As medical science continues to uncover new facts about the pathogenesis, treatment, and long-term effects of various diseases and makes strides in developing effective therapies, it seems that long-held notions are toppled on a regular basis. In the management of atopic dermatitis especially, it seems that frequent new discoveries challenge long-held and often poorly-founded perceptions. In this relatively fast-changing landscape, misconceptions abound.

Here’s a look at three somewhat common myths that persist regarding atopic dermatitis with a discussion of the facts as we now know them. Keeping abreast of the science will help clinicians better serve patients and their families.

1. Irritating Detergents are a Common Cause of Atopic Dermatitis

Despite widespread claims to the contrary, laundry detergents rarely cause eczematous dermatoses in exposed patients. Detergents are not an attributable cause of atopic dermatitis (AD), which is chronic in nature and has a well-known characteristic distribution and generally relapsing/remitting presentation. Furthermore, detergents do not commonly precipitate eczematous flares in patients with atopic dermatitis. The long-standing myth that detergents contribute to flares in atopic patients derives from assumptions about the skin of such patients.

**Take-Home Tips.** There is no evidence that detergents cause atopic dermatitis and other eczematous dermatoses; patients/families need not undertake arduous efforts to avoid most detergents. When it comes to bathing patients with eczema, water exposure appears to be less important than frequent and liberal application of moisturizers to maintain skin hydration. In fact, one study found that among patients who applied moisturizer without pre-bathing, the skin had a higher moisture status at 1.5 hours than patients who took a soaking bath and then applied moisturizer. IgE testing for food allergy tends to be unreliable when used generally in AD, although it remains important to confirm allergy when clinically suspected. Finally, barrier repair is an important aspect of AD management, with several new barrier repair creams now on the market.

By Andrew Krakowski, MD and Lawrence F. Eichenfield, MD
The skin of atopic patients may be described as “irritable” or “hyper-sensitive” with compromised epidermal barrier function and marked cutaneous inflammation. Clinically, patients experience dry skin and pruritus, with a lower threshold to perceive itch with a variety of stimuli, including contact with coarse fibers, such as wool, compared to individuals without AD. While the skin sensitivity is real, it is uncommon in practice for patients to find that specific laundry detergents or soaps lead to eczema flares.

Families often describe rather arduous interventions they were advised to use, such as double or triple-rinsing laundry and using hypo-allergenic soaps and detergents, etc., to protect the child from “irritating detergents.” In reality, when standard therapeutic interventions are in place to control atopic dermatitis, such extreme avoidance tactics are rarely necessary. We have seen little detrimental impact on eczema among patients on standard therapeutic regimens who are “normalized” to standard laundry detergents and single-rinse cycles.

2. Frequency of Bathing is Crucial to Atopic Dermatitis Care: Soakers versus Water Avoiders

A long-standing controversy in dermatology has been over the appropriate frequency of bathing for pediatric patients with atopic dermatitis. There appear to be two schools of thought on the issue. The “Dry School” advocates maintain that bathing contributes to skin dryness and recommend infrequent bathing. However, the majority of these specialists tend to advocate frequent bathing. However, the majority of these specialists tend to advocate frequent application of...
moisturizers to hydrate the skin of patients with AD. The “Wet” proponents believe that bathing helps to hydrate the skin and is useful to remove antigens that may contribute to the pathogenesis or promote secondary infection. They urge frequent soaking baths, commonly recommending that the rate of bathing increase in direct proportion to the severity of the eczema. They also generally advise liberal application of moisturizers immediately following the bath while the skin is still hydrated by the water.

Though it doesn’t settle the controversy, results from a small study we conducted at Rady Children’s Hospital and Health Center and the University of California San Diego suggest that frequent and liberal application of moisturizers may be more important for maintaining skin hydration than the frequency of bathing. The study involved patients with AD as well as controls. We found that the skin of patients who had bath soaks but did not apply moisturizers was less hydrated than the skin of patients who applied moisturizer only but did not bathe. The skin of patients who took soaking baths and then applied moisturizer remained well-hydrated for the 1.5-hour observation period following application.

Interestingly, among patients who applied moisturizer without pre-bathing, the skin had a higher moisture status at 1.5 hours than the bathing plus moisturizer group. Though dermatologists may continue to debate the appropriate frequency of bathing, ultimately the decision may depend on physician and parent/caregiver preferences and the ability and/or desire to comply with recommendations.

In any regimen, it is clear that moisturizer application is tremendously important. Patients should always apply moisturizer after bathing, and those who bathe less frequently should apply moisturizer regularly to improve skin hydration.¹

An emerging, related trend in management of patients with atopic dermatitis is the use of “Wet Wrap Therapy.” This intervention tends to be employed for patients with more severe AD under the care of a dermatologist. However, pediatricians may benefit from familiarity with the approach, which can be viewed online (eczemacent.org/eczema_center/ecvc.htm#wetwraps). There are multiple variations on wet-wrap therapy, which essentially involves wrapping the patient’s involved skin with layers of material after hydrating and applying topical steroids, often utilizing damp gauze wraps, under-layers of pajamas or long-johns, or other suitable material and a dry over-layer.

After a bath, the patient applies emollient and/or corticosteroid as directed by the physician. Next, the under-layer material is soaked in clean, warm water then wrung out until just damp. Once this material is in place, the dry over-layer is put on. The wraps may be left in place overnight, although they are sometimes used for just a period of time prior to retiring.

Data show that wet wraps can yield a down-regulation of serum chemokines in patients with AD.² Furthermore, wet wrap dressings have been shown to improve epidermal barrier function.³

3. IgE Testing is Indicated for All Patients with Atopic Dermatitis

Although patients with moderate to severe atopic dermatitis have about 25 to 35 percent increased rate of
food allergies compared to the general population, data suggest that IgE testing is not widely indicated among individuals with AD. There is a poor correlation of tests to clinical reactions. While positive specific IgE tests were found in 63 to 74 percent of patients with AD in one study, only 24 to 37 percent of these same patients had food reactions.45

Based on currently available data, testing for food allergies in AD should be reserved for those patients who are not responsive to standard therapies, and/or have a history suspicious for food reactions. Patient and family reports of food allergies should be confirmed, given that anywhere from 50 to 90 percent of presumed food allergies are not allergies. 


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42 | Practical Dermatology for Pediatrics | May/June 2010