

Pediatric atopic dermatitis patient case series integrating ceramides-containing cleansers and moisturizers to prescription treatment and maintenance approaches

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Abstract

Introduction: Atopic dermatitis (AD) is a common, chronic-recurrent disorder typically starting in infancy and early childhood and associated with pruritus and genetic predisposition. Daily use of moisturizers that contain lipids such as ceramides (CER) reduces the rate of AD flares and the need for topical steroid treatment.

A pediatric AD case series is presented to educate healthcare providers treating children with AD to tailor AD prescription therapy, skincare, and maintenance treatment to improve patient outcomes.

Methods: A panel of 8 pediatric dermatologists, dermatologists, and pediatricians who treat pediatric AD patients reported on clinical cases from their practice. During the meeting, the advisors discussed 15 pediatric AD cases and agreed to select six patients covering various presentations of pediatric AD, patient ages, and skin types.

Results: The advisors discussed why they selected the case, previous treatment, type of prevention and education provided, skincare as mono or adjunctive treatment, prescription and non-prescription therapy and maintenance treatment, and clinical pearls.

Patient 1: The 4-month-old boy with Fitzpatrick phototype 3 had eczema since he was one month old and was successfully treated with CER-containing skincare.

Patient 2: The 8-month-old girl with Fitzpatrick phototype 3 presented with keratosis pilaris and eczematous changes, causing her family concern. Her skin condition improved with CER-containing skincare.

Patient 3: The 9-year-old girl with Fitzpatrick phototype 5 has long-standing AD and dark patches on her skin. She received mometasone 0.1% ointment twice daily until clear, followed by crisaborole application once daily. In addition, CER-containing hydrating cleanser and moisturizer were successfully applied twice daily.

Patient 4: The 8-year-old girl with Fitzpatrick phototype 1, possibly having lanolin sensitivity, had recurrent pruritic rashes and scratching since one year of age. Previous treatment with hydrocortisone 1% cream and cocoa butter was not successful. She feels embarrassed by the dark marks and does not want to wear shorts. Treatment was changed to mometasone 0.1% ointment twice daily until clear, followed by crisaborole application once daily. In addition, CER-containing hydrating cleanser and moisturizer were successfully applied twice daily.

Patient 5: The 6-year boy with Fitzpatrick phototype 1 has a family history of asthma, and AD and presented with recurrent pruritic flares on his arms and body, interfering with his sleep. He used a regular soap bar for cleansing, followed by triamcinolone as needed and crisaborole. Treatment was changed to mometasone 0.1% ointment twice daily to the plaques and tapered twice or thrice a week. CER-containing hydrating cleanser and healing ointment were applied once or twice daily. At six weeks, his skin was clear.

Patient 6: The 2-year-old girl with Fitzpatrick phototype 1 presented with recurrent rashes and scratching in her sleep. She previously applied hydrocortisone 2.5% cream, which did not help. Treatment was changed to alclometasone 0.05% ointment for the face, mometasone 0.1% ointment for the body, and oral hydroxyzine 10mg. CER-containing

hydrating cleanser and healing ointment were applied once or twice daily. The regime cleared her skin 90%.

Conclusion: Sharing best-practice in AD therapy and maintenance treatment for pediatric eczema patients may support healthcare providers treating children to improve clinical outcomes. Consistent skincare use with CER-containing cleansers and moisturizers as mono or adjunctive to prescription treatment promoted a healthy skin barrier.