

INTRODUCTION

Curriculum United for Better Eczema Care: why, how, and what?

While various medical specialties treat eczema patients, care for these patients is largely fragmented and disorganized. Moreover, standardized treatment protocols that incorporate upcoming eczema therapies and emerging guidelines have yet to be established. Thus, there is both a need and an opportunity to equip clinicians to succeed in this novel and changing era of eczema care. The National Eczema Association's (NEA) strategic plan—developed through extensive discussions with patients who have atopic dermatitis and their caregivers, industry, and providers representing different specialties—called for the creation of an interdisciplinary coalition to steer this initiative. The Coalition United for Better Eczema Care (CUBE-C) is a network of cross-specialty leaders working to help construct an educational curriculum based on standards of effective treatment and disease management.

Why?

Atopic dermatitis (AD) is the most common pediatric skin disease affecting up to 20% of children.¹ This disease carries a significant impact on patient and family quality of life as well as psychosocial well-being. Effective management regimens are multifactorial, often involving biological, psychological, behavioral, and social implications of the disease. While AD often requires a multidisciplinary approach, there remains a discrepancy among specialists and primary care practitioners with regard to a standardized, evidence-based approach for the management of AD.²

Various novel therapies in topical and systemic formulations have been surfacing over the past year, warranting their integration within our current model of treatment. Such therapies include crisaborole, a topical phosphodiesterase-4 inhibitor (PDE-4) and dupilumab, a human monoclonal antibody that inhibits signaling of interleukin-4 and interleukin-13. Other therapies that are currently in clinical trials include other topical PDE-4 inhibitors, IL-31 and IL-13 inhibitors, H4 blockers, and JAK inhibitors. Moreover, emerging guidelines are awaiting incorporation into current practice. One such focus is on emollient therapy from birth as a means of AD prevention, with a cost-effective analysis supporting this intervention.³⁻⁵ Another preventative focus is a new paradigm in food allergy prevention. The National Institutes of Allergy and Infectious Disease (NIAID) recently created an addendum supporting early introduction to peanuts in infants with AD, and adherence to these practices can potentially

decrease the incidence of peanut allergy.⁶ These more sophisticated therapies and guidelines will place new demands on health care providers, many of whom are not adequately informed about therapeutic mechanisms or these new guidelines.

Because of these challenges in eczema care, there is a great need and opportunity to structure an interdisciplinary model that is aligned with evidence-based practice and educate health care providers about recent literature. The NEA established the CUBE-C as a cross-specialty effort to promote medical education and guide eczema care.

The NEA is an organization dedicated to improving the health and quality of life for individuals with eczema and their family members through research, support and education. As part of a 3-year strategic plan, the Roadmap to Advocacy serves to raise awareness about the burden that AD has on patients and families. As part of the goal to equip practitioners with the most effective patient-centered models of eczema, the CUBE-C curriculum has been devised.

How?

CUBE-C is a medical collaborative leadership entity that represents professional areas of medicine relevant to eczema, including:

- Dermatologists
- Allergists
- Primary care providers
- Pediatricians
- Asthma immunologists and/or pulmonologists
- Mental health practitioners
- Evidence-based alternative care practitioners
- Nurse practitioners/physician assistants

To develop the CUBE-C curriculum, experts in atopic dermatitis from across specialties, along with patient representatives, were organized into topic area groups. Each group was responsible for preparing core curriculum materials and slide decks, identifying references supporting all content and highlighting moments of “shared decision-making,” which is when health care providers, patients, and families work together to select therapies. All materials were reviewed by the full panel for critique and consensus, presented at a live summit meeting, and adapted for publication in *Seminars in Cutaneous Medicine and Surgery*. The CUBE-C pro-

■ ■ ■ Introduction

gram is focused on essentials of diagnosis; mechanisms of disease pathogenesis; recognition of comorbidities and disease impact; traditional, alternative, new, and evolving therapies; and aspects of allergy, itch, and infection in atopic dermatitis. The program also addresses cost and context of eczema, potential for interdisciplinary care, and shared patient decision-making and educational interventions as important parts of therapy. Treatment protocols have been compiled to review the holistic reality of typical eczema patients, and address quality-of-life considerations, patient and family preference, adherence and compliance issues, and evidence-based alternative/complementary treatments.

What?

To highlight the eczema medical educational program, the CUBE-C curriculum has been divided into a PowerPoint-based slide deck and review article series as follows:

- Atopic Dermatitis: Diagnosis, Comorbidities, Psychosocial Impact
- Atopic Dermatitis: Pathogenesis
- Atopic Dermatitis: Skin Care and Topical Therapies
- Atopic Dermatitis: Addressing Allergy, Infection, Itch, and Complementary Therapies
- Atopic Dermatitis: Phototherapy and Systemic Therapy
- Atopic Dermatitis: Emerging Therapies
- Atopic Dermatitis: Therapeutic Care Delivery: Access to Care, Therapeutic Education, and Shared Decision-Making

The CUBE-C contributors are hopeful that this material will be useful for all health care practitioners across the spectrum of care of atopic dermatitis.

Lawrence F Eichenfield, MD^{1,2}

Jusleen Ahluwalia, MD^{1,2}

Dawn Marie Davis, MD³

David Fleischer, MD⁴

Andrea Waldman, MD^{1,2}

Jonathan Spergel, MD, PhD^{5*}

¹Division of Pediatric and Adolescent Dermatology, Rady Children's Hospital, San Diego, California.

²Departments of Dermatology and Pediatrics, University of California, San Diego School of Medicine.

³Department of Dermatology, Mayo Clinic Rochester, Rochester, Minnesota.

⁴Pediatric Allergy and Immunology, University of Colorado School of Medicine, Aurora.

^{5*}Senior Author, Division of Allergy and Immunology, The Children's Hospital of Philadelphia; Department of Pediatrics, Perelman School of Medicine at University of Pennsylvania, Philadelphia.

Correspondence: Lawrence F Eichenfield, MD; Leichenfield@rchsd.org

References

1. LeBovidge JS, Elverson W, Timmons KG, et al. Multidisciplinary interventions in the management of atopic dermatitis. *J Allergy Clin Immunol*. 2016;138(2):325-334. <https://doi.org/10.1016/j.jaci.2016.04.003>.
2. McGregor SP, Farhangian ME, Huang KE, Feldman SR. Treatment of atopic dermatitis in the United States: analysis of data from the National Ambulatory Medical Care Survey. *J Drugs Dermatol*. 2017;16(3):250-255.
3. Simpson EL, Chalmers JR, Hanifin JM, et al. Emollient enhancement of the skin barrier from birth offers effective atopic dermatitis prevention. *J Allergy Clin Immunol*. 2014;134(4):818-823. <https://doi.org/10.1016/j.jaci.2014.08.005>.
4. Horimukai K, Morita K, Narita M, et al. Application of moisturizer to neonates prevents development of atopic dermatitis. *J Allergy Clin Immunol*. 2014;134(4):824-830.e6. <https://doi.org/10.1016/j.jaci.2014.07.060>.
5. Xu S, Immaneni S, Hazen GB, Silverberg JI, Paller AS, Lio PA. Cost-effectiveness of prophylactic moisturization for atopic dermatitis. *JAMA Pediatr*. 2017;171(2):e163909. <https://doi.org/10.1001/jamapediatrics.2016.3909>.
6. Togias A, Cooper SF, Acebal ML, et al. Addendum guidelines for the prevention of peanut allergy in the United States: report of the National Institute of Allergy and Infectious Diseases-sponsored expert panel. *Pediatr Dermatol*. 2017;34(1):e1-e21. <https://doi.org/10.1111/pde.13093>.