

ATOPIC DERMATITIS MANAGEMENT (Part 1 of 2)

| Therapy | | Strength | Dosage form | Dosing/frequency | Recommendations |
|--|--|------------------------|------------------------------------|---|--|
| NON-PHARMACOLOGIC | | | | | |
| Topical moisturizers | Emollients (glycol and glyceryl stearate, soy sterols) | — | crm, oint, gel, lotion, oil | Liberal and frequent reapplication. Apply soon after bathing to improve skin hydration. | <ul style="list-style-type: none"> Mild AD: main primary treatment. Moderate to severe AD: incorporated into regimen. |
| | Occlusives (petrolatum, dimethicone, mineral oil) | | | | |
| | Humectants (glycerol, lactic acid, urea) | | | | |
| Prescription emollient devices | Palmitoylethanolamide-, glycyrrhetic acid-, or other hydrolipid-containing preparations | — | crm | 2–3 times daily. | <ul style="list-style-type: none"> Adjunct to treatment and maintenance. More costly than topical moisturizers but not superior. |
| Bathing | Water | — | — | Once daily for 5–10mins (warm water). Apply moisturizer immediately after bathing. <i>Severely inflamed skin:</i> up to 20mins; apply topical anti-inflammatory therapies (TCS) immediately after without towel drying. | <ul style="list-style-type: none"> Use of nonsoap-based surfactants and synthetic detergents (syndets) are often recommended. Limit use of neutral-to-low pH, hypoallergenic, and fragrance-free nonsoap cleansers. Limited data on the addition of oils, emollients, and other related additives to bath water, and the use of acidic spring water (balneo-therapy) and water-softening devices; not recommended. |
| Wet-wrap therapy | Topical agent covered by wetted first layer (tubular bandage, gauze, cotton suit) and dry second layer | — | — | Up to 24hrs at a time for up to 2wks. | <ul style="list-style-type: none"> For significant flares and/or recalcitrant disease. Use with or without TCS for moderate to severe AD (caution with medium to higher potency TCS).¹ |
| Phototherapy | UVB | Narrowband (309–312nm) | — | Administer to affected areas 2–5 times weekly | <ul style="list-style-type: none"> Last-line therapy for non-immunocompromised patients with topical treatment failure. |
| PHARMACOLOGIC | | | | | |
| Topical Corticosteroids² | | | | | |
| Very high potency | augmented betamethasone dipropionate (ointment) | 0.05% | crm, oint, lotion, foam, soln, gel | <i>Treatment:</i> apply twice daily until lesions improve, for up to 2–4wks at a time; for high potency TCS, may apply once daily. Use 0.5g for an area of 2 adult palms. <i>Maintenance:</i> apply 1–2 times weekly for frequent, repeated flares at same site. | <ul style="list-style-type: none"> First-line pharmacologic therapy for mild to moderate AD if uncontrolled by moisturizers or irritant avoidance. Use concomitantly with moisturizers. Use least potent TCS that is effective. Lower potency TCS should be used on the face and skin folds and medium to high potency TCS on the body. Monitor cutaneous side-effects during long-term, potent steroid use. Routine monitoring of systemic effects is not recommended. |
| | clobetasol propionate | 0.05% | | | |
| | diflorasone diacetate (ointment) | 0.05% | | | |
| | halobetasol propionate | 0.05% | | | |
| High potency | amcinonide | 0.1% | | | |
| | augmented betamethasone dipropionate (cream) | 0.05% | | | |
| | betamethasone dipropionate | 0.05% | | | |
| | desoximetasone | 0.25% | | | |
| | desoximetasone (gel) | 0.05% | | | |
| | diflorasone diacetate (cream) | 0.05% | | | |
| | fluocinonide | 0.05% | | | |
| | halcinonide | 0.1% | | | |
| | mometasone furoate (ointment) | 0.1% | | | |
| triamcinolone acetonide | 0.5% | | | | |
| Medium potency | betamethasone valerate | 0.1% | | | |
| | clocortolone pivalate | 0.1% | | | |
| | desoximetasone (cream) | 0.05% | | | |
| | fluocinolone acetonide | 0.025% | | | |
| | flurandrenolide | 0.05% | | | |
| | fluticasone propionate | 0.05%, 0.005% | | | |
| | mometasone furoate (cream) | 0.1% | | | |
| | triamcinolone acetonide | 0.1% | | | |
| Lower-medium potency | hydrocortisone butyrate | 0.1% | | | |
| | hydrocortisone probutate | 0.1% | | | |
| | hydrocortisone valerate | 0.2% | | | |
| | prednicarbate | 0.1% | | | |
| Low potency | alclometasone dipropionate | 0.05% | | | |
| | desonide | 0.05% | | | |
| | fluocinolone acetonide | 0.01% | | | |
| Lowest potency | hydrocortisone acetate | 0.5–1% | | | |
| | hydrocortisone base | 0.25–1% | | | |

(continued)

ATOPIC DERMATITIS MANAGEMENT (Part 2 of 2)

| Therapy | Strength | Dosage form | Dosing/frequency | Recommendations | |
|--|-----------------|---------------------------------------|------------------|---|--|
| Phosphodiesterase 4 (PDE4) Inhibitor | | | | | |
| crisaborole | Eucriisa | 2% | ointment | <i>Mild to moderate:</i> ≥3mos: apply a thin layer to affected areas twice daily. | <ul style="list-style-type: none"> • First-line treatment |
| Topical Calcineurin Inhibitors | | | | | |
| tacrolimus | Protopic | 0.03%, 0.1% | ointment | <i>Moderate to severe:</i> ≥2yrs ³ : apply a thin layer to affected areas twice daily. 2–15yrs: use 0.03% strength. ≥16yrs: use 0.03% or 0.1% strength. May use 2–3 times weekly as maintenance therapy to prevent recurrent flares. | <ul style="list-style-type: none"> • Second-line therapy for short-term and non-continuous chronic treatment of AD in non-immunocompromised patients with inadequate response to topical prescription therapies or when they are not advisable. • Preferred for sensitive areas (eg, face, skin folds). • Not recommended during active infections of lesions. • May be combined with TCS sequentially or concomitantly. • Long term safety has not been established due to association with skin malignancies and lymphoma; avoid continuous long-term use in any age group. |
| pimecrolimus | Elidel | 1% | cream | <i>Mild to moderate:</i> ≥2yrs ³ : apply a thin layer to affected areas twice daily. May use 2–3 times weekly as maintenance therapy to prevent recurrent flares. | |
| Interleukin-4 Receptor Alpha Antagonist | | | | | |
| dupilumab | Dupixent | 100mg/0.67mL, 200mg/1.14mL, 300mg/2mL | SC inj | <i>Moderate to severe:</i> 6–17yrs (15–<30kg): initially 600mg (two 300mg inj at different sites) followed by 300mg every 4wks; (30–<60kg): initially 400mg (two 200mg inj at different sites) followed by 200mg every other week; (≥60kg): initially 600mg followed by 300mg every other week. ≥18yrs: initially 600mg followed by 300mg every other week. | <ul style="list-style-type: none"> • Reserved for patients with inadequate response to topical prescription therapies or when they are not advisable. • May use with or without TCS. • Topical calcineurin inhibitors may also be used, but should be reserved only for problem areas (eg, face, neck, intertriginous and genital areas). |
| tralokinumab-ldrm | Adbry | 150mg/mL | SC inj | <i>Moderate to severe:</i> ≥18yrs: initially 600mg (four 150mg inj), followed by 300mg (two 150mg inj) every other week. After 16wks, may consider 300mg every 4wks for patients weighing <100kg who achieve clear or almost clear skin. | |
| Janus Kinase Inhibitor⁴ | | | | | |
| ruxolitinib | Opzelura | 1.5% | cream | <i>Mild to moderate:</i> ≥12yrs: apply a thin layer to the affected areas (up to 20% BSA) twice daily; max 60g/wk. | <ul style="list-style-type: none"> • For short-term and non-continuous chronic treatment of AD in non-immunocompromised patients with inadequate response to topical prescription therapies or when they are not advisable. • Not recommended during active infections, and for use with biologics, other JAK inhibitors, or potent immunosuppressants (eg, azathioprine, cyclosporine). |

OTHER RECOMMENDATIONS

- Topical antimicrobial preparations (topical antibiotics, antiseptics, antibacterial soaps, antibacterial bath additives) are not routinely recommended.
- For moderate to severe AD, bleach baths with intranasal mupirocin may be recommended to reduce disease severity.
- Topical antihistamines (eg, doxepin, diphenhydramine) are not recommended due to risk of absorption and contact dermatitis.
- No adequate data to recommend topical coal tar derivatives.
- Systemic immunosuppressants (eg, methotrexate, mycophenylate mofetil, azathioprine) have been recommended for severe AD in patients with topical treatment failure.

NOTES

Key: AD = atopic dermatitis; BSA = body surface area; crm = cream; JAK = Janus kinase; MACE = major adverse cardiovascular events; oint = ointment; soln = solution; UVB = ultraviolet B; TCS = topical corticosteroid

¹ Increased absorption of mid- to higher-potency TCS applied under the wraps may cause hypothalamic-pituitary-adrenal axis suppression.

² See Topical Steroid Potencies chart for more drug information.

³ For children aged <2yrs with mild to severe disease, off-label use of tacrolimus 0.03% or pimecrolimus 1% can be recommended.

⁴ Increased risk of serious infections, all-cause mortality, malignancies, MACE, and thrombosis in patients treated with JAK inhibitors for inflammatory conditions.

REFERENCES

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