Atopic Dermatitis

FAST FACTS

up to 25%
of children are affected by AD

60%
of people with AD develop it during their first year of life; 90% develop it before age 5

10–30%
of children with AD continue to experience symptoms into adulthood

85%
of pediatricians refer their patients with mild AD to dermatologists

Atopic dermatitis (AD), or eczema, is a common, chronic, relapsing and intensely pruritic (itchy) skin condition that often presents in infants and young children. Children with mild to moderate AD can often be managed by their primary care provider.

ASSESSMENT

he diagnosis of AD is clinical and cannot be confirmed by laboratory testing. Perform a standard health history and physical exam with specific questions about family history of asthma, allergic rhinitis, and AD. History of symptoms should reveal a chronic or relapsing nature and itch. Symptoms may also include disturbed sleep.

Determine severity
Mild: Patches of scaly, erythematous skin; mild, infrequent itching; little impact on daily life
Moderate: Multiple patches of scaly, erythematous skin; frequent itching; possible excoriations and localized skin thickening; moderate impact on daily life; disruption of sleep
Severe: Widespread redness and scaling; severe, constant scratching; open, cracked areas of skin that may bleed and ooze; Lichenified skin and pigment changes; limits daily activities; impacting sleep and/or mood

HPE (HISTORY AND PHYSICAL EXAM) RED FLAGS

- Patient age <2 months
- Known, or suspected, immunodeficiency
- Oncology patient
- Failure to thrive
- Evidence of multiple infections
- Fever or lethargy

MANAGEMENT/TREATMENT

1. **Manage all patients, regardless of severity**
   - Eliminate exacerbating factors (triggers)
   - Maintain skin hydration with daily baths and use of thick moisturizers
   - Minimize scratching
2. **Treat acute flares**
   Apply appropriate topical corticosteroid (TCS) ointment to affected area twice daily for 2–4 weeks
3. **Perform wound culture** if you suspect secondary infection and always before beginning antibiotics to treat skin, as the result can guide treatment (e.g., MSSA versus MRSA)

WHEN TO REFER

As the primary care provider, you can manage many of your patients with AD. Consider a referral to Cincinnati Children's Dermatology for:

- Extensive, severe disease
- Unclear diagnosis
- Refractory disease requiring escalation of treatment
- History of recurrent skin infections
- Suspected immunodeficiency
- Growth concerns
- For consideration of dupilumab or other immunomodulatory medications

If you would like additional copies of this tool, or would like more information, please contact the Physician Outreach and Engagement team at Cincinnati Children's.

If you have clinical questions about patients with atopic dermatitis, email dermatology@cchmc.org.

Tool developed by Cincinnati Children's physician-hospital organization (known as Tri-State Child Health Services, Inc.) and staff in the James M. Anderson Center for Health Systems Excellence. Developed using expert consensus and informed by Best Evidence Statements, Care Practice Guidelines, and other evidence-based documents as available. For Evidence-Based Care Guidelines and references, see www.cincinnatichildrens.org/evidence.

Atopic Dermatitis

Patient Presents

Standard Workup

- Situational History
- Family History
- Physical Exam

HPE (HISTORY AND PHYSICAL EXAM) RED FLAGS

- Patient <2months
- Known, or suspected, immunodeficiency
- Oncology patient
- Failure to thrive
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Any Red Flags?

- Yes → Refer to Dermatologist
- No → Maintenance regimen

Determine Severity

Mild

- Patches of scaly, erythematous skin
- Mild, infrequent itching
- Little impact on daily life

Moderate

- Multiple patches of scaly, erythematous skin
- Frequent itching
- Possible excoriations & localized skin thickening
- Moderate impact on daily life
- Disruption of sleep

Severe

- Widespread redness and scaling
- Severe, constant scratching
- Open, cracked areas of skin that may bleed or ooze
- Lichenfied (thickened) skin and hyperpigmentation
- Limits daily activities
- Impacts sleep and/or mood.

Maintenance Regimen for All Severities

Eliminate exacerbating factors/triggers
- Harsh soaps
- Detergents/fabric softeners with dyes/fragrances
- Wool or polyester clothing
- Known allergens
- Excessive bathing (>1x/day)
- Temperature extremes & low humidity

Maintain skin hydration
- Moisturize with fragrance-free cream/ointment 2+x/day & after bathing
- Use wet wraps
- Bathe daily in lukewarm water for 5–10 minutes with gentle, fragrance-free soap/cleanser
- Moisturize immediately after bath

Minimize scratching
- Trim nails short
- Limit access to involved skin with cotton garments, gloves and socks
- Keep bedroom cool with A/C or a fan
- Consider habit reversal therapy in older children

Acute Flare Treatment

Apply appropriate topical corticosteroid (TCS) to affected area twice daily for 2–4 weeks.

Mild
Low-potency TCS such as hydrocortisone 2.5% ointment

Moderate
Medium-potency TCS such as triamcinolone 0.1% ointment

Severe
1. Medium-potency TCS such as triamcinolone 0.1% ointment with wet wraps
2. High-potency TCS such as mometasone 0.1% ointment or clobetasol 0.05% ointment in limited areas
3. Triamcinolone ointment is available in 454g jars for patients with extensive disease

Note: Avoid systemic steroids as AD frequently rebounds. Sometimes systemic steroids are needed for treatment of asthma or other comorbidities. Tell parents AD will likely recur when discontinued.

Frequent Flares Treatment

Consider nonsteroidal topical agents:
- Pimecrolimus 1% cream
- Tacrolimus 0.03% or 0.1% ointment (0.1% for age 15+)—both of these calcineurin inhibitors are approved for ages 2+
- Crisaborole ointment may be helpful for face/folds but may sting on initial use

Perform wound culture if you suspect secondary infection and always before beginning antibiotics to treat skin, as the result can guide treatment (e.g., MSSA versus MRSA)

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link® at 1-888-987-7997.