Guidelines of care for the management of atopic dermatitis

Section 1. Diagnosis and assessment of atopic dermatitis

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Atopic dermatitis (AD) is a chronic, pruritic, inflammatory dermatosis that affects up to 25% of children and 2% to 3% of adults. This guideline addresses important clinical questions that arise in the management and care of AD, providing updated and expanded recommendations based on the available evidence. In this first of 4 sections, methods for the diagnosis and monitoring of disease, outcomes measures for assessment, and common clinical associations that affect patients with AD are discussed. Known risk factors for the development of disease are also reviewed. (J Am Acad Dermatol 2014;70:338-51.)

Key words: assessment scales; atopic dermatitis; biomarkers; clinical associations; criteria; diagnosis; risk factors.

DISCLAIMER

Adherence to these guidelines will not ensure successful treatment in every situation. In addition, these guidelines should not be interpreted as setting a standard of care, or be deemed inclusive of all proper methods of care nor exclusive of other methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific therapy must be made by the physician and the patient in light of all the circumstances presented by the individual patient and the known variability and biologic behavior of the disease. This guideline reflects the best available data at the time the guideline was prepared. The results of future

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Abbreviations used:

AAD:	American Academy of Dermatology
AD:	atopic dermatitis
ADHD:	attention deficit hyperactivity disorder
CDLQI:	Children's Dermatology Life Quality Index
DFI:	Dermatitis Family Impact
DLQI:	Dermatology Life Quality Index
EASI:	Eczema Area and Severity Index
FLG:	filaggrin
GREAT:	Global Resource for Eczema Trials
IGA:	Investigator's Global Assessment
IgE:	immunoglobulin E
IL:	interleukin
ISAAC:	International Study of Asthma and Allergies in Childhood
MDC:	macrophage-derived chemoattractant
POEM:	Patient-Oriented Eczema Measure
SASSAD:	Six Area, Six Sign Atopic Dermatitis
SCORAD:	SCORing Atopic Dermatitis
SORT:	strength of recommendation taxonomy
TARC:	thymus and activation-regulated chemokine
TISS:	Three-Item Severity Scale
UK:	United Kingdom

studies may require revisions to the recommendations in this guideline to reflect new data.

SCOPE

This guideline addresses the diagnosis and assessment of pediatric and adult atopic dermatitis (AD; atopic eczema) of all severities. Other forms of dermatitis, such as irritant dermatitis and allergic contact dermatitis in those without AD, are outside of the scope of this document. Recommendations on AD treatment and management are subdivided into 4 sections given the significant breadth of the topic and to update and expand on the clinical information and recommendations previously published in 2004. This document is the first section in the series and covers methods for diagnosis and monitoring of AD, disease severity and quality of life scales for outcomes measurement, and common clinical associations that affect patients. A discussion on known risk factors for the development of AD is also presented. The second guideline in the series will address the management and treatment of AD with pharmacologic and nonpharmacologic topical modalities; the third section will cover phototherapy and systemic treatment options; and the fourth section will address the minimization of disease flares, educational interventions, and use of adjunctive approaches.

METHOD

A work group of recognized AD experts was convened to determine the audience and scope of the guideline, and to identify important clinical questions in the diagnosis and assessment of AD (Table I). Work group members completed a disclosure of interests that was updated and reviewed for potential relevant conflicts of interest throughout guideline development. If a potential conflict was noted, the work group member recused him or herself from discussion and drafting of recommendations pertinent to the topic area of the disclosed interest.

An evidence-based model was used and evidence was obtained using a systematic search of PubMed, the Cochrane Library, and the Global Resource for Eczema Trials (GREAT)[1] databases from November 2003 through November 2012 for clinical questions addressed in the previous version of this guideline published in 2004, and from 1964 to 2012 for all newly identified clinical questions as determined by the work group to be of importance to clinical care. Searches were prospectively limited to publications in the English language. MeSH terms used in various combinations in the literature search included: atopic dermatitis, atopic eczema, diagnosis, diagnostic, severity course, assessment, biomarkers, outcomes measures, morbidity, quality of life, appearance, comorbidity, food allergy, allergic rhinitis, asthma, cancer, sleep, growth effects, developmental effects, behavioral, psychological, attention deficit hyperactivity disorder (ADHD), treatment, and outcome. A total of 1417 abstracts were initially assessed for possible inclusion. After removal of duplicate data, 292 were retained for final review based on relevancy and the highest level of available evidence for the outlined clinical questions. Evidence tables were generated for these studies and used by the work group in developing recommendations. The Academy's previously published guidelines on AD were also evaluated, as were other current published guidelines on AD.[2-5]

The available evidence was evaluated using a unified system called the Strength of Recommendation Taxonomy (SORT) developed by editors of US family medicine and primary care journals (ie, *American Family Physician*, *Family Medicine*, *Journal of Family Practice*, and *BMJ USA*).[6] Evidence was graded using a 3-point scale based on the quality of study methodology (eg, randomized control trial, case control, prospective/retrospective cohort, case series, etc) and the overall focus of the study (ie, diagnosis, treatment/prevention/screening, or prognosis) as follows:

I. Good-quality patient-oriented evidence (ie, evidence measuring outcomes that matter to patients: morbidity, mortality, symptom improvement, cost reduction, and quality of life).
II. Limited-quality patient-oriented evidence.
III. Other evidence, including consensus guidelines, opinion, case studies, or disease-oriented evidence (ie, evidence measuring intermediate, physiologic,