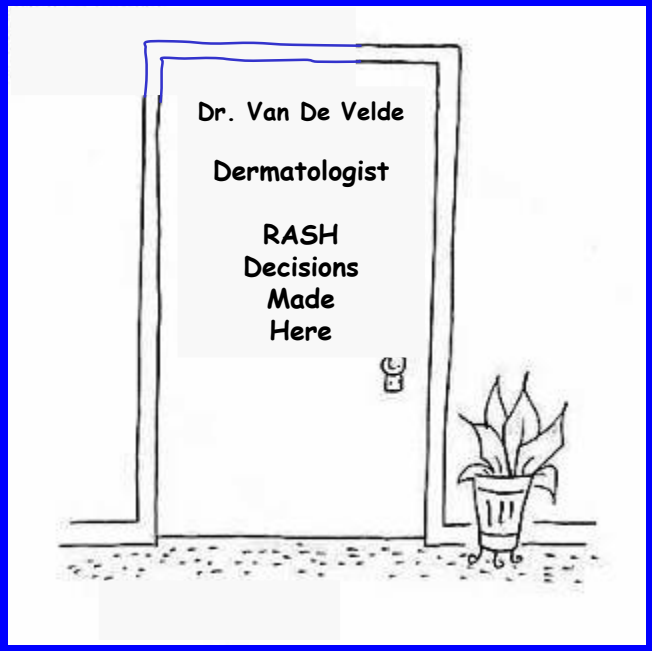
Practical Treatment of Psoriasis

Rochelle Van De Velde, MD. FRCPC.


Dr. Van De Velde
Dermatologist
RASH
Decisions
Made
Here


DERMATOLOGY
JOURNAL
OF
ITCHCRAFT

Faculty/Presenter Disclosure

- **Faculty:** Dr. Rochelle Van De Velde

Relationships with commercial interests:

- **Grants/Research Support:** AbbVie, Amgen, Astellas, Galderma, Janzen Ortho, Leo
- **Speakers Bureau/Honoraria: Galderma, Valeant**

Disclosure of Commercial Support

- **This program has received no financial or in-kind support from any outside organization.**

- **Potential for conflict(s) of interest:**
  - None

Objectives

1. Learn how to recognize and diagnose psoriasis.

2. Learn some practical tips on how to manage psoriasis.

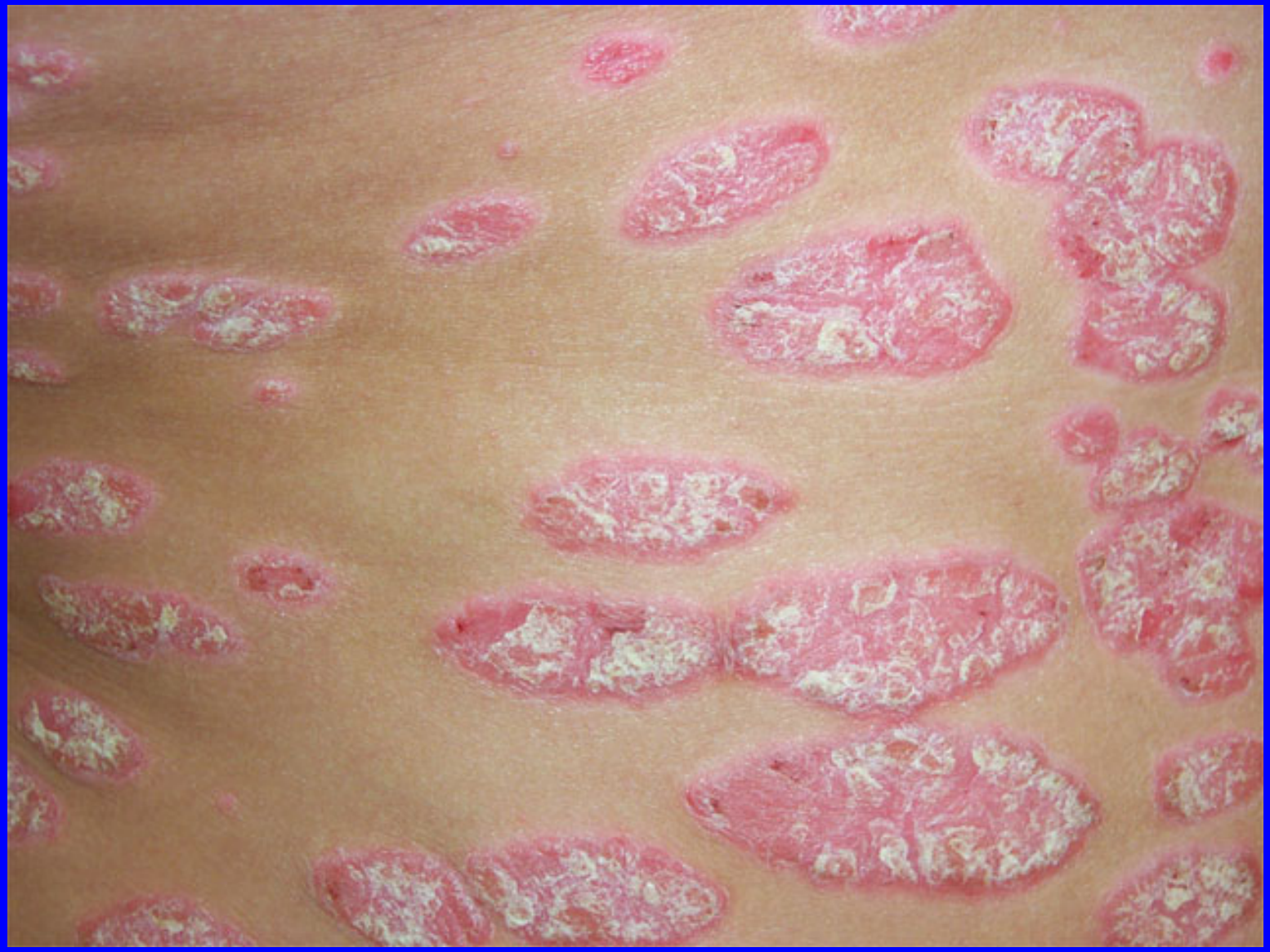
3. Learn when to refer to a dermatologist.

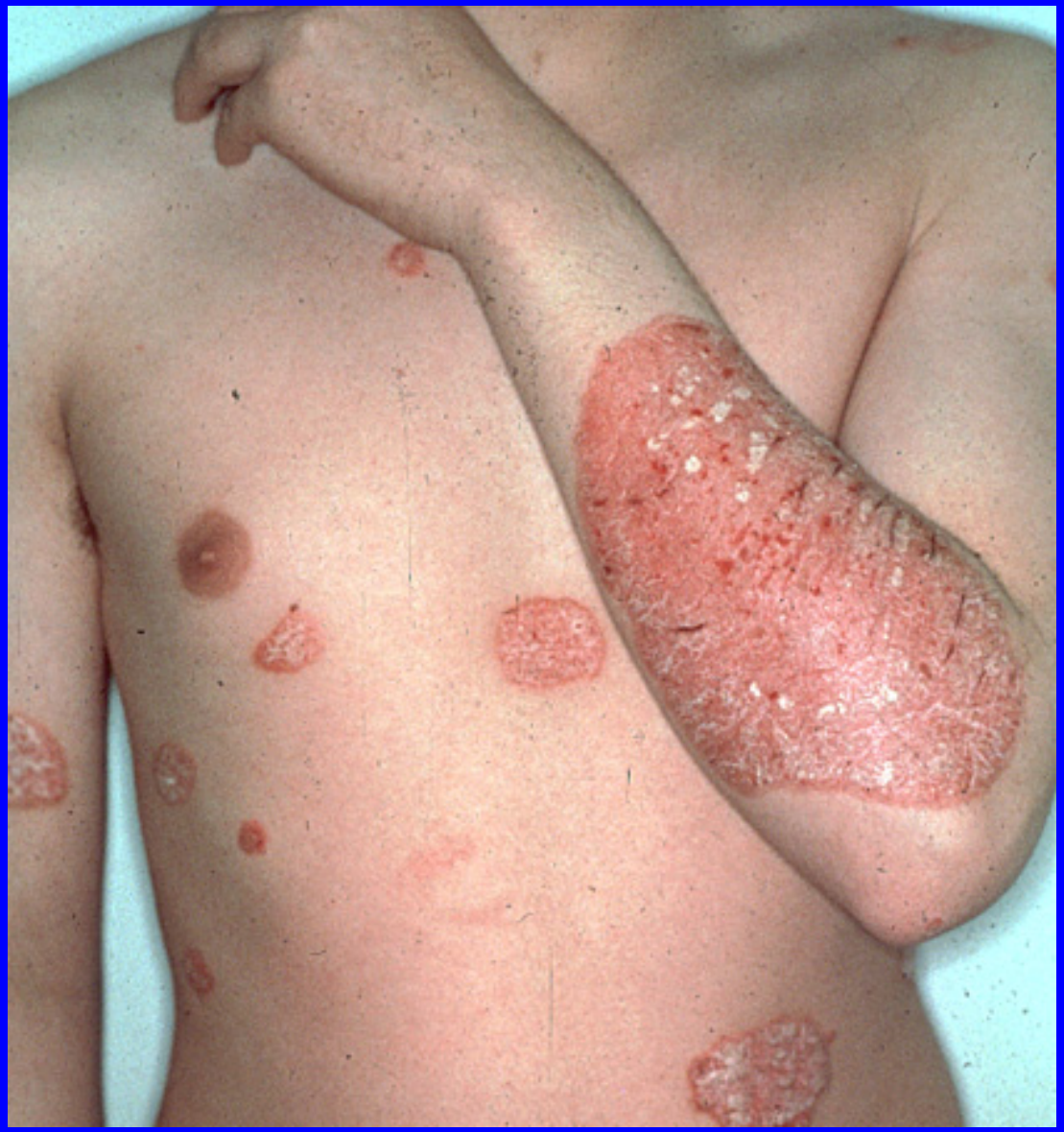
Psoriasis

- Chronic recurrent inflammatory skin condition
- Affected 2-4% of the population of any age with peaks of onset at 15-25 and 50-60 years
- About 1/3 of pts have a positive Fhx
  - Life-time risk with
    - 0 affected parents 4%
    - 1 affected parent 28%
    - 2 affected parents 65%

Psoriasis – Clinical Presentation

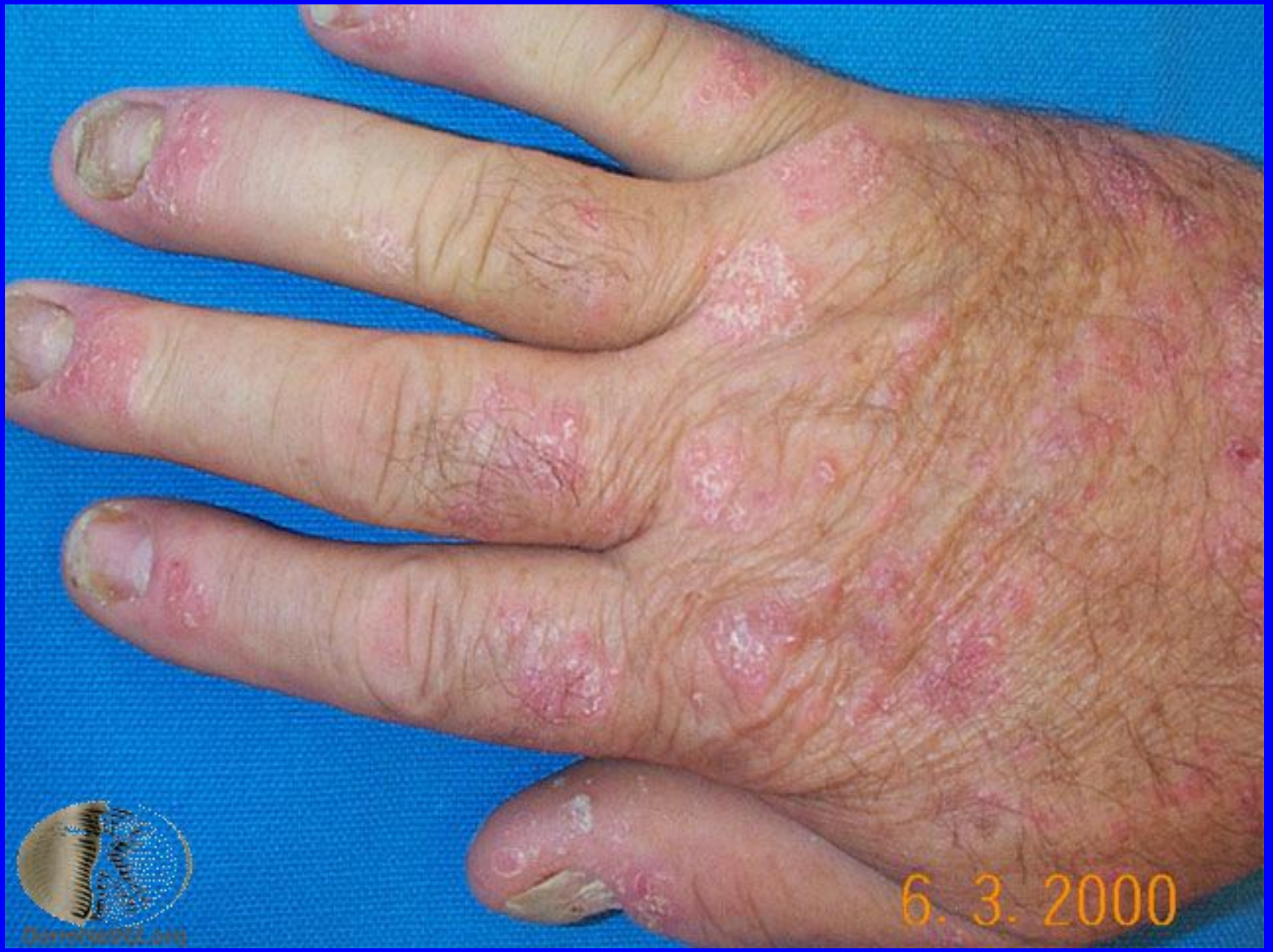
- Well-demarcated, scaly, erythematous plaques with a predilection for the scalp, nails, extensor surfaces of the limbs, umbilical region, sacrum and gluteal fold
- Symmetrical
- Varies from asymptomatic to +++pruritic
- Usually develops slowly unless it follows a Strep infection (guttate psoriasis)





Classification of Psoriasis

- Plaque Psoriasis
- Guttate Psoriasis (follows Strep)
- Flexural or Inverse Psoriasis
- Scalp Psoriasis
- Palmoplantar Psoriasis – keratoderma, painful fissuring, pustules
- Nail Psoriasis- pitting, onycholysis, subungual hyperkeratosis
- Erythrodermic psoriasis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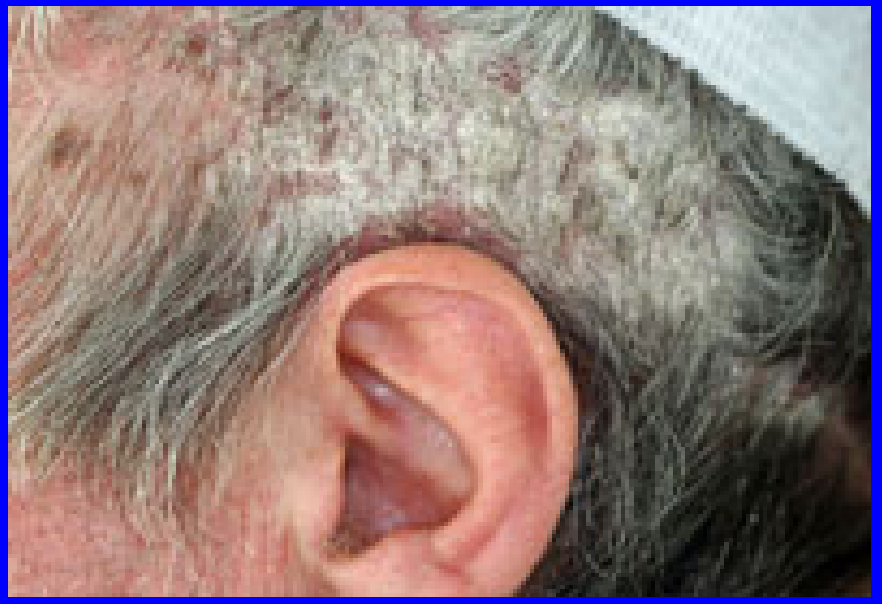

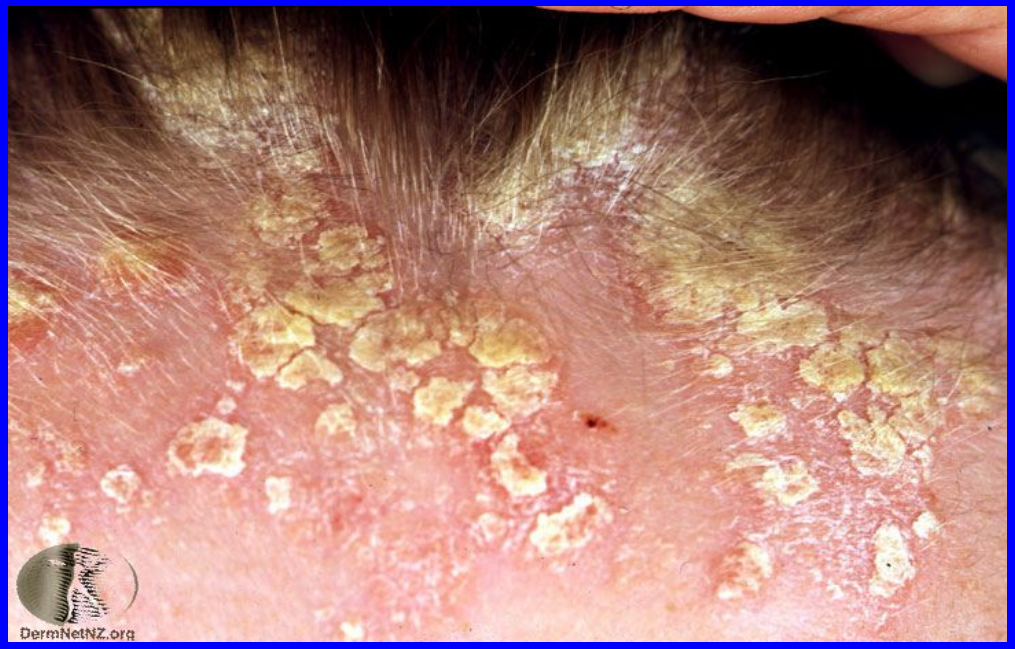
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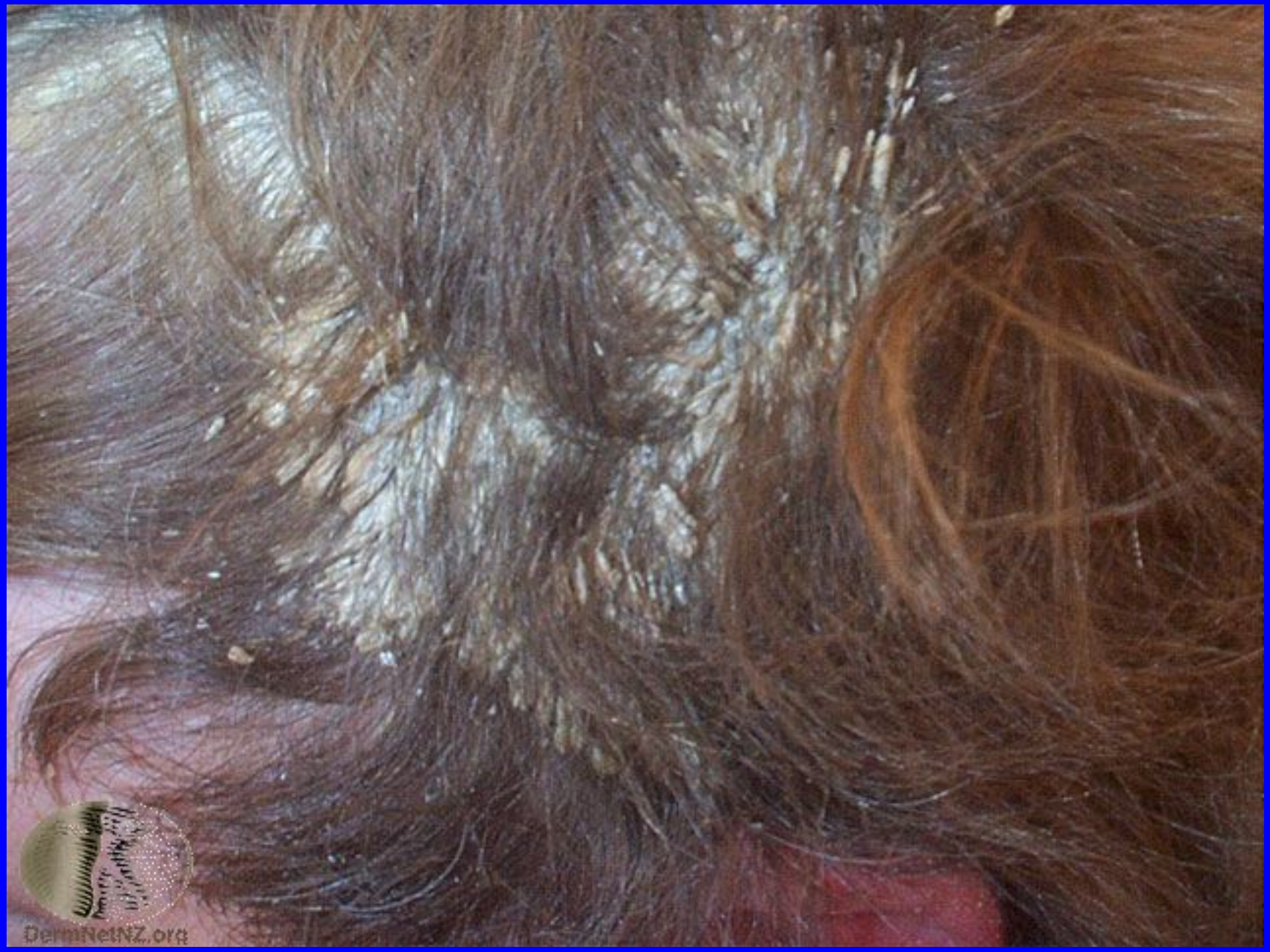
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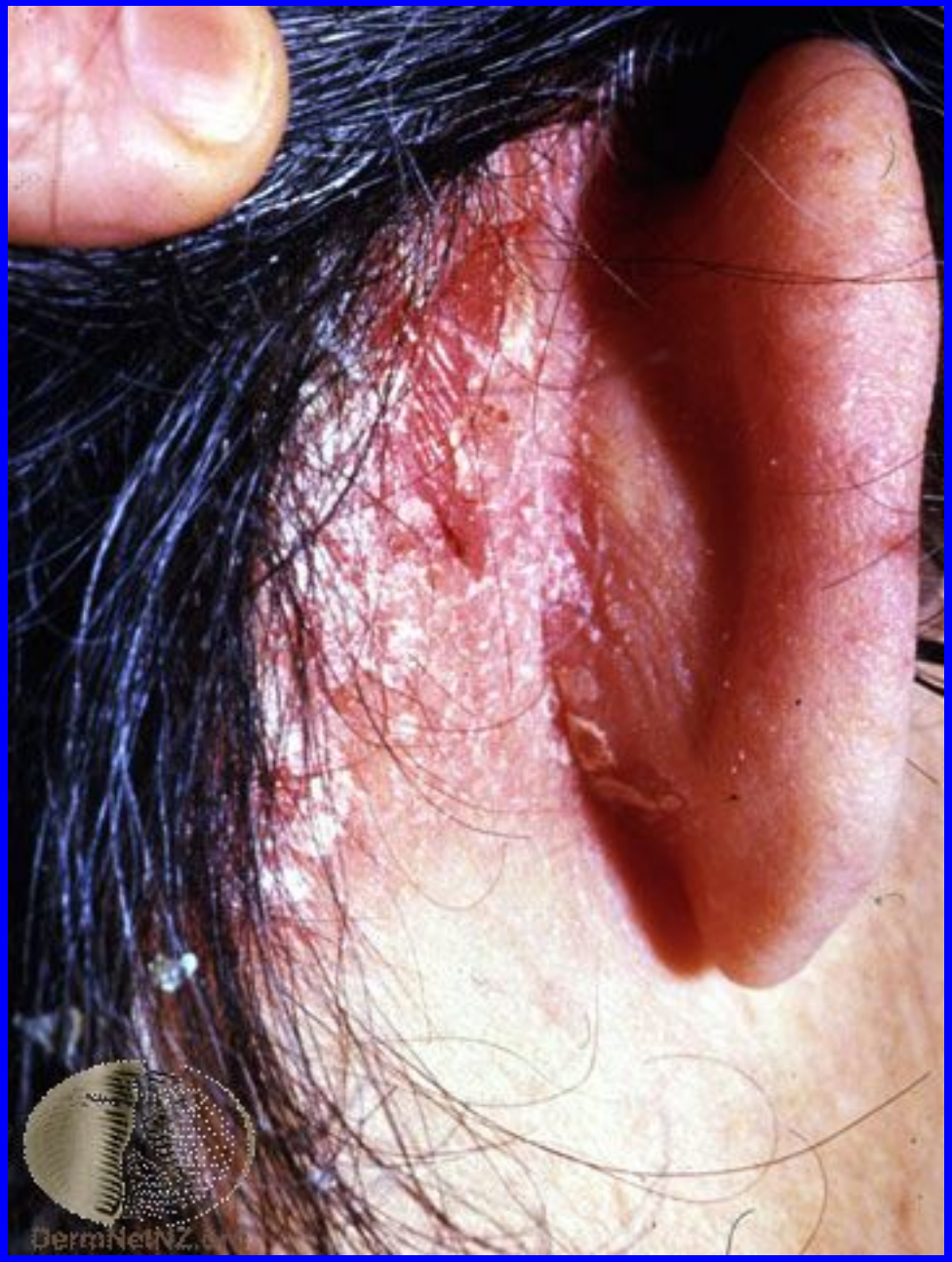
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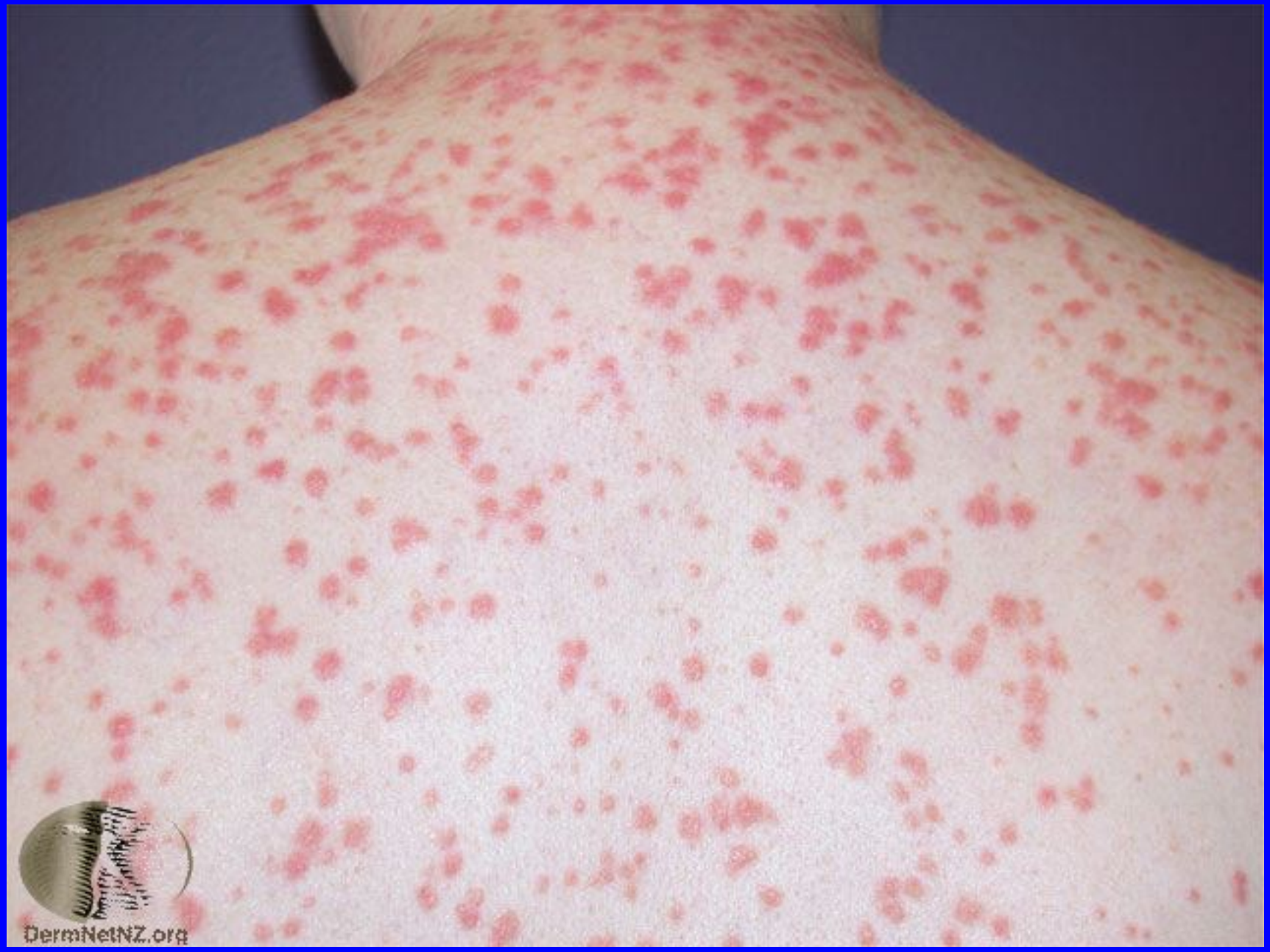
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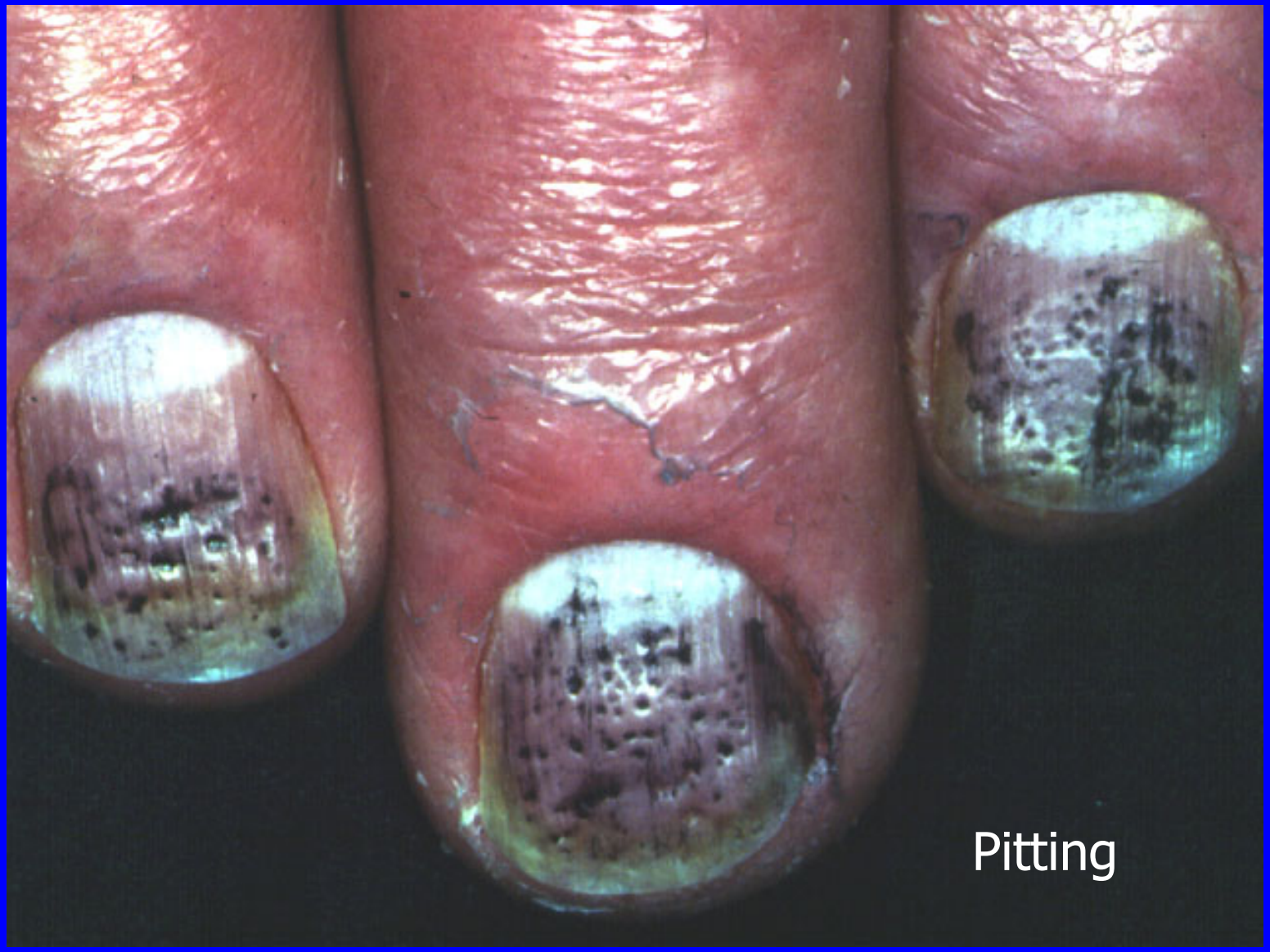
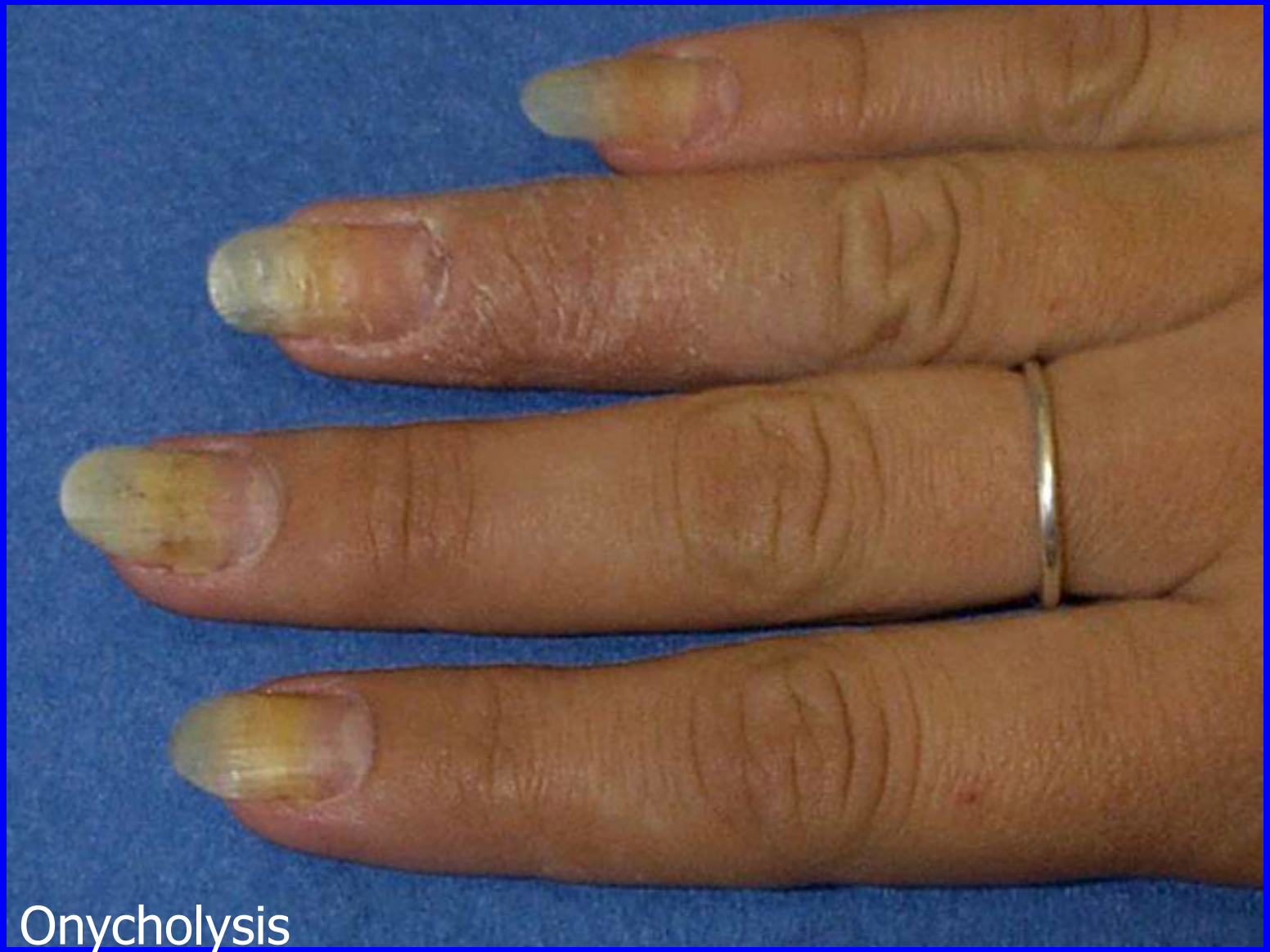
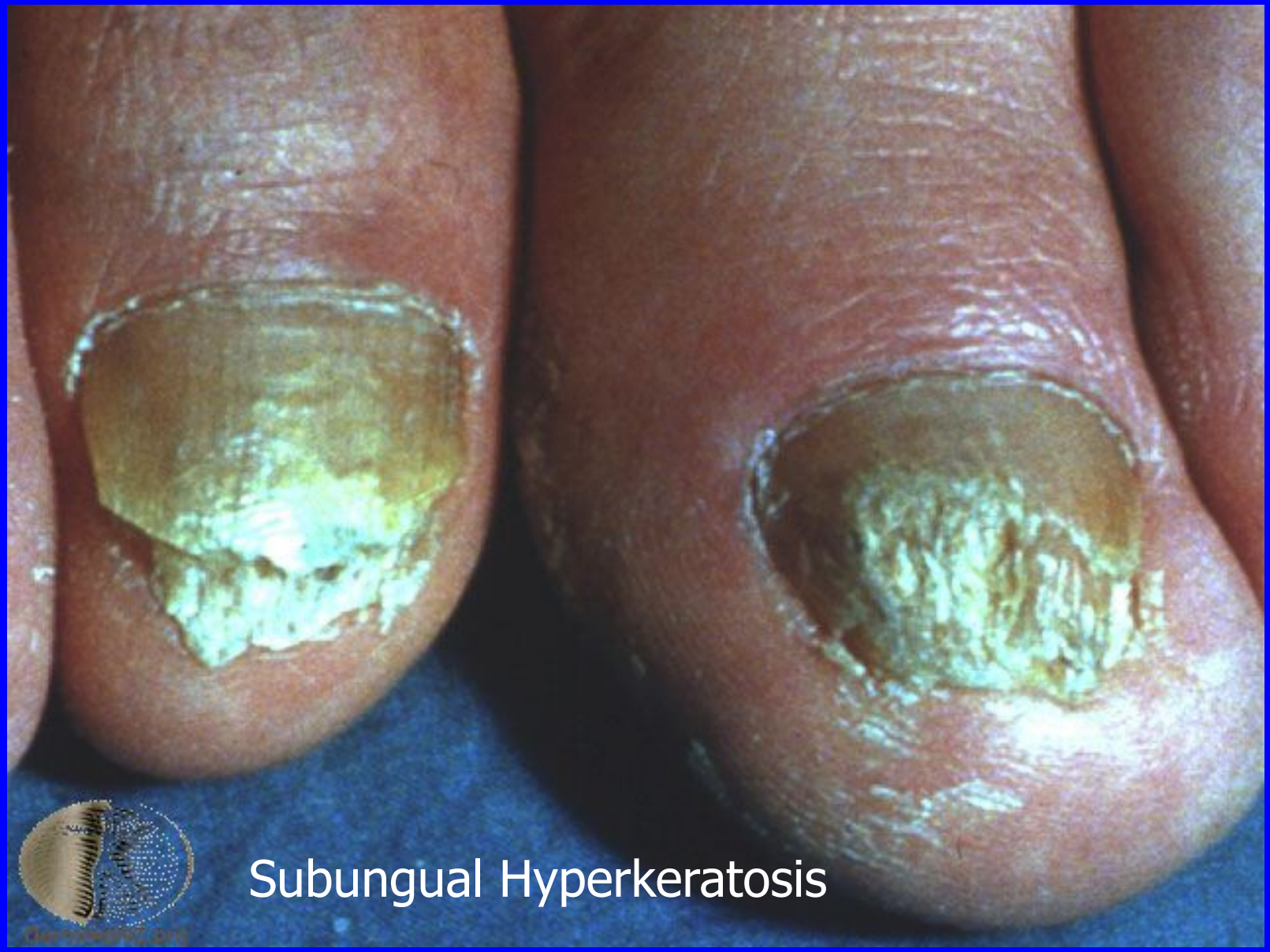
Nail changes in psoriasis

- Pitting
- Onycholysis
- Subungual hyperkeratosis
- Onychodystrophy

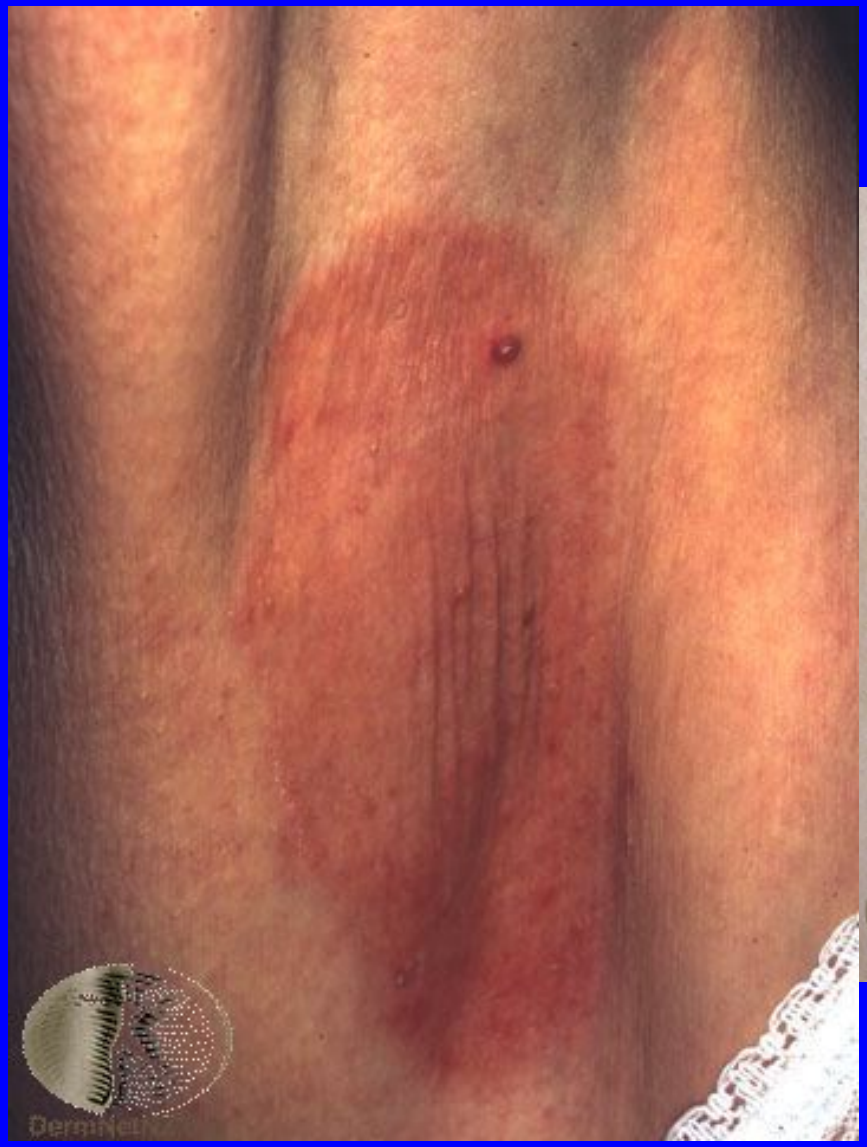

Pitting

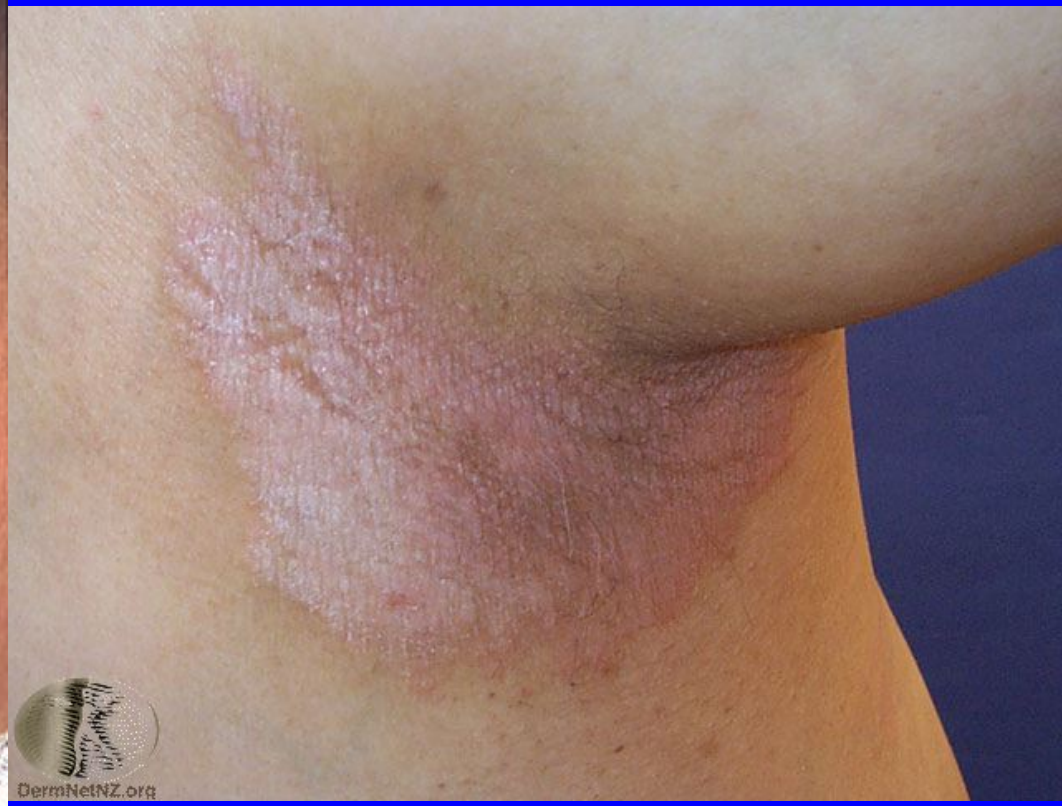


Onycholysis

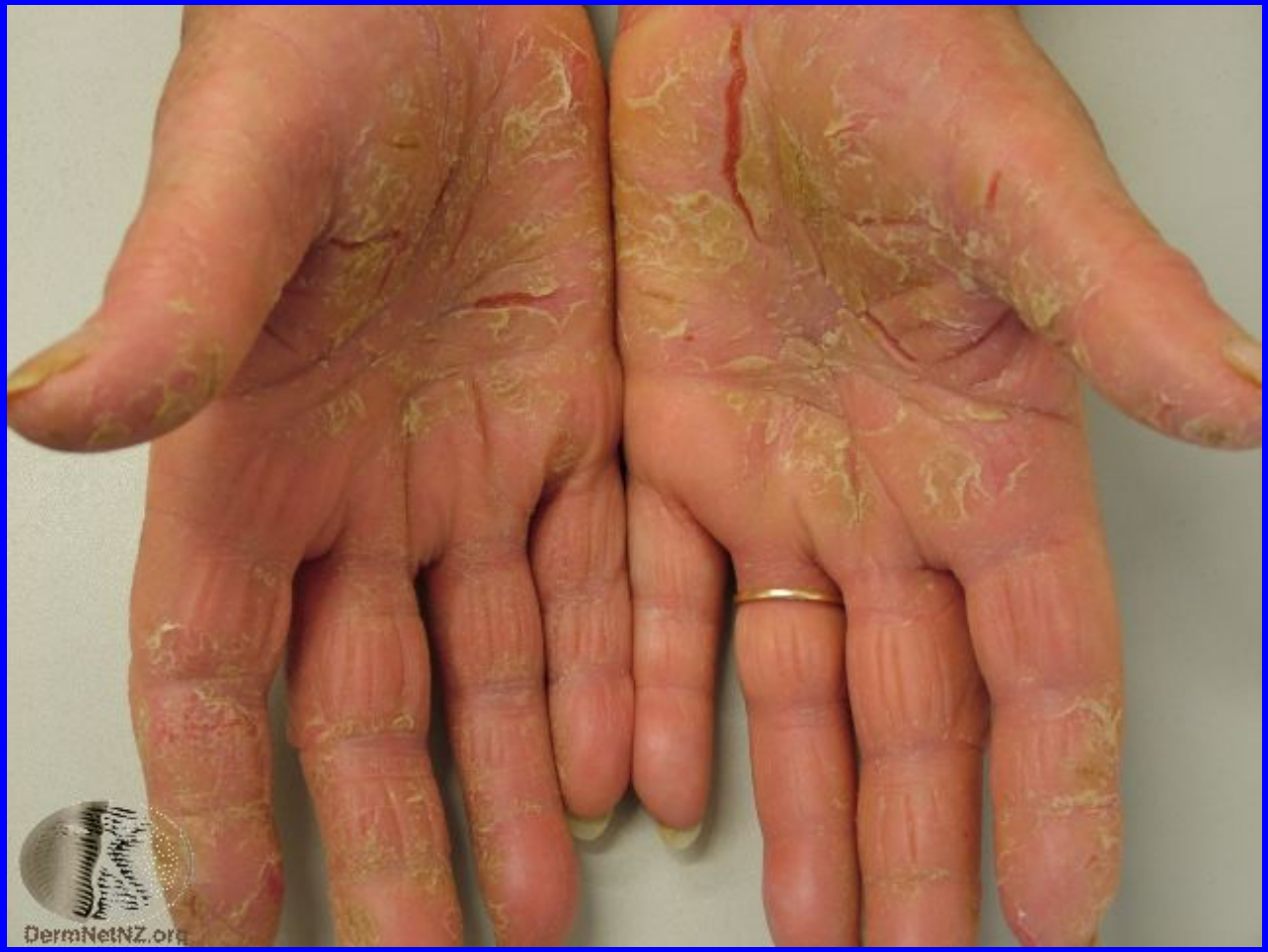

Subungual Hyperkeratosis

Psoriatic Onychodystrophy





Inverse Psoriasis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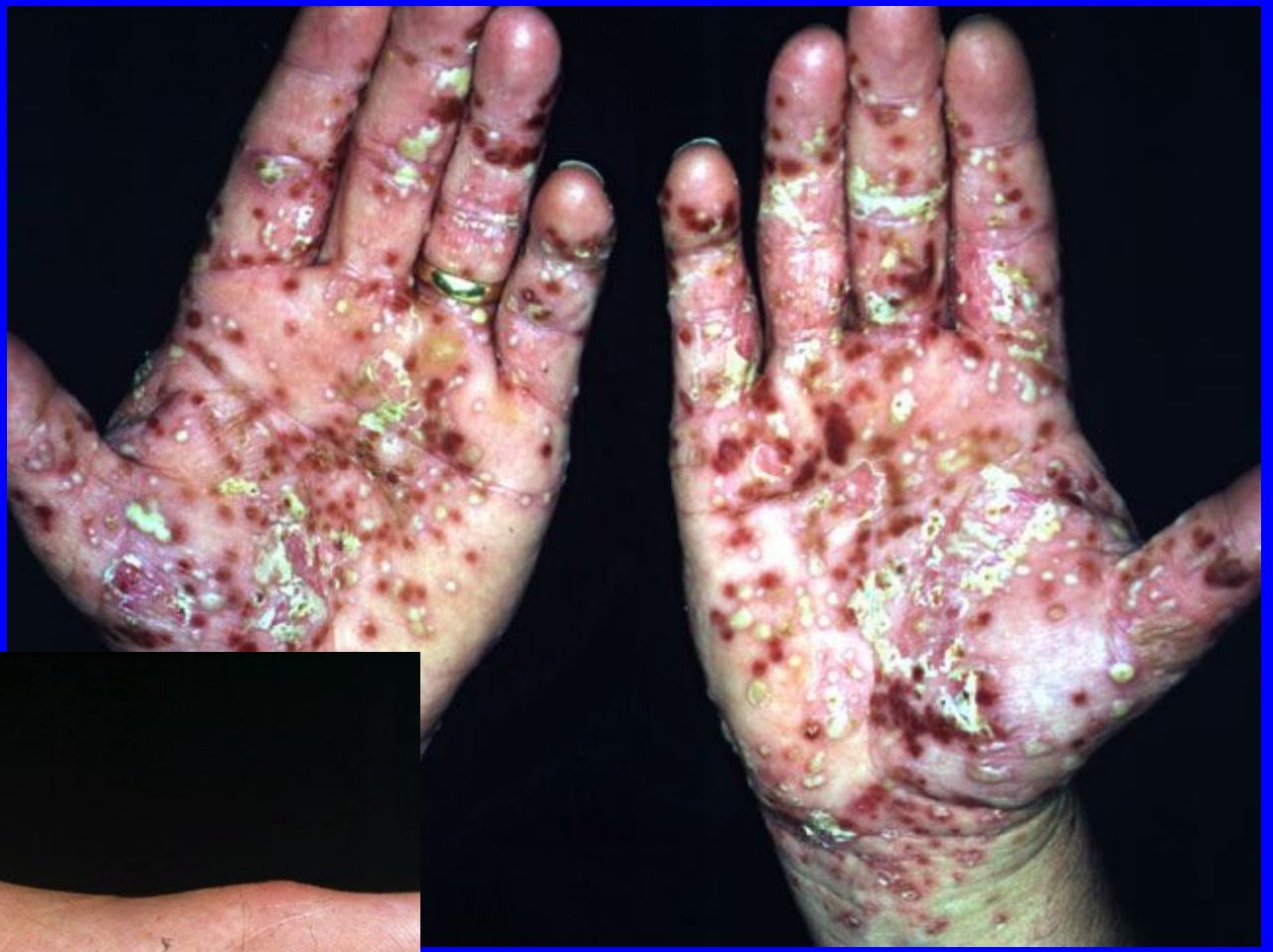
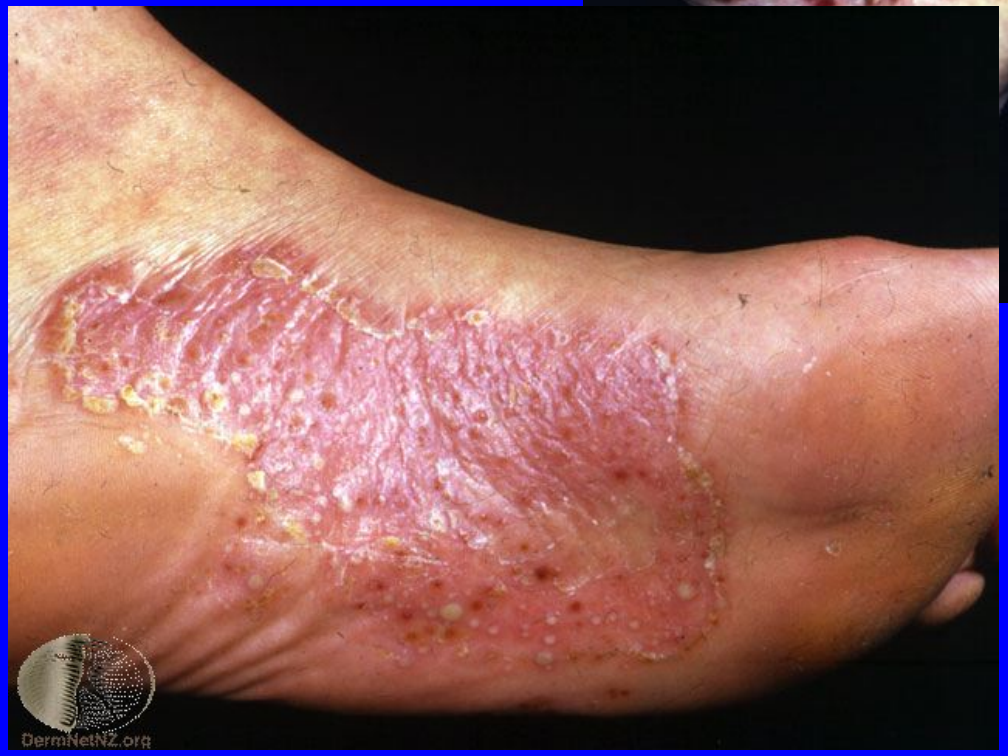
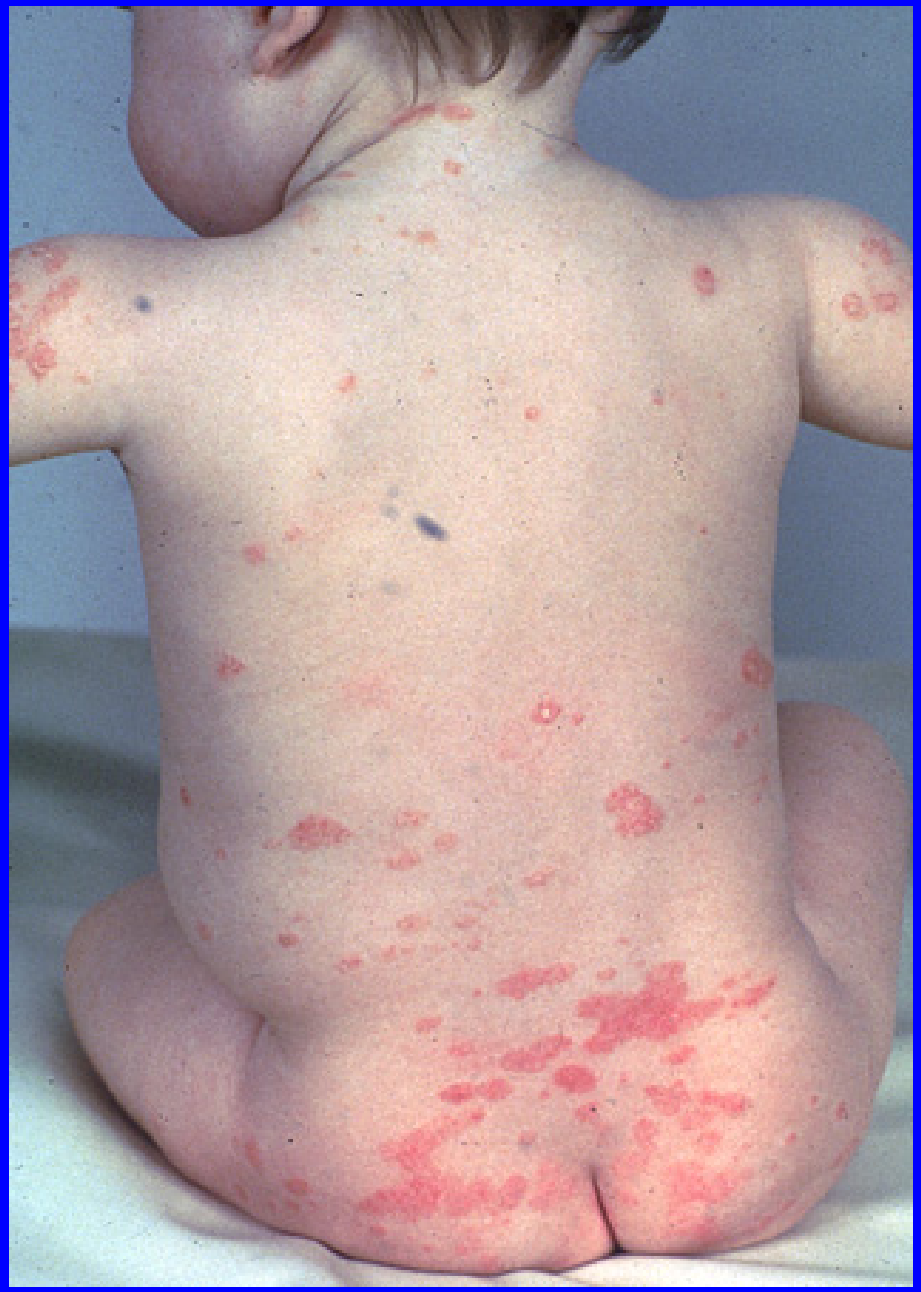
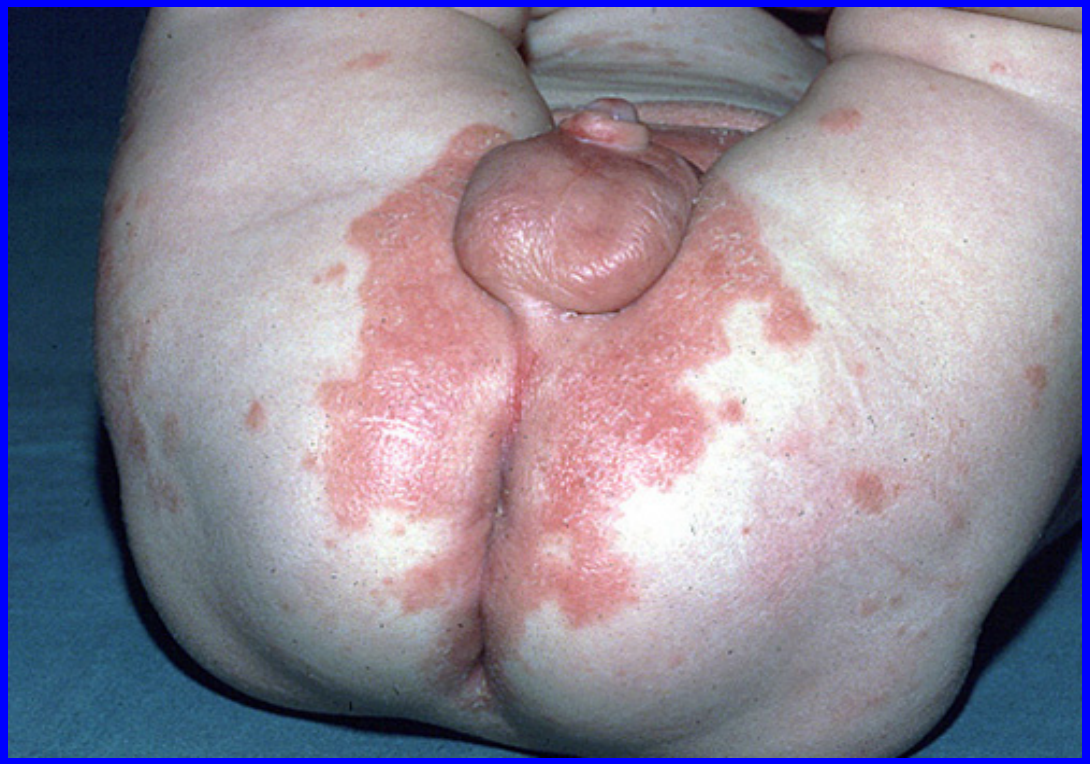




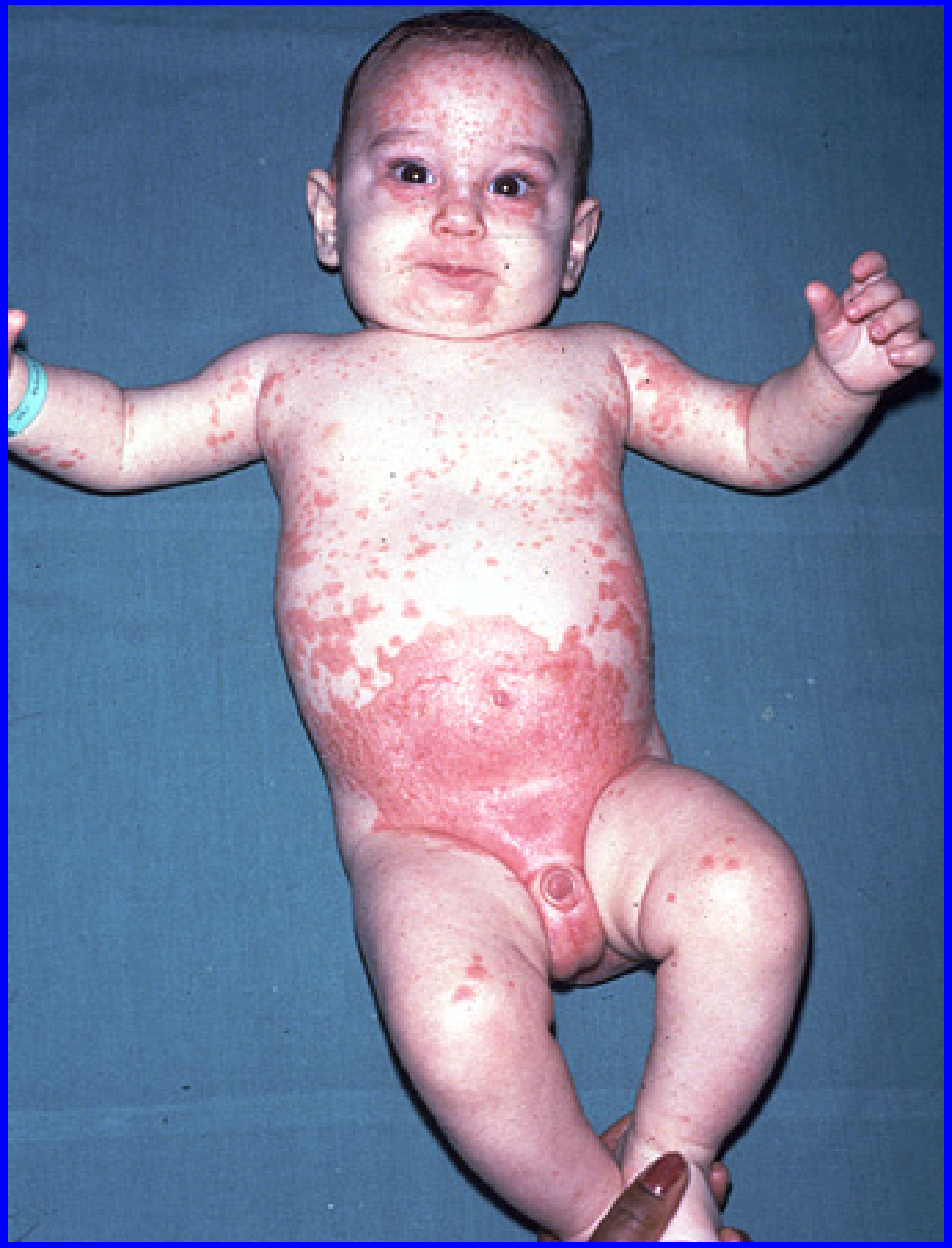
Pustular Psoriasis



Often presents in first 1-2 years as a diaper rash not responding to standard Rx



Unlike irritant contact dermatitis (regular diaper dermatitis), psoriasis is well-demarcated and involves the skin folds.

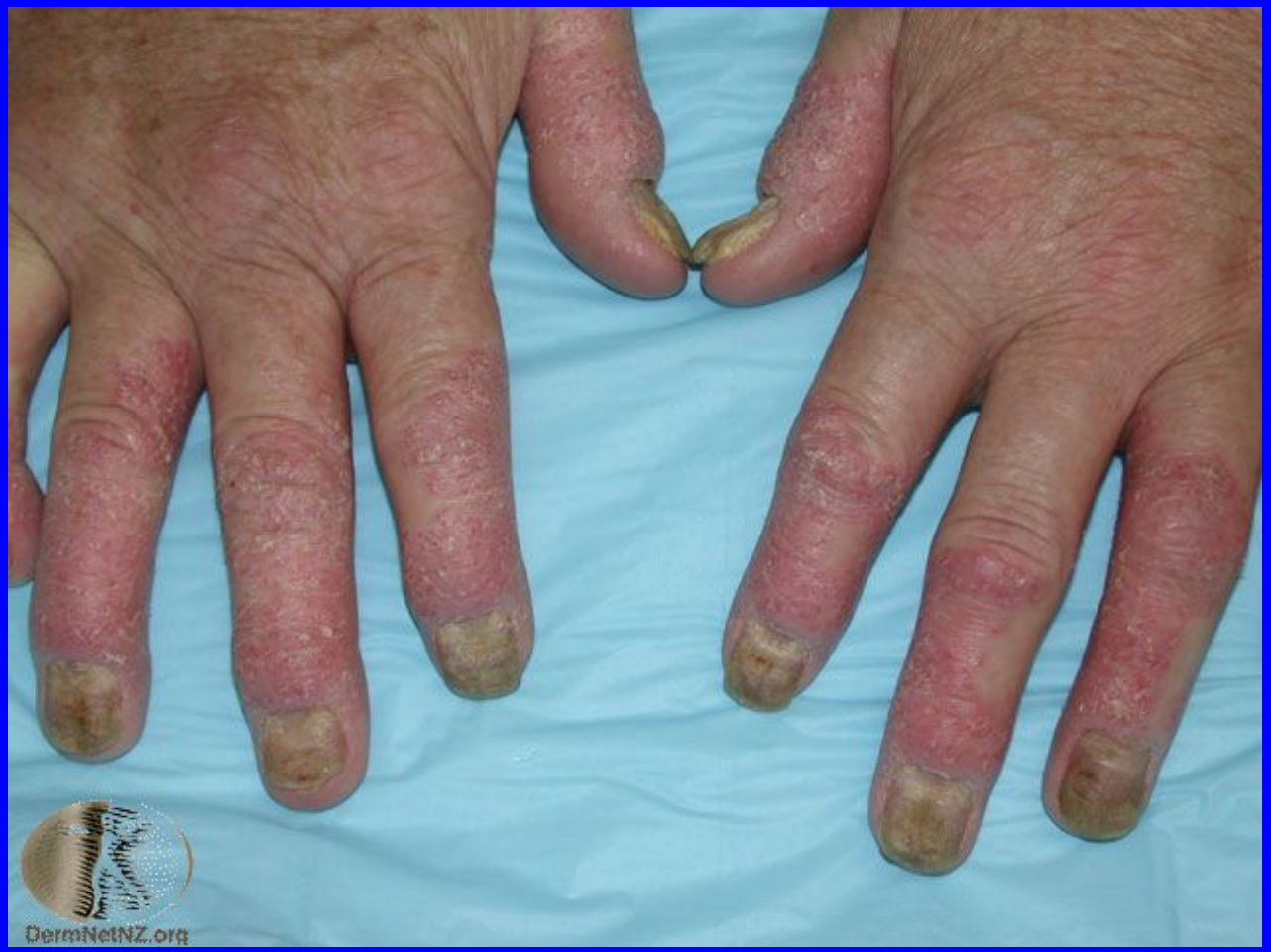


Exacerbators for Psoriasis

- Streptococcal infections – pharynx/perianal
- Stress
- Trauma to the skin (Koebner phenomenon)
- Meds
  - Beta-blockers
  - NSAIDS
  - Lithium
  - Antimalarials
  - Oral Steroids
- Alcohol
- Smoking
- Obesity

Psoriasis Comorbidities

- Psoriatic arthritis – swollen joints, enthesitis , sausage fingers
- Depression
- Inflammatory bowel disease
- Uveitis
- Celiac Disease
- Metabolic Syndrome- obesity, HTN, Hyperlipidemia, gout, CVD, DM2
  - Reduce those risk factors (decr weight, stop smoking, decr alcohol consumption)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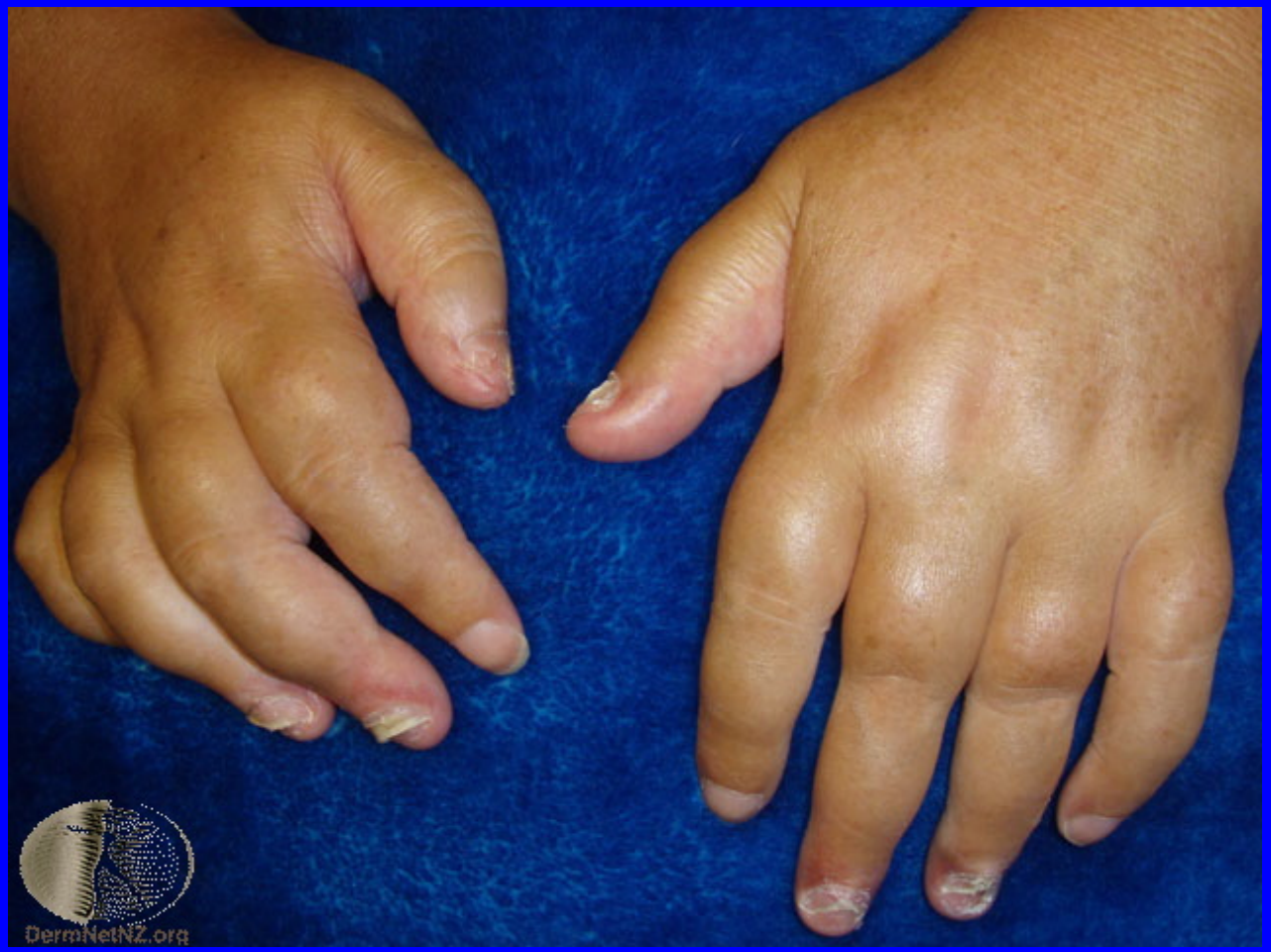
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Psoriasis

- Psoriatic arthritis develops in 5-40%
  - Usually age 30-50
  - Accounts for 8-20% of all cases of childhood arthritis – peak age of onset 9-12
  - Asymmetric arthritis of small (DIP) and large joints of the arms and legs and also spine, hips, shoulders
  - Enthesitis (pain and swelling at tendon/ ligament insertion sites such as the heel)
  - Can be quite destructive and therefore should be treated aggressively

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Treatments for Mild Psoriasis

- Topicals

- Emollients
- Steroids
- Calcineurin Inhibitors
- Calcipotriol (Vit D) – Dovonex, Dovobet – Max of 100g/wk in adults and 50g/wk in kids to prevent hypercalcemia
- Coal Tar Preparations – 5%LCD (Liquor Carbonis Detergens) added to a topical
- Salicylic Acid Preparations – 2% SA in Diprosalic ungt. 8% SA in Clobetasol ungt bid prn for palms/soles

Emollients

- Use mild soap or cleansers and limit their use to the armpit and buttock area.
- Creams and Ointments (tubs) are better emollients than lotions (in pump bottles)
- Daily showers/baths are fine as long as they are followed by generous application of an emollient.

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Steroids

- Low potency (1% HC bid prn) face/folds/genitals
- Mid potency (BM 0.1% bid prn) body, extremities, ears, neck
- Super high potency (Clobetasol ungt bid prn) for stubborn spots (elbows/knees/hands)
- Choose the vehicle that will optimize compliance
  - Ungt in babies (better emollient, stings less)
  - Cream in teenagers
  - Lotions/solutions/foams/shampoos for scalp
    - Clobetasol solution bid prn
    - Ectosone scalp lotion (Betamethasone) less stingy.
    - Dermasmooth FS scalp oil- doesn't sting but messy.
    - Capex or Clobex shampoo
- IL steroid injections – Kenalog 5mg/ml x max 3ml monthly.
- Duration: 2 weeks on, 1 week off (or use a CI)

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- Duobrii lotion (Halobetasol/Tazarotene) od

Topical Calcineurin Inhibitors (TCIs)

- Non-steroidal topical immunomodulators
- Great as steroid sparing agents
- Better for maintenance than acute flares
- Particularly useful on face, eyelids, folds (inverse psoriasis), and genitals

- **Available:**
  - Tacrolimus (Protopic ointment)
    - 0.03% ungt – age 2-15
    - 0.1% ungt - adults
  - Pimecrolimus (Elidel cream)
    - Approved for use in AD for infants >3 mo

Topical Calcineurin Inhibitors

- Side effects
  - Local burning
  - Sl increased rate of skin infections; folliculitis, impetigo, HSV, Molluscum
  - Headache
  - Flushing with alcohol (rare)
  - Black box warning no longer!!!

  "Potential increased risk of NMSC and lymphoma" – has not been seen.
  - Expensive - $90 per 30g tube

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Scalp Psoriasis

- Steroids- Clobetasol solution, Ectosone lotion
- Dermasmoothe FS scalp oil (Fluocinolone in peanut oil)
- Enstilar foam (sticky) – Calcipotriene /betamethasone diproprionate
- Clobex or Capex shampoo
- Tar shampoo- T-gel
- IL Kenalog 5mg/ml injections (Dilute Kenalog 10mg/ml 1:1 with 1%Xylocaine and use 3ml (15mg) total in numerous small injections monthly)

When to refer?

- Patients with extensive skin +/- joint disease should be referred to a Dermatologist +/- a Rheumatologist.

- Patients with limited disease that are very bothered by their disease where topicals have been unsatisfactory.

Phototherapy

- Great for patients with extensive skin disease (and no evid of arthritis) who are unable to apply or are experiencing s/es from topicals.
- Narrow band UVB, BBUVB, PUVA – full body, hand/feet
- Limited locations, Home units available
- Treatment must be overseen by a dermatologist
- 2-3x/week
- S/es are minimal but may incl burning, photoaging, and incr risk of skin cancer

Systemic treatments for Psoriasis

- Avoid systemic steroids
- Acitretin (Soriatane), MTX, Cyclosporine
- Biologics
  - Etanercept (Enbrel), Infliximab (Remicade), Adalimumab (Humira) and Certolizumab (Cimzia) blocking the activity of TNF-alpha (and now their biosimilars)
  - Ustekinumab (Stellara) targets interleukin-12 (IL-12) and IL-23.
  - Secukinumab (Cosentyx) and Ixekizumab (Taltz) and Brodalumab (Siliq) target IL-17
  - Guselkumab (Tremfya) and Risankizumab (Skyrizi) block IL-23 alone.
  - Biosimilar Apremilast (Otezla) – phosphodiesterase 4 inhibitor inhibits cAMP degradation and the prod of proinflammatory mediators TNF, IL-17, IFN

Acitretin (Soriatane)

- Oral retinoid used in men and women of non-childbearing age (teratogen that is fat soluble and takes yrs to clear).
- 25-50mg po od (Starting dose 10mg od). (10mg and 25mg tabs)
- Approx $150/month (25mg od)
- Not effective for psoriatic arthritis.
- Thought to work by slowing the proliferation of skin cells.
- Non immunosuppressive
- Improvement noted by 2-12 weeks.

Acitretin side effects

- Dry skin, eyes, nose, lips
- Fragile skin and nails
- Sticky skin
- Hair shedding
- Photosensitivity
- Incr skin infections (paronychia, boils, impetigo)
- H/As, Muscle/joint aches
- Hyperlipidemia, Incr LFTs
- Mood changes – irritability, anxiety, depression
- Teratogen
- They will never be allowed to donate blood again

➢ Check Preg, CBC, Renal and LFTs, Fasting lipids baseline and monthly.

Alitretinoin (Toctino)

Oral retinoid officially indicated for chronic hand dermatitis

Better tolerated than Soriatane (less hair loss, sticky skin)

More expensive than Soriatane ($750/mo)

30mg po od x 3/12

Similar side effect profile and monitoring as Soriatane

Methotrexate

- 10-25mg po weekly ($30/month for 15mg weekly), Can also be given sc.
- Takes 8 weeks for results
- Side effects incl Nausea/vomiting, ulcerative stomatitis, h/a, dizzy, alopecia, hepatic and pulmonary inflammation/fibrosis, pancytopenia, ?lymphoma, teratogenic, renal toxicity, and incr opportunistic infections
- Take folic acid 5mg po od concomitantly except on the day of the MTX
- Preg, CBC, Renal and LFTs monthly
- Hepatitis serology at baseline

Cyclosporine

2.5-5mg/kg/day given bid

$320/month for 100mg po bid

Highly effective, rapid onset- works for flares

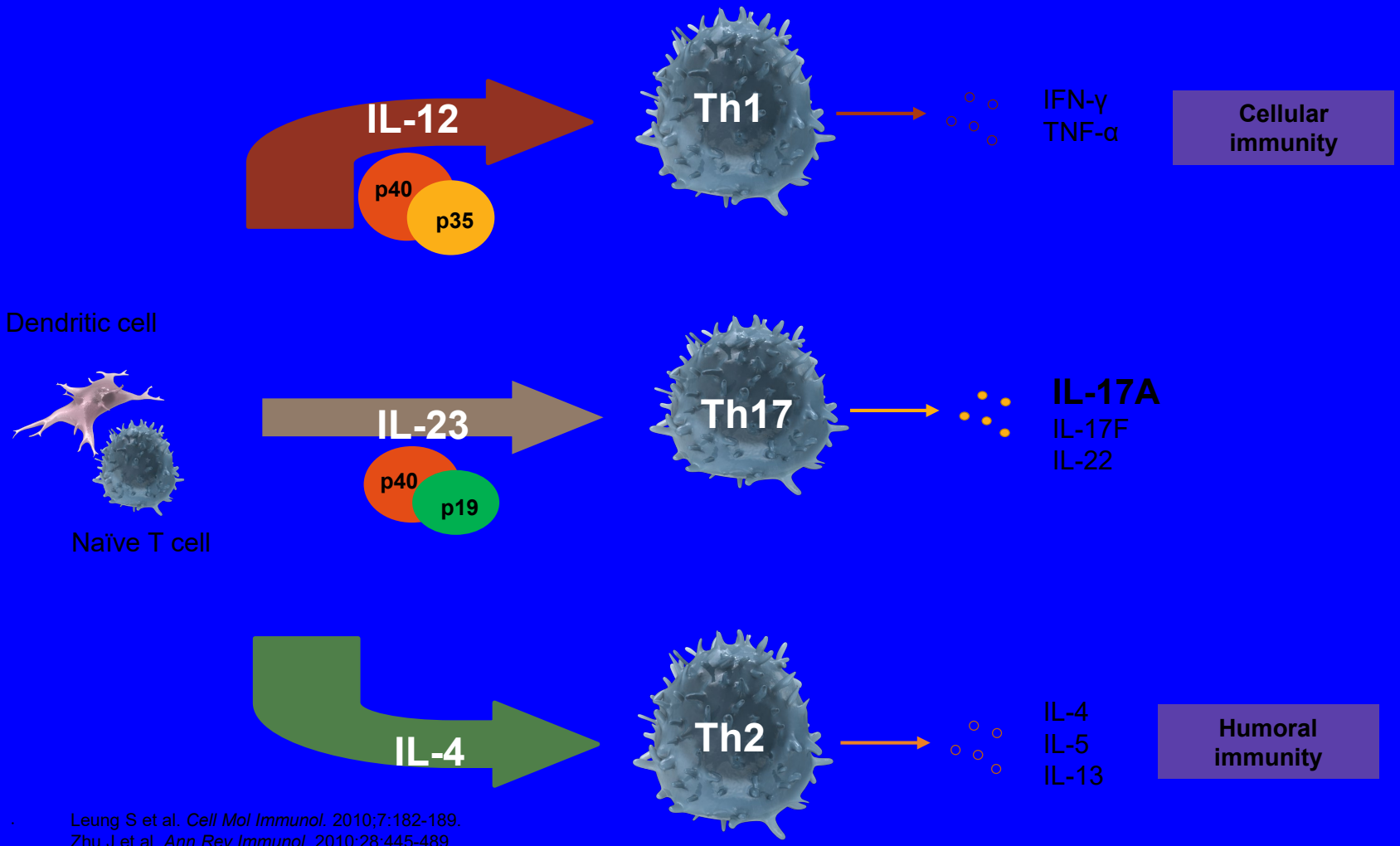
Side effects incl Renal dysfxn, HTN, tremor, H/A, paresthesias, hypertrichosis, gingival hyperplasia, N/V/D, myalgias, arthralgias, hyperK, HypoMg, Hyperlipidemia, Hyperuricemia

2 Baseline BPs and Creatinines

CBC, Renal and LFTs, UA, Lipids, K, Mg, Uric acid and BP at baseline and then q 2/52 x 8 weeks and then monthly

T-cell Differentiation into effector cells

Cytokine Environment Regulates Lymphocyte Differentiation Into Functional Subsets



Leung S et al. *Cell Mol Immunol.* 2010;7:182-189.
Zhu J et al. *Ann Rev Immunol.* 2010;28:445-489

Biologic Agents targets in Psoriasis

TNF-α Inhibitors
Etanercept (Enbrel)
Adalimumab(Humira)
Infliximab (Remicade)
Certolizumab (Cimzia)
Biosimilars (Amgevita, Hyrimoz, etc)

IL-12/IL-23 Inhibitors
Ustekinumab (Stellara)
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IL-17 Inhibitors
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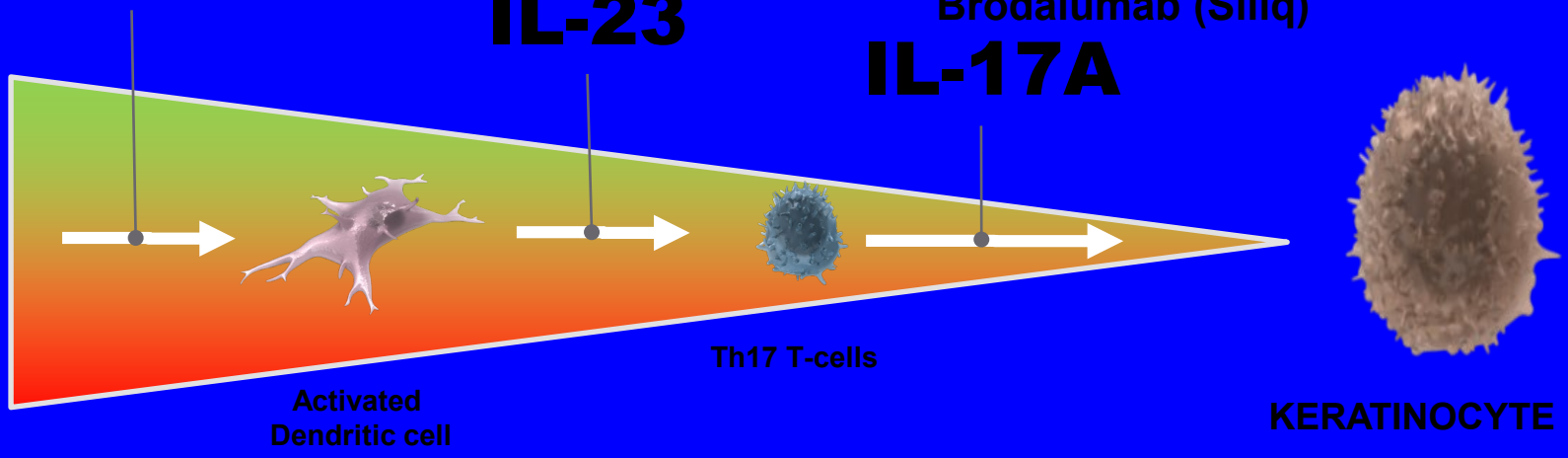

Adapted from Nestle et al. N Engl J Med 2009;361:496-509; Kopf M et al. *Nat Rev Drug Discov.* 2010;9:703-718; Garber K. *Nat Biotechnol.* 2011;29:563-566.

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- Acitretin (Soriatane), MTX, Cyclosporine
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  - Secukinumab (Cosentyx) and Ixekizumab (Taltz) and Bodalumab (Siliq) target IL-17
  - Biosimilar Apremilast (Otezla) –$13-15,000/yr phosphodiesterase 4 inhibitor inhibits cAMP degradation and the prod of proinflammatory mediators TNF, IL-17, IFN

Important things for GPs to know about Biologics

Potential S/Es incl cold/flu like sxs, injections site reaction, rash, incr risk of opport infection, possible increased risk of cancer, possible reactivation of old infections like TB or hepatitis, possible exacerb of CHF, ?incr incid of demyelinating diseases such as MS

Injection should be held if pt

- Has an infection /fever req antibx
- If undergoing dirty surgery
- Suspects pregnancy (except Certolizumab (Cimzia)
- Pt or fam members need a live atten vaccine – Shingles Zostavax, Yellow fever, Inhaled flu vaccine
- Has had a significant change in medical health

Psoriasis Support Groups

Canadian Dermatology Association

www.dermatology.ca

Canadian Association of Psoriasis Patients

www.skinpatientalliance.ca

Canadian Psoriasis Network

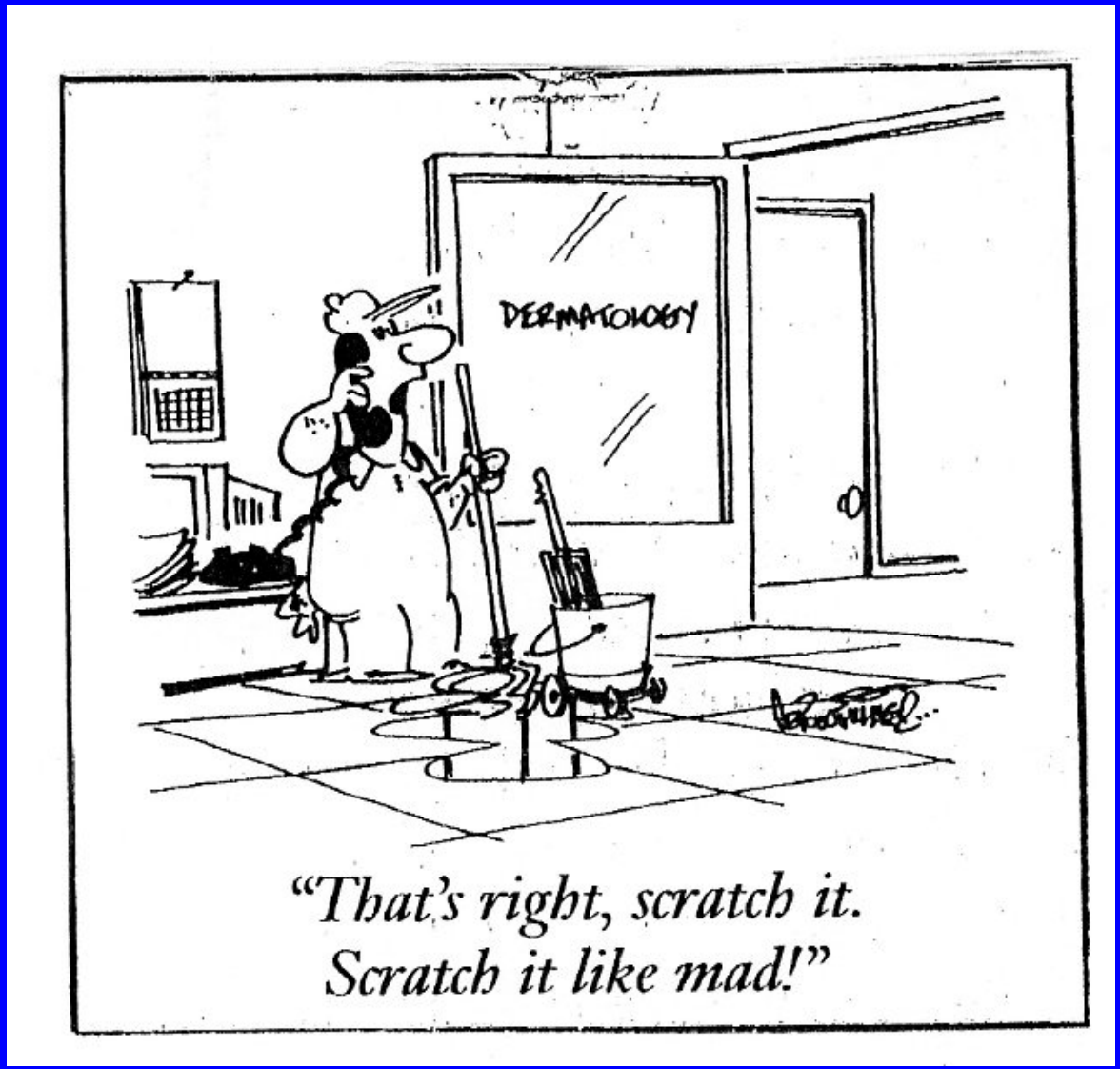
www.canadianpsoriasisnetwork.com

Venderm Innovations in Psoriasis

www.venderm.ca

Summary - Take home messages

1. Mild psoriasis can be treated topically.
2. Remember psoriasis is a systemic inflammatory disease and that these pts are at increased risk for psoriatic arthritis and cardiac disease.
3. Remember to ask on how their disease imparts their QOL as many of these pts are depressed.
4. Refer patients with extensive skin disease to Dermatology and psoriasis patients with joint pains to Rheumatology for consideration of systemic therapy.



Any Questions?!?!