Simple Solutions Treat Tough Atopic Dermatitis

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LAS VEGAS — If you're stumped about how to manage your patients with severe atopic dermatitis, Amy S. Paller, M.D., offered clear-cut advice at the Fall Clinical Dermatology Conference.

"It's important to see if there's a problem with what they're doing on a basic level," said Dr. Paller, professor and chair of dermatology at Northwestern University, Chicago. "How often are they bathing? Once a day or at least every other day? Are they following that with a good thick moisturizer that can improve that underlying skin barrier? What about harsh agents? Are they avoiding bubble baths and harsh soaps? Is there a benefit of a soft water system?"

She offered the following tips for managing these patients:

► **Consider wrap management.** After patients bathe and apply topical medication or moisturizer to their skin, have them put on damp, long underwear–type cotton pajamas and socks. Top this with a dry layer of pajamas and a dry layer of socks. This strategy "decreases the pruritus and discomfort and helps kids fall asleep," said Dr. Paller, who is also a professor of pediatrics at the university. "In severely affected infants it's been a wonderful addition without doing anything else that might increase the strength of medication that you're using. You can modify this as well for hand dermatitis by putting on damp gloves topped with dry gloves."

She cautioned that wet wraps "can theoretically increase the absorption of topically applied medications. That's why in my practice I primarily use this directly after the moisturizer. It can make a big difference."

► **Inquire about diet.** If patients or their families tell you they think a particular food triggers the skin reaction, "then you need to act on that," she said. "Consider allergy testing and dietary avoidance in more severe patients who are not responsive to traditional treatment. I always like to get a nutritionist involved, because if you don't maintain good nutrition, you can have problems. There have been many cases of young children put on dietary manipulation, who go on to have dietary deficiencies, particularly kwashiorkor and even rickets."

► **Monitor for infection.** *Staphylococcus aureus* tends to adhere more firmly to the keratinocytes in patients with atopic dermatitis. These patients also show a deficiency in the ability to express antimicrobial peptides, particularly the human β-defensins and cathelicidins. "This probably contributes to the risk of infection and hopefully in the future will translate into some new therapies," she said.

► **Try bleach baths.** Have patients soak daily in a tub of bathwater that contains one-eighth to one-fourth of a cup of bleach. "With children, they're rarely in a full tub, so you need to back off on some of [the amount of bleach] based on how full the tub is," she said. "Also consider the use of gentle antibacterial soaps."

Dr. Paller discussed the case of a 16-month-old boy who had severe atopic dermatitis and skin infections. Despite the vigorous use of topical steroids and basic care, he flared every time his antibiotic was discontinued. "At this point, we introduced a daily bleach bath and it remarkably improved his control and decreased his need for systemic antibiotics," she said.

Bleach baths are also useful for methicillin-resistant *S. aureus* infection.

► **Try compounded topical therapy.** She said that patients who are unresponsive to commercially available topical agents almost always respond to compounded triamcinolone (0.025% or 0.1%) and salicylic acid (2%-6%) in petrolatum or Aquaphor. "I tend to use the powder form of triamcinolone; I think that works the best," she said. "In the younger children I'll never go above 2%-3% salicylic acid."

She added that patients should be monitored carefully for side effects due to the risk of systemic absorption of the compounded agent. Taper the dosing as patients improve.

► **Treat certain body sites differently.** For example, if the periorbital area is affected, consider introducing calcineurin inhibitors.

"I still have patients who don't understand that it's safe to apply those in the periorbital area," she said at the conference, sponsored by the Center for Bio-Medical Communication Inc. "I've seen patients who have terrible problems with excessive rubbing of their eyes, even in the face of calcineurin inhibitors. In some of these patients it's important to get

them in to an ophthalmologist or an allergist who can help to address the fact that they may have some associated conjunctivitis that's triggering that periocular pruritus."

For affected areas of the scalp she recommends that patients apply fluocinolone in oil vehicle applied to a wet scalp for as little as an hour before they wash their hair.

If that doesn't work, try compounded triamcinolone and salicylic acid in mineral oil, "but be aware of the potential risks of increased absorption."

Dr. Paller called hands and feet "the toughest areas that we tend to see." They typically require an increased potency of any agents used.

When these basic approaches fail or are not tolerated, consider the following: hospitalization to "cool down" the patient; systemic immunosuppressants; ultraviolet light, including narrow-band UVB; and balneotherapy.

"UVB treatment in pediatric patients is very difficult, often because of time constraints, and concern about UV exposure, compliance, and tolerance," she said.

As for systemic corticosteroids, "we try to avoid long-term use in children because of the many potential side effects including growth failure," she said. "When you stop someone on systemic corticosteroids, there tends to be a rebound effect."

The systemic immunosuppressant she uses most often is cyclosporin A. She usually starts with a dose of 5 mg/kg per day (3 mg/kg per day if it's the microemulsion form). "In many cases there's a response within a few weeks," Dr. Paller said. "In other cases it can take longer, so I will tend to go for a 3-month trial and see how that patient is doing. I always try to taper about 1 mg/kg per day each month as tolerated. I find that many patients cannot get off the medication, but they can be tapered down to a lower level."

Although use of cyclosporin A requires monitoring of blood pressure and renal and liver function, "I have not had one patient who's had a side effect that's significant from the use of cyclosporine, so I don't hesitate to use it, even in young children if that's necessary."

If the patient is still not responding, consider the possibility of an alternative diagnosis. Atopic dermatitis impostors can include contact dermatitis, scabies, Wiskott-Aldrich syndrome, hyperimmunoglobulinemia E, and Netherton's syndrome.

"Sometimes we need to step back and ask, 'Do we have the right diagnosis?' " Dr. Paller said. ■