

GUIDELINE UPDATE

New research findings that are changing clinical practice

Keith B. Holten, MD
University of Cincinnati Family
Practice Residency,
Wilmington, Ohio

How should we care for atopic dermatitis?

- **Do topical steroids relieve atopic dermatitis?**
- **What are the indications for pimecrolimus topical therapy?**
- **Is ultraviolet phototherapy useful?**
- **Are systemic corticosteroids indicated?**
- **What is the role of immunomodulatory therapies?**

Children and adults with atopic dermatitis (eczema) are the target populations of a guideline that was recently funded and developed by the American Academy of Dermatology (AAD). The AAD Work Group and Guideline/Outcomes Task Force created the original document. The entire AAD membership was solicited for review and comment. The final recommendations were reviewed and approved by the AAD board of directors. The intended users are physicians.

The evidence categories for this guideline are therapeutic effectiveness and treatment. Outcomes considered are 1) occurrence of atopic dermatitis; 2) therapeutic effectiveness, as measured by clinical signs and symptoms, blood cortisol levels, symptom scores, bacterial colonization, and serum immunoglobulin E (IgE) levels; and 3) adverse events. Their rating scheme has been updated to comply with the Strength of Recommendation taxonomy (SORT).¹

■ **Guideline relevance and limitations**

Atopic dermatitis is a common problem encountered by family physicians. It typically manifests in infants aged 1 to 6 months; approximately 60% of patients experience their first outbreak by age 1 year and 90% by age 5 years. Onset of atopic dermatitis in adolescence or later is uncommon and should prompt consideration of another diagnosis.² Females usually have a worse prognosis than males.

A lengthy bibliography accompanies this guideline. The guideline is strengthened by use of summary tables and weakened by lack of a cost-effectiveness analysis.

■ **Guideline development and evidence review**

The work group was convened and the scope of the guideline was defined. They identified clinical questions to structure the primary issues in diagnosis and management. A literature search in Medline and EMBASE databases spanning the years 1990 to June 3, 2003, was performed. Additional searches were done by hand searching publications, including reviews, meta-analyses and correspondence.

The resultant prospective studies for treatments were screened for outcome evidence. A meta-analysis of patient data and a systematic review of the evidence were performed. Quality and strength of evidence were weighted according to a rating scheme.

CORRESPONDENCE

Keith B. Holten, MD, 825
Locust Street, Wilmington,
OH 45177. E-mail:
keholtendmd@cmhregional.com

Source for this guideline

Hanifin JM, Cooper KD, Ho VC, et al. Guidelines of care for atopic dermatitis. *J Am Acad Dermatol* 2004; 50:391–404.

■ Other guidelines for atopic dermatitis

Guidelines for the evaluation of food allergies

This guideline from 2001 provides a rational approach to the evaluation of food allergies. Children with atopic dermatitis have a greater risk of food allergies. Allergy testing should be performed, when there is poor response to initial treatments.

Source. American Gastroenterological Association medical position statement: guidelines for the evaluation of food allergies. *Gastroenterology* 2001; 120:1023–1025.

Rhinitis

This guideline, revised in 2003, contains very little information about atopic dermatitis.

Source. Institute for Clinical Systems Improvement (ICSI). *Rhinitis*. Bloomington, Minn: Institute for Clinical Systems Improvement (ICSI); 2003 May. 34 p. [86 references]

Neonatal skin care

This guideline is mostly directed to routine skin care for infants and does not list separate special instructions for atopic dermatitis.

Source. Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN). *Neonatal Skin Care. Evidence-based Clinical Practice Guideline*. Washington, DC: AWHONN; 2001. 54 p. [148 references]

REFERENCES

1. Ebell M, Siwek J, Weiss BD, et al. Strength of recommendation taxonomy (SORT): A patient-centered approach to grading evidence in the medical literature. *J FamPract* 2004; 53:111–120.
2. Ghidorzi AJ Jr. Atopic dermatitis. *eMedicine*. June 2001. Available at: www.emedicine.com/emerg/topic130.htm. Accessed on April 20, 2005.

Practice recommendations

GRADE A RECOMMENDATIONS

- **Long-term, intermittent application of topical corticosteroids** is appropriate, effective, and safe. Hydration and occlusion enhance delivery. Data are limited regarding steroid concentration, duration of treatment, and frequency of use.
- **Emollients** are effective and safe. They are useful for both prevention and treatment of episodes.
- **Topical tar** is effective, but compliance is reduced due to staining of clothing.
- **Topical calcineurin inhibitors** (immunomodulators, such as pimecrolimus and tacrolimus) reduce the rash severity and symptoms in children and adults.
- **Systemic immunomodulatory agents** (such as cyclosporin) are effective against severe atopic dermatitis, but of limited value because of adverse effects.
- **Oral antibiotics** should be used to treat infected skin. They are not helpful for uninfected atopic dermatitis.
- **Topical antibiotics** are effective for skin infections, but they lead to the development of resistance.
- **Oral antihistamines** do not relieve pruritis associated with atopic dermatitis. They are indicated for patients with accompanying allergies (rhinitis, conjunctivitis, or urticaria).
- **Dietary supplements** are not effective.
- **Ultraviolet phototherapy** is effective.

GRADE B RECOMMENDATIONS

- **Dietary restriction** is useful only for infants with proven egg allergies.
- **Ultraviolet phototherapy** coupled with methoxypsoralen (PUVA) is helpful.

GRADE C RECOMMENDATIONS

- **Combining education with psychotherapy** can reduce symptoms.
- **Systemic corticosteroids** can be used for short-term treatment. However, there are concerns about rebound flaring and adverse effects.
- **Interferon gamma** is effective.
- The efficacy of **leukotriene inhibitors, desensitization injections, and theophylline** is unclear.
- The effectiveness of **alternative treatments** (herbal therapies, hypnotherapy, acupuncture, massage, or biofeedback) is unclear.