LiVDerm
REVOLUTIONIZING DERMATOLOGY EDUCATION

ATOPIC DERMATITIS

Scientific Guidelines

01

Review guidelines from American Academy of Dermatology Association for AD diagnosis and assessment, treatment with topical therapies, treatment with phototherapy and systemic agents, and flare prevention and use of adjunctive therapies and approaches.

Use the AD CareNavigator to assist with diagnosis, treatment, insurance and more.

02

ASSESSMENT OF SEVERITY

	Skin characteristics	Impact on quality of life and well-being
Mild	• Areas of dry skin • Infrequent itching with or without small areas of redness	• Little impact on everyday activities, sleep and psychosocial well-being
Moderate	• Areas of dry skin • Frequent itching • Redness with or without excoriation and localized skin thickening	• Moderate impact on everyday activities and psychosocial well-being • Frequently disturbed sleep
Severe	• Widespread areas of dry skin • Incessant itching • Redness with or without excoriation, extensive skin thickening, bleeding, oozing, cracking, and alteration of pigmentation	• Severe limitation of everyday activities and psychosocial functioning • Nightly loss of sleep

TREATMENT

NONPHARMACOLOGIC MANAGEMENT

Often the first treatment prescribed to a patient newly diagnosed with psoriasis, topicals are applied to the skin. Topical corticosteroids, nonsteroids calcineurin inhibitors and retinoids are commonly prescribed, as well as administering phototherapy using ultraviolet lights A or B.

PHARMACOLOGIC TOPICAL TREATMENTS

Use topical medications to treat patients with mild-to-moderate AD that has not responded to nonpharmacologic management:

- Topical corticosteroids (desonide, hydrocortisone, fluocinolone, triamcinolone, betamethasone dipropionate)
- Topical calcineurin inhibitors (tacrolimus, pimecrolimus)
- Topical anti-inflammatory agents (tacrolimus)
- Topical phosphodiesterase (PDE) 4 inhibitors (crisaborole)

PHOTOTHERAPY

Narrowband ultraviolet B (NBUVB) and medium-dose ultraviolet A1 (UVA1) therapy may effectively reduce symptoms in patients with mild-to-moderate AD. High-dose UVA1 may be effective for darker skin.

ORAL ANTIHISTAMINES

First-generating sedating antihistamines (diphenhydramine, hydroxyzine, cyproheptadine) can be used to relieve itch and aid sleep in patients with persistent or moderate AD.

ORAL CORTICOSTEROIDS

Effectively treat moderate-to-severe cases of AD with oral corticosteroids (prednisone) for short-term use, only.

ORAL IMMUNOMODULATORY AGENTS

Refractory and moderate-to-severe AD cases can be treated with immunosuppressive agents taken orally, usually only for short-term use:

- Calcineurin inhibitors (cyclosporine)
- Antimetabolites (methotrexate, azathioprine, mycophenolate mofetil)

BIOLOGICS

Injectable monoclonal antibody drugs (dupilumab, omalizumab, rituximab, ustekinumab) and oral phosphodiesterase inhibitors (apremilast) can be used to treat patients with severe AD who have not responded well to other treatments.

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ATOPIC DERMATITIS IN PEDIATRIC PATIENTS

Atopic Dermatitis (AD) is common in babies and children, often initially appearing between 3 and 6 months old. It presents as dry, sensitive skin that may become red, scaly and itchy. The AD rash typically first appears on an infant's face and scalp, and may localize around the creases of their neck, wrists, elbows, knees, ankles or armpits as they get older.

AD CLINICAL PRESENTATION AND TREATMENT BY AGE

Age	Skin characteristics	Impact on quality of life and well-being
Infant (birth to 12 months old)	Pruritic, erythematous plaques confined to face and extensor surfaces of limbs With or without sparing of groin and axilla, or scalp dermatitis	Topical corticosteroids (desonide, crisaborole), oral antihistamines (diphenhydramine, hydroxyzine, doxepin), topical antipruritics (pramoxine)
Child (1 year old to puberty)	Pruritic, erythematous plaques commonly presenting on the flexural surfaces (antecubital and popliteal fossae, posterior neck)	All of the above, and systemic corticosteroids (prednisone), topical immunomodulators (tacrolimus and pimecrolimus), topical antimicrobials (mupirocin, bacitracin), topical antifungals (ketoconazole)
Adolescent (puberty to 18 years old)	All of the above With or without concomitant hand dermatitis	All of the above, and targeted biologics (dupilumab), oral and topical Janus kinase (JAK) inhibitors (baricitinib, tofacitinib)

BIOLOGIC USE IN PEDIATRIC PATIENTS

Drug	Target	Route	Age
Baricitinib	JAK1/2	Oral	9 years and older
Tofacitinib	Topical JAK1/3	Oral or topical	2 years and older
Cyclosporine	IL-2	Oral	2 years and older
Crisaborole	PDE4	Topical	3 months and older
Dupilumab	IL-4 receptor α	Injection	6 years and older
Apremilast	PDE4	Oral	6 years and older
Omalizumab	IgE	Injection	6 years and older

AD TREATMENTS IN CLINICAL TRIALS FOR USE IN PEDIATRIC PATIENTS

Drug	Target	Route	Phase
Tralokinumab	IL-13	Injection	III
Lebrikizumab	IL-13	Injection	III
Upadacitinib	JAK1	Topical	I
Delgocitinib	JAK1/2/3 and tyrosine kinase2	Topical	III
Ruxolitinib	JAK1/2	Topical	III
Tapinarof	Aryl hydrocarbon receptor ligand	Topical	III

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