Novel concepts of prevention and treatment of atopic dermatitis through barrier and immune manipulations with implications for the atopic march

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Learning objectives: “Novel concepts of prevention and treatment of atopic dermatitis through barrier and immune manipulations with implications for the atopic march”

1. To recognize the role of epidermal barrier abnormalities in patients with atopic dermatitis and the subsequent atopic march.
2. To identify primary and secondary interventions that might be helpful in patients with atopic dermatitis.

CME items

Question 1. Which primary intervention is recommended by the authors to help prevent the atopic march (ie, atopic dermatitis, food allergy, asthma, and allergic rhinitis)?
A. early dietary introduction of peanut products around 4 to 6 months of age
B. moisturizing skin early in life
C. prophylactic intermittent topical steroid use
D. antibiotic treatment for wheeze-associated respiratory tract infections

Question 2. The majority of patients with atopic dermatitis have a dysbiosis characterized by a reduction in microbial diversity and colonization of which microbe?
A. Staphylococcus aureus
B. Streptococcus pneumoniae
C. Serratia marcescens
D. Escherichia coli

Question 3. Atopic dermatitis is thought to predispose to other allergic diseases through which mechanism?
A. allergen sensitization through a disrupted skin barrier
B. primarily NK cell–driven responses
C. decreased transepidermal water loss
D. increased TH1 responses

Question 4. Which is true regarding the role of filaggrin in patients with atopic dermatitis?
A. The majority of patients with atopic dermatitis have a filaggrin mutation.
B. All patients with filaggrin mutations will have atopic dermatitis.
C. Filaggrin is a major epidermal structural protein.
D. There is no relationship between filaggrin mutations and increased allergic sensitization.

Question 5. Ceramide-dominant moisturizers are thought to be beneficial in the treatment of atopic dermatitis through which mechanism?
A. maintaining an alkaline skin pH
B. restoring cutaneous lipids
C. producing antimicrobial effects
D. none (They are not thought to be effective.)