is a biologic therapy, not a JAK inhibitor.

A. A 10-year-old with mild asthma, showing partial improvement with low-potency topical steroids but poor adherence;

B. A 15-year-old with seasonal allergic rhinitis, frequent flares, bad sleep, fear of needles;

C. A 7-year-old with occasional flares, controlled, reporting mild itch;

D. A 13-year-old with recurrent infections, significant quality of life, and experiences no relief from topical steroids and topical calcineurin inhibitors.

Speaker:
Poll is open. Five more seconds for incoming answers. Thank you. We will close the poll and share the results.

Dr Schoch:
Let us see. Yes, D. Actually, I agree with the people. I would still offer the biologic to the 15-year-old. I completely agree. I hinted at this earlier with this question. The 13-year-old is a clear cut. Recurrent infections, the topical steroids are not working. Next step would be to go to dupilumab. However, you could really do lebrikizumab or tralokinumab as well, because they are approved. However, most of the time we will start with dupilumab based on the insurance, based on the formulary.

A 15-year-old who is still having frequent flares and is significantly impacted. Sometimes we can work with the fear of needles. Remember, if we offer something like JAK inhibitors, there is still lab monitoring. We are not completely getting away from needles. It is something to discuss. Would you rather do lab monitoring or would you rather work on your fear of needles and do injections at home?

Collaborative patient-centered and caregiver centered approaches to managing children with moderate to severe atopic dermatitis. This is what I am talking about when we are talking about the specific patients. We cannot make the decision on our own completely. We have to see what patients' and parents' preferences are and what their limits are.

Which of the following is NOT a common trigger of AD flares in children?

A. Soaps and detergents;

B. Soft fabrics like silk or cotton;

C. Viral and bacterial skin infections; or

D. Extreme weather fluctuations.

Speaker:
Poll is open, please vote. Five more seconds for incoming answers. Thank you. We will close the poll and share the results.

Dr Schoch:
Yes. Also bolded. Good job. Soft fabrics like silk or cotton are not a common trigger of atopic dermatitis flares. We will talk about what is.

When we are working with a family to decide how to treat the atopic dermatitis, sometimes we use something called an action plan. An action plan, you can find various examples online. It basically has 3 components where the green is the maintenance routine. The mild is the mild to moderate flares. The red is what do you do when there are really bad flares?

Having the patients know what they are supposed to do at each of those steps is part of the treatment, because we cannot have treatment if patients do not understand when and how to use their medications.

Part of the maintenance is avoiding common triggers, including environmental allergens, dust mites, pollen, contact allergens that, again, can trigger atopic dermatitis. They do not cause it per se, but can trigger it. Climate. We tend to see eczema flares in low humidity. In Florida, for example, this time of the year when the air is a lot drier than in the summer. In extreme heat or extreme cold. Irritants. Wool or rough fabrics can be causing irritant dermatitis that triggers atopic dermatitis as well as saliva, sweat, harsh soap, detergent, fabric softeners, dryer sheets. Again, all contain triggering an irritant dermatitis that then triggers atopic dermatitis.

Then infections. This is a chicken or the egg thing where these infections, like staph aureus and molluscum, basically like to happen on eczema skin. Then when they do happen on eczema skin, they tend to make the eczema worse.

I want to go back a little bit to the proactive treatment of atopic dermatitis flare-ups, because this is something that has changed in my practice compared to when I was in training 15 years ago. Instead of just treating the flares like you can see in the top with the graphs of thread where we are just kind of treating the flares to try to get patients down to you just treat until you cannot see the eczema anymore.

Then I see this a lot in my practice, patients who are referred because they are like, “I was told to use a topical steroid for 7 days. After 7 days, the eczema is almost gone, but not completely.” Then they stop using the medication. Eczema comes right back. They go back down to the 7 days. It is almost gone, but not completely. You just keep going through this cycle.

Instead, what I tell patients is I want you to use the topical medicine 2 times a day until that eczema is completely gone, and then a little bit more, because you want to completely put out the fire. Then once we get the fire out, we do not want it coming back. We are going to put a little bit of medication on. We usually do this 2 to 3 times a week. The most common regimen I recommend is to just apply the topical medication once a day on each day of the week. This is, again, just putting a little bit of water on the fire here and there to keep those embers from going back into a full flame.

There are a few very good studies on this that show that it reduces flares by at least 50%. It is something very small that you can do in your clinical practice, if you are not doing, to help your patients get better control.

Then another issue that comes up with families in terms of trying to problem-solve is when do we discontinue biologics? The short answer is I do not know. I do not think anybody knows quite yet. There is no consensus.

In one of the trials, the patients that stopped the medication, stopped dupilumab, over half of them relapsed and restarted dupilumab. I usually tell patients when we are starting dupilumab, we are on it for at least a couple of years before we consider. It depends on their age how likely they are to grow out of the eczema, how severe it is, what the pattern is. We know eczema is a chronic problem. We do not have a good stopping point for a chronic problem.

Discontinuation requires time and patient caregiver buy-in. Because if you stop the medication, then the eczema is going to come back. Then it is going to take a while for the medication to kick in again. You are setting yourself up for being without the medication, actively keeping the eczema away for a couple months at least.

Shared decision-making in atopic dermatitis. We talked about this a little bit at the beginning in one of the questions. It is really important. We cannot really be effective in treatment if we do not get buy-in from our families. Actively listening and engaging patients and their caregivers, accommodating various economic and appointment needs by facilitating closer follow-up when needed and desired. If I have patients who do not have a lot of health literacy and they are confused on the plan, then I try to just do one thing at a time, have them come back more frequently. Considering patient goals, preferences, and cultural skincare practices. Assisting with medication access and support resources.

Employing motivational interviewing. When you are trying to come up with a plan with a family involves 4 things.

Engaging: building rapport, taking into account the patient's point of view and forming an alliance, asking permission to examine, asking permission to progress the treatment plan.

Focusing: what does the patient want to discuss? What is the most important part of the eczema to you? Is it the sleep disturbance? Is it the itch? Is it the appearance, because kids are making fun of you? Knowing what problem of the chronic condition is most important to them to focus on. Presenting evidence of risks and benefits in patient-friendly language is really important. Talking about the advantages and disadvantages to not making a change. This comes up a lot in clinic for me too. We could go forward if you are not happy. However, if you are happy, we can stop where we are and we do not have to go to biologics. There is a lot of time that that is like here is the advantage of going forward to biologics, here is the advantage of not and just staying where we are at.

Then evoking: trying to get more from the patient from the family. What are the patient's ideas and solutions? Waiting and listening. Asking open ended questions. What do you think about this? Or how do you believe you can get your medicines on more? Or tell me more about why you cannot apply your medicines.

Then plan: having a plan, making sure you are on the same page about the plan to collaboratively identify the next steps involved to move toward change. Knowing what the goal is and then how would you do that? What do you believe is the first or next step? What can I do to support you?

Now that we have discussed this a little bit, what should the following phrases best aligns with motivational interviewing principles to address a caregiver's concerns about initiating systemic therapy? Is it:

A. “I understand this is a big decision. Here is why I think this treatment is best for your child.”

B. "You seem concerned about starting a new treatment. What is your main worry about this option, and how can I address it for you?"

C. "It's important to remember that all treatments have risks, and this one is no exception. I recommend it despite the risks."

D. "We've tried everything else, and this treatment is the only option left. Let us move forward with it."

Speaker:
Poll is open. Five more seconds for incoming answers. Thank you. We will close the poll and share the results.

Dr Schoch:
Okay. Most people picked B because we are including a question. I do not think A is awful either. There is a lot of times where that is part of the conversation that I have still with parents. You are saying, "Okay, this is why I think this is best." Then being like, "What are the barriers for you?" I think can still be part of the conversation, because a lot of times that is what families are asking me, like, "What do you think is best?" I always say, "I am going to treat your child just like I would treat my own as a parent."

Option B exemplifies motivational interviewing by exploring the caregiver's emotions and concerns, encouraging open communication, and promoting shared decision-making. That is the difference between A and B. Again, it just depends on the relationship you have with the family. A is you telling them a little bit more of here is what we are going to do, versus B is trying to evoke a little bit more from them.

All right. Post-test number 4. After participating in this program, how confident are you in your ability to treat atopic dermatitis in pediatric patients?

A. Not confident;

B. Somewhat not confident;

C. Somewhat confident;

D. Confident; or

E. Very confident.

Speaker:
Poll is open. Five more seconds for incoming answers. Thank you. We will close the poll and share the results.

Dr Schoch:
Okay. We made some progress. We moved from B's and C's to C's and D's. That is perfect. I do not expect anybody to become an expert and fully confident within an hour. I think understanding how to tweak your topical therapy approach and knowing when to go to systemic therapy can really increase your confidence in terms of managing your pediatric patients with atopic dermatitis.

Key takeaways:

- Atopic dermatitis significantly impairs quality of life for patients and caregivers
- Topical therapy remains first-line. However, their use can be a burden. Newer systemic options are available for patients with severe or refractory atopic dermatitis;
- Engaging patients and caregivers in shared decision-making is imperative to improve self-management, adherence, and quality of life;
- Then developing patient-specific action plans to address barriers and to care for atopic dermatitis to optimize the outcomes is important.

There is not a one-size-fits-all approach. There is a lot of different permutations of how we can treat atopic dermatitis. It really depends not only on what I think is best, but also what the patient and family want.

With that, I know it is a lot to cover. However, if you guys have any time for questions, I am happy to take them.

Speaker:
We are now taking any questions you may have for Dr Schoch. Please use the Q&A function in Zoom. While you do so, we will have some QR codes on the screen momentarily. We also have links in the chat panel. One would be for the downloadable slide deck from today's presentation. The other would be for the program evaluation link to complete and claim your credit. You will need to log in to or create a CCO account. Please claim your credit within 30 days as it will expire after this time. One final opportunity for any questions.

Dr Schoch, I do not see anything coming into the Q&A panel. Are there any other comments you have for us today?

Dr Schoch:
I do not think so. I think just knowing what is on the horizon and what is available and when to move to the next step is as much as we can expect to learn in an hour. Watch out for the to-be-continued that I discussed as well. There are, hopefully, going to be a few new options available to us in the future.

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