



Bath Time: Atopic Dermatitis and Bathing

CLINICAL QUESTION

Can atopic dermatitis (AD) be improved with more baths/showers, bleach baths, or bath additives?

BOTTOM LINE

In AD, more frequent baths (and likely showers), 1-2 times/day, improve symptoms meaningfully ($\geq 30\%$) for about 40% more patients than less frequent bathing (with moisturizers after bath/showers). Despite advocacy, research does not support bleach baths, bath additives or water softeners for AD symptoms. Offer simple advice for frequent plain-water bathing and application of moisturizers immediately afterward.

EVIDENCE

- Statistically significant differences unless noted.
- Frequency:
 - Cross-over randomized controlled trial (RCT)¹ of 42 children with moderate-severe AD. Two-week treatments of twice-daily versus twice-weekly baths (moisturizers applied after baths but otherwise twice-daily):
 - Patients with $\geq 30\%$ symptom improvement: 58% twice-daily baths versus 15% twice-weekly, number needed to treat (NNT)=3.

- Mean symptom score (0-103, higher worse): Baseline 42, twice-daily baths improved 21 points more than twice-weekly.
- Showers versus Baths:
 - No RCTs.
 - 1 non-randomized trial² and 1 intervention cohort³: Children who added a shower daily at school had improved AD scores.
- Bleach Baths:
 - General AD: Systematic Review⁴ (4 RCTs, 116 patients) of moderate-severe AD, bleach bath (5-10 mins, 2x/week) versus regular bath, at 4 weeks:
 - No significant difference in AD scores, surface area with AD, or staphylococcal colonization.
 - Limitations: Trials small/short/heterogeneous.
 - Others find similar.⁵ No increased adverse events.
 - AD with clinical bacterial infection:
 - RCT (22 patients): Reduction in score of submerged sites.
 - Bleach bath group also got nasal mupirocin and were more severe at start.⁶
 - Cross-over RCT (40 patients): No difference in AD severity.⁷
- Additives (like Oilatum™ or Aveeno™):
 - Systematic review (5 RCTs, 111 patients):⁸ inconsistent reporting, high risk of bias.
 - RCT (482 children):⁹ generally moderate AD, assigned to bath additive (clinician/patient choice) versus no additive, after 1 year: No benefit.
- Water Softener:
 - RCT (336 children):¹⁰ moderate-severe AD living in hard-water area (≥ 200 mg/l calcium carbonate), ion-filter water softener versus none, after 12 weeks: No difference.

CONTEXT

- Guidelines/reviews recommend regular bathing and apply moisturizers (ointment or thick-creams) immediately after, while skin is still damp.¹¹⁻¹⁴
- Advocacy for bath alterations, like bleach baths, persists¹¹⁻¹⁴ but some acknowledge the evidence does not support benefit.¹³

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