NAIL PSORIASIS DIAGNOSIS AND TREATMENT

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DISCLOSURE OF FINANCIAL RELATIONSHIPS WITH INDUSTRY

• CLINICAL RESEARCH AND GRANTS TO UNIVERSITY
  – Amgen, Abbvie, Celgene, Lilly, Merck, Novartis, Pfizer

• CONSULTING: RECEIVED HONORARIUM
  – Celgene, Lilly, Novartis, Pfizer

• SPEAKER BOARDS: NONE

• STOCK: NONE
OBJECTIVES: NAIL PSORIASIS MANAGEMENT

• Recognize nail psoriasis in matrix and nail bed
• Differentiate treatment options of nail matrix and nail bed psoriasis
• Understand the technique of intralesional injection and when to do this procedure
Overview of Nail Psoriasis

- Occurs in up to 78% of patients with psoriasis
- More common in those with psoriatic arthritis (about 80%)
- Usually involves several nails
- Fingernails not toenails have the typical findings
- Only sign of psoriasis in 5% of patients
- May adversely affect quality of life
RECOGNIZING NAIL PSORIASIS
Clinical Features of Nail Psoriasis Most Indicative of Diagnosis

- Irregular pitting of the nail plate
- Salmon-colored patches or oil spots on the nail bed
- Onycholysis with erythematous borders

These findings point to the diagnosis of nail psoriasis.
ONYCHOLYSIS WITH RED BORDER IS NAIL PSORIASIS

NAIL PSORIASIS - ERYTHRONYCHIA
Other Less Specific Clinical Features of Nail Psoriasis:

- Nail bed (subungual) hyperkeratosis (resembles onychomycosis)
- Onychorrhexis of fingernails
- Splinter hemorrhages
- Nail plate thickening and crumbling
- Paronychia
- Rarely: erythema or spotting of lunula, leukonychia

These findings may also occur with other inflammatory or infectious conditions
NAIL PSORIASIS TREATMENT

• Systemic therapy generally improves nail psoriasis to the same extent as skin psoriasis
• Rule out psoriatic arthritis
• Treatment approach of nail bed involvement may differ from nail plate/matrix psoriasis
• Toenails may have concomitant onychomycosis so mycological testing is helpful prior to systemic immunosuppressive therapy
Patient with PSA and fingernail and toenail dystrophy who was starting infliximab
ONYCHOMYCOSIS AND NAIL PSORIASIS
PSORIASIS LOCATION

• **NAIL MATRIX**
  - Pits
  - Crumbly nail plate
  - Dystrophy of plate
  - Leukonychia

• **NAIL BED**
  - Onycholysis
  - Subungual hyperkeratosis
  - Splinter hemorrhages

Matrix involvement requires systemic or intralesional therapy
LOCATION IN NAIL BED

SUBUNGUAL DELIVERY: TOPICAL PRODUCTS MAY REACH DISEASED NAIL BED

DISTAL SUBUNGUAL ONYCHOLYSIS OR HYPERKERATOSIS
TOPICAL THERAPY MAY BE BENEFICIAL

ONYCHOLYSIS/RED BORDER
LOCATION IN NAIL PLATE

TOPICAL PRODUCTS UNABLE TO PENETRATE

MATRIX DISEASE
NAIL MATRIX INVOLVEMENT

FAILED TOPICAL THERAPY
ONYCHOLYSIS AND NAIL PLATE CRUMBLING

BOTH NAIL MATRIX AND NAIL BED DISEASE
TREATMENT OF NAIL BED PSORIASIS
TOPICAL MEDICATIONS

FIRST LINE
• Corticosteroids
• Calcitriol
• Calcipotriol
• Tazarotene
• Tacrolimus

SECOND LINE
• Urea
• Anthralin
• 5-FU
• Cyclosporine 70%
  maize oil solution
TOPICAL TAZAROTENE 0.1% GEL

BEFORE

AFTER

From RK Scher et al. Cutis 2001; 68:355-358
VITAMIN D OINTMENT

BEFORE

AFTER
ROTATIONAL THERAPY

- 62 PATIENTS with 142 abnormal fingernails
- Vit D ointment weekdays and clobetasol on weekends each once daily
- 72% reduction in the hyperkeratosis at 6 months and 81% at 12 months
- No significant adverse events

Rigopoulos D. et al Acta Derm Vener 2002
TREATMENT OF NAIL MATRIX PSORIASIS
TREATMENT OF NAIL MATRIX PSORIASIS

• Short course of Acitretin
  – 0.2 to 0.3 mg/kg/day for 6 months
• Apremilast has efficacy in nail disease
• Biologics generally clear the nails to the same extent as the skin
• Intraleisional injection of corticosteroids in nail unit
  – 3 to 5 mg/ml triamcinolone

Tosti A et al Arch Derm 2009; 145:269-71
INJECTION TECHNIQUES
TOOLS TO GET STARTED

CONTAINS ETHYL CHLORIDE
“SKIN FREEZE”

TOPICAL PRODUCTS CONTAINING LIDOCAINE
TOOLS TO GET STARTED

USE 30 GAUGE NEEDLE!
TOOLS TO GET STARTED

USE 3 to 5 MG TRIAMCINOLONE PER ML

DILUTE WITH LIDOCAINE WITHOUT EPI
TOOLS TO GET STARTED

EPINEPHRINE LIMITS DIFFUSION OF DRUG
SO....

DILUTE WITH LIDOCAINE WITHOUT EPI
NAIL MATRIX PSORIASIS
INJECT AT INTERSECTION OF POSTERIOR AND LATERAL NAIL FOLDS

INJECT A SMALL AMOUNT TO CREATE A BLEB AND SOME LOCAL ANESTHESIA

THEN INJECT INTO PROXIMAL NAIL FOLD
Intralesional triamcinolone diluted with lidocaine to 5mg/cc

May be helpful to spray with Ethyl chloride while injecting
INJECT SUPERFICially IN DIRECTION OF MATRIX AND GO SLOWLY

AIM TOWARD MATRIX FROM EACH SIDE
INJECT IN DIRECTION OF MATRIX, THEN ALONG LATERAL NAIL FOLD

THEN INJECT DOWN LATERAL NAIL FOLDS

SOME DIFFUSION WILL OCCUR UNDER NAIL PLATE INTO NAIL BED WHICH MAY HELP NAIL BED DISEASE

SEVERE NAIL BED DISEASE MAY BENEFIT FROM INTRALESIONAL INJECTION
NAIL PSORIASIS KEY POINTS

• Pits, onycholysis with red border and oil spots are indicative of nail psoriasis

• Nail bed disease- rotational topical therapeutics

• Nail matrix disease – intralesional injections
  – Use triamcinolone 3 to 5 mg/ml which has been diluted with plain lidocaine

• Acitretin for 6 months may be helpful

• Apremilast also has efficacy and may also benefit arthritis

• Biologics work to the extent they do in skin
THE END