

## To Bathe or Not To Bathe in Atopic Dermatitis?

Minnelly Luu, MD - Peck Y. Ong, MD

Practices involving the use of bathing in atopic dermatitis (AD) vary widely among pediatricians and specialists. These practices can be broadly divided into two camps: those who favor frequent bathing vs. those who restrict bathing in AD. In fact, almost half of patients who have seen multiple providers for AD report receiving conflicting recommendations on bathing<sup>1</sup>. A recent survey study showed that pediatric dermatologists and allergist/immunologists are more likely to prescribe frequent bathing compared with primary care providers<sup>2</sup>.

Opinions on the use of bathing in AD are largely based on clinical experience rather than clinical trial evidence. Studies directly addressing the role of bathing in AD have individually been limited either by small sample size, retrospective design, lack of control group, and/or lack of blinding. Overall, there appears to be more studies in support of frequent bathing<sup>3-7</sup> than infrequent bathing<sup>8-11</sup>. However as a result of conflicting evidence, updated guidelines on the management of AD from the American Academy of Dermatology (AAD) as well as the Joint Task Force on Practice Parameters (representing the American Academy of Allergy, Asthma, & Immunology; the American College of Allergy, Asthma, & Immunology; and the Joint council of Allergy, Asthma, and Immunology) have generally abstained from making a recommendation on frequency of bathing<sup>12,13</sup>.

Despite ongoing debate on this subject, a consistent recommendation from these guidelines continues to be the importance of application of a cream or ointment on the skin immediately after bathing, a method often termed “soak and smear” or “soak and seal”. While those who advocate infrequent bathing have traditionally been concerned about the drying effects of water and soaps, the benefits of “soak and smear” is best explained by Tofte and Hanifin: Bathing may dry the skin through the evaporation of

water from wet skin. However bathing also hydrates the skin when moisturizer is applied immediately after bathing, thus retaining the hydration of the skin<sup>14</sup>. In addition, bathing is important to eliminate crust and cleanse the skin from bacteria.

In addition to ideal bathing frequency, several other unanswered questions remain, including whether bathing is better than showering and optimal duration of a bath. Although more studies are needed to address these issues, most experts continue to believe in the beneficial effects of frequent bathing and recommend that AD patients take a daily bath (up to 15-20 minutes) using a mild skin cleanser, followed immediately by application of a moisturizer and/or a topical medication<sup>7</sup>.

Minnelly Luu, MD

Attending Physician in the Division of Dermatology, Department of Pediatrics,

Children's Hospital Los Angeles

Assistant Professor of Dermatology at USC Keck School of Medicine

Peck Y. Ong, MD

Attending Physician in the Division of Clinical Immunology and Allergy, Department of Pediatrics, Children's Hospital Los Angeles

Associate Professor of Clinical Pediatrics at USC Keck School of Medicine.

## References

- 1 Kempe E, Jain N, Cardona I. Bathing frequency recommendations for pediatric atopic dermatitis: are we adding to parental frustration? *Ann Allergy Asthma Immunol* 2013; **111**: 298-9.
- 2 Cardona ID, Kempe E, Hatzenbeuhler JR *et al*. Bathing Frequency Recommendations for Children with Atopic Dermatitis: Results of Three Observational Pilot Surveys. *Pediatr Dermatol* 2015; **32**: e194-6.
- 3 Gutman AB, Kligman AM, Sciacca J *et al*. Soak and smear: a standard technique revisited. *Arch Dermatol* 2005; **141**: 1556-9.
- 4 Mochizuki H, Muramatsu R, Tadaki H *et al*. Effects of skin care with shower therapy on children with atopic dermatitis in elementary schools. *Pediatr Dermatol* 2009; **26**: 223-5.
- 5 Murota H, Takahashi A, Nishioka M *et al*. Showering reduces atopic dermatitis in elementary school students. *Eur J Dermatol* 2010; **20**: 410-1.

- 6 Kim H, Ban J, Park MR *et al*. Effect of bathing on atopic dermatitis during the summer season. *Asia Pac Allergy* 2012; **2**: 269-74.
- 7 Hajar T, Hanifin JM, Tofte SJ *et al*. Prehydration is effective for rapid control of recalcitrant atopic dermatitis. *Dermatitis* 2014; **25**: 56-9.
- 8 Chiang C, Eichenfield LF. Quantitative assessment of combination bathing and moisturizing regimens on skin hydration in atopic dermatitis. *Pediatr Dermatol* 2009; **26**: 273-8.
- 9 Koutroulis I, Petrova K, Kratimenos P *et al*. Frequency of bathing in the management of atopic dermatitis: to bathe or not to bathe? *Clin Pediatr (Phila)* 2014; **53**: 677-81.
- 10 Koutroulis I, Pyle T, Kopylov D *et al*. The Association Between Bathing Habits and Severity of Atopic Dermatitis in Children. *Clin Pediatr (Phila)* 2016; **55**: 176-81.
- 11 Kohn LL, Kang Y, Antaya RJ. A randomized, controlled trial comparing topical steroid application to wet versus dry skin in children with atopic dermatitis (AD). *J Am Acad Dermatol* 2016.
- 12 Schneider L, Tilles S, Lio P *et al*. Atopic dermatitis: a practice parameter update 2012. *J Allergy Clin Immunol* 2013; **131**: 295-9.e1-27.
- 13 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**: 116-32.
- 14 Tofte SJ, Hanifin JM. Current management and therapy of atopic dermatitis. *J Am Acad Dermatol* 2001; **44**: S13-6.