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Current Therapeutic Strategies, Phototherapy, and Systemic Therapy

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Disclosures

- Investigator for Abbvie, Galderma, Kiniksa, Leo, Lilly, Pfizer, Trevi
- Consultant and/or advisory board member for Abbvie, AnaptysBio, Asana, Arena, BioMX, Boehringer-Ingelheim, Celgene, Dermavant, Dermira, Eli Lilly, Galderma, GlaxoSmithKline, Glenmark, Kiniksa, Leo, Menlo, Novartis, Pfizer, Regeneron, Sanofi-Genzyme
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Ultraviolet therapy

Study	Comparison	Investigator-rated good/excellent control in RR (95% CI)
Bayerl 1999	UVB versus no UVB	No data regarding the primary outcome investigator-rated good/excellent control
Sjovall 1987	Local UVB versus placebo	RR 2.0 (95% CI 0.26 to 15.6)
Sjovall 1987	Local UVB hand versus whole body + hand UVB	RR 2.2 (95% CI 0.83 to 5.8)
Sjovall 1987	Local UVB hand versus whole body versus placebo	RR 3.67 (95% CI 0.90 to 14.97)
Brass 2015	Local NB-UVB versus topical PUVA	RR 0.50 (95% CI 0.22 to 1.16)
Sezer 2007	Local NB-UVB versus topical PUVA	NB-UVB was effective in 2/12 hands and topical PUVA was effective in 1/12 hands

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Christoffers WA, Coenraads PJ, Svensson A, Diepgen TL, Dickinson B, Xia J, Williams HC. Interventions for hand eczema. Cochrane Database Syst Rev. 2019 Apr 26;4(4):CD004695.

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GW Oral interventions: Alitretinoin

Alitretinoin 10 mg improves:

- investigator-rated symptom control compared with placebo (RR 1.58, 95% CI 1.20 to 2.07; NNTB 11; 2 studies, n = 781)
- participant-rated symptom control (RR 1.73, 95% CI 1.25 to 2.40)

Alitretinoin 30 mg improves:

- investigator-rated symptom control compared with placebo (RR 2.75, 95% CI 2.20 to 3.43; NNTB 4; 2 studies, n = 1210)
- Participant-rated symptom control (RR 2.75, 95% CI 2.18 to 3.48).

- Evidence was rated as high certainty.
- The number of adverse events (including headache) probably did not differ between alitretinoin 10 mg and placebo (RR 1.01, 95% CI 0.66 to 1.55; 1 study, n = 158; moderate-certainty evidence), but the risk of headache increased with alitretinoin 30 mg (RR 3.43, 95% CI 2.45 to 4.81; 2 studies, n = 1210; high-certainty evidence).

School of Medicine & Health Sciences | Christoffers WA, Coenraads PJ, Svensson A, Dieggen TL, Dickinson Blok JL, Xia J, Williams HC. Interventions for hand eczema. Cochrane Database Syst Rev. 2019 Apr; 2019(4):CD004055. <http://onlinelibrary.wiley.com/doi/10.1002/spe.1424> emb.uwa.edu.au

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GW Oral interventions: Cyclosporine A

Oral cyclosporine A 3 mg/kg/day probably *slightly* improves:

- investigator-rated control of symptoms (RR 1.88, 95% CI 0.88 to 3.99; 1 study, 34 participants)
- participant-rated control of symptoms (RR 1.25, 95% CI 0.69 to 2.27) compared to topical betamethasone dipropionate 0.05% after six weeks of treatment.

- Risk of adverse events, e.g. dizziness, was similar between groups (up to 36 weeks; RR 1.22, 95% CI 0.80 to 1.86, n = 55; 15/27 betamethasone versus 19/28 cyclosporin).
- Evidence was rated as moderate certainty.

School of Medicine & Health Sciences | Christoffers WA, Coenraads PJ, Svensson A, Dieggen TL, Dickinson Blok JL, Xia J, Williams HC. Interventions for hand eczema. Cochrane Database Syst Rev. 2019 Apr; 2019(4):CD004055. <http://onlinelibrary.wiley.com/doi/10.1002/spe.1424> emb.uwa.edu.au

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GW Guidelines for systemic therapy in hand eczema

- Consensus guidelines
- Panel of dermatologists and a general practitioner (GP) with a special interest in dermatology

English J, Aldridge R, Gawkrödger DJ, Kowonicki S, Statham B, White JLM, et al. Consensus statement on the management of chronic hand eczema. *Clinical and Experimental Dermatology* 2009;34(7):763-9.

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Guidelines for systemic therapy in hand eczema

- German Dermatologic Society
- Canadian
 - Recommended*
 - Highly potent corticosteroids
 - UV therapy
 - **Alitretinoin**
 - Last resort*
 - Other systemic treatment, e.g. cyclosporin

Diepgen TL, Elzein P, Schlemann S, Fartzach M, Köllner A, Burdick C, et al. Guideline on the management of hand eczema ICD-10 Code: L20, L23, L24, L25, L30. Journal der Deutschen Dermatologischen Gesellschaft 2009;71(Suppl 3):S1-S6.
Lynde C, Guenther L, Diepgen TL, Sasseville D, Poulin Y, Gulliver W, et al. Canadian hand dermatitis management guidelines. Journal of Cutaneous Medicine and Surgery 2010;14(6):207-84.

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US experience with systemic therapy for hand eczema

- Narrow-band UVB is the predominant modality of phototherapy
 - Better safety and tolerability than PUVA
 - Relatively slow onset of efficacy
 - Often inadequate efficacy
- Alitretinoin is not approved in the US
 - All the published guidelines are not relevant to the US
- Cyclosporine works well short-term
 - Generally cannot be used for long-term maintenance
 - Requires 3.5+ mg/kg/day as a starting dose
 - Poor safety and tolerability profile

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US experience with systemic therapy for hand eczema

- Anecdotally, methotrexate works well long-term
 - Requires high doses
 - Often inadequate efficacy, particularly on xerosis and hyperkeratotic subset.
- Dupilumab is increasingly being used on-label for hand eczema in the context of more generalized AD or off-label for hand eczema
 - Stay tuned!

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Thank you

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