Nail Psoriasis

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Updated 04/23/19
Nail Psoriasis: A Review of Treatment Options. Pasch M.
Drugs. 2016:675.

• Nail involvement affects 80-90% of patients with plaque psoriasis.
Differential Diagnosis

- Onychomycosis
- Yellow nail syndrome
- Lichen planus
- Pachyonychia congenita
- Alopecia areata (pitting)
- Atopic dermatitis
- Squamous cell carcinoma

- 27% of psoriasis patients with FLN → T. unguium
- Prevalence of onychomycosis: 13%
Squamous cell carcinoma

– Dobson CM, et al.
  • Br J Dermatol 2002;147:144-9
Treatment of nail psoriasis

• Topical
  – camouflage
  – 40% urea
  – (potent) steroids (occlusion)
  – Calcipotriol
  – Tar
  – 5-FU
  – Tazarotene
  – cyclosporine
Treatment of psoriatic nails with topical cyclosporin: a prospective, randomized placebo-controlled study.

– Cannavo CP, et al.


• N=16, oil-dissolved 70% CsA solution (A) versus oil alone (B), 12 weeks, patients score
• (A) 3 complete resolution, 5 substantial improvement, (B) 1 moderate improvement
• Conclusion: safe, effective and cosmetically acceptable
Topical anthralin therapy for refractory nail psoriasis.

– Yamamoto T, et al.


• N=20, 0.4-2.0% anthralin in petrolatum, 1x per day 30 min. to nailbed, 5 months
• 12 (60%) moderate to obvious improvement
• 4 (12%) no response
• ↓ onycholysis and pachynuchia and pitting
• side effect: reversible pigmentation nailplate
Clobetasol propionate foam in the treatment of psoriasis.
Reid DC, Kimball AB.
Comparison of nail lacquer clobetasol efficacy at 0.05 %, 1 % and 8 % in nail psoriasis treatment: prospective, controlled and randomized pilot study. Nakamura RC, et al. An Bras Dermatol. 2012;87(2):203–211

• 8% clobetasol nail lacquer most effective

• Tazarotene under occlusion effective for onycholysis and pitting

• less successful in treating subungual hyperkeratosis, leukonychia, nail plate deterioration, and splinter hemorrhages
Matrix based system of Isotretinoin as nail lacquer to enhance transungual delivery across human nail plate.
Joshi M, Sharma V, Pathak K.
Int J Pharm. 2015;478:268-277

- Isotretinoin has also been formulated into a nail lacquer for topical use in treating nail psoriasis.
Dystrophic psoriatic fingernails treated with 1% 5-fluorouracil in a nail penetration-enhancing vehicle: a double-blind study.


- N=57, randomised, double-blind, left-right
- 5FU in Nail penetration enhancer Belanyx (urea, propylene glycol) vs. same vehicle without 5FU
  1x per day, 12 weeks
- Similar, significant compared to baseline
Calcipotriol ointment in nail psoriasis: a controlled double-blind comparison with betamethasone dipropionate and salicylic acid.

Tosti A, Piraccini BM, Cameli N, Kokely F, Plozzer C, Cannata GE, Benelli C.


N=58, 2x per day, 3-5 months, efficacy nail thickness, after 3 months (26.5 vs 30.4%) and 5 months (49.2% vs. 51.7%) no significant difference
Severe 20-nail psoriasis successfully treated by low dose methotrexate.

Lee JY.
Low-dose short-term cyclosporine versus etretinate in psoriasis: improvement of skin, nail, and joint involvement.

Treatment of severe nail psoriasis with acitretin: an impressive therapeutic result.

Apremilast, an oral phosphodiesterase 4 inhibitor, in patients with difficult-to-treat nail and scalp psoriasis: Results of 2 phase III randomized, controlled trials (ESTEEM 1 and ESTEEM 2).

Rich P, Gooderham M, Bachelez H, Goncalves J, Day RM, Chen R, Crowley J.

Infliximab efficacy in nail psoriasis. A retrospective study in 48 patients.

A 24-week randomized clinical trial investigating the efficacy and safety of two doses of etanercept in nail psoriasis.

Ortonne JP, Paul C, Berardesca E, Marino V, Gallo G, Brault Y, Germain JM.
Adalimumab for nail psoriasis: Efficacy and safety from the first 26 weeks of a phase 3, randomized, placebo-controlled trial.

ADALIMUMAB

mNAPSI 75 Response Rate

- PBO, N=108
- ADA, N=109

Patients, %

Week 16
- 2.9
- 26.0***

Week 26*
- 3.4
- 46.6***
A Major Win for the Treatment of Nail Psoriasis.
Lipner SR.
Nail Psoriasis Treated With Certolizumab Pegol in Patients With Psoriatic Arthritis: Preliminary Observation.

Determination of the Nail Psoriasis Severity Index improvement rate standards for nail psoriasis treatment in a phase IV clinical trial of ustekinumab: the MARCOPOLO study.


Effect of secukinumab on the clinical activity and disease burden of nail psoriasis: 32-week results from the randomized placebo-controlled TRANSFIGURE trial.

Ixekizumab treatment improves fingernail psoriasis in patients with moderate-to-severe psoriasis: results from the randomized, controlled and open-label phases of NCOVER-3.

Efficacy of Guselkumab Compared With Adalimumab and Placebo for Psoriasis in Specific Body Regions: A Secondary Analysis of 2 Randomized Clinical Trials.

Foley P, Gordon K, Griffiths CEM, Wasfi Y, Randazzo B, Song M, Li S, Shen YK, Blauvelt A.


Response of psoriatic nails to oral photochemotherapy.
Marx JL, Scher RK.

ONLY PITTING FAILED TO RESPOND TO PUVA

PDL > EXCIMER
Treatment of nail psoriasis with Pulse Dye Laser plus calcipotriol betametasona gel vs. Nd:YAG plus calcipotriol betamethasone gel: An intrapatient left-to-right controlled study

Arango-Duque LC, Roncero-Riesco M, Usero Bárcaña T, Palacios Álvarez I,Fernández López E.

Actas Dermosifiliogr. 2017;108(2):140-144.


No difference between the 2 treatments
Psoriasis of the nails treated with grenz rays: a double-blind bilateral trial.
Lindelöf B

“therapeutic response was moderate”
“grenz ray therapy could be useful only when the psoriatic nails are of normal thickness”