Dermatology 101: From Acne to Zebras and the Pearls in Between

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Disclosures

- **Speaker: Dr Kyle Cullingham**
- **Relationships with commercial interests:**
  - **Speakers Bureau/Honoraria:** Abbvie, Allergan, Celgene, LEO
  - **Consulting Fees:** Abbvie, Celgene, Galderma, Janssen, LEO, Novartis

Conflict of Interest Declaration: Nothing to Disclose

Presenter: Dr. Kyle Cullingham

Title of Presentation: Dermatology for GPs

I have no financial or personal relationship related to this presentation to disclose.

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DERMATOLOGY

Saskatoon's only medical & cosmetic dermatology clinic.

About Us

SkinSense Dermatology provides both medical and cosmetic dermatology services in Saskatoon, Saskatchewan. Run by Dr. Angela Law and Dr. Nicole Hawkins, both board-certified Dermatologists, the clinic offers skin care for all ages and stages of health. Referral from a family physician is required for all medical dermatology patients. All of our Dermatologists are Fellows of the Royal College of Physicians and Surgeons of Canada certified in Dermatology. This level of qualification requires four years of medical school followed by five years of intensive training in medical, surgical, and paediatric dermatology, culminating in a fellowship exam.

PROFESSIONAL MEMBERSHIPS

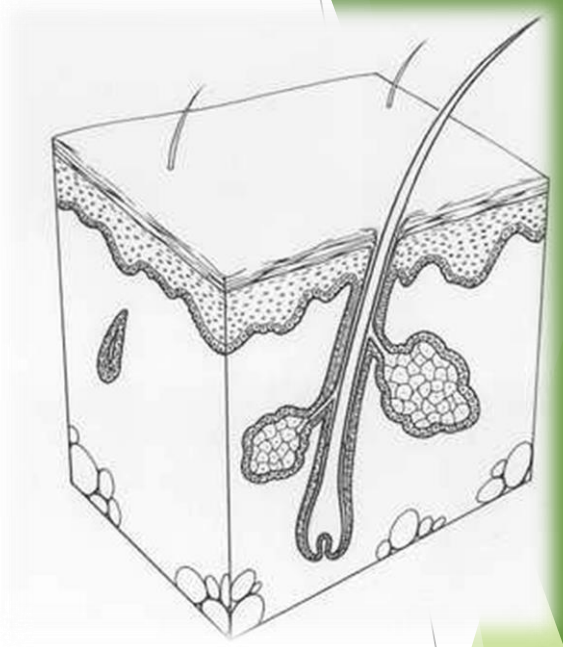
Our Dermatologists are active in many professional societies. These include the Canadian Dermatology Association, the American Academy of Dermatology, and the American Society for Dermatologic Surgery.

Objectives

- Discuss some common dermatological concerns – focus on recognition, management, what's new and pearls.
  - Acne
  - Rosacea
  - Psoriasis
  - Eczema
- Interspersed with interesting real Dermatology cases with common pitfalls, red flags, or learning points.
- Time for questions/comments

Clinical pearls

Acne

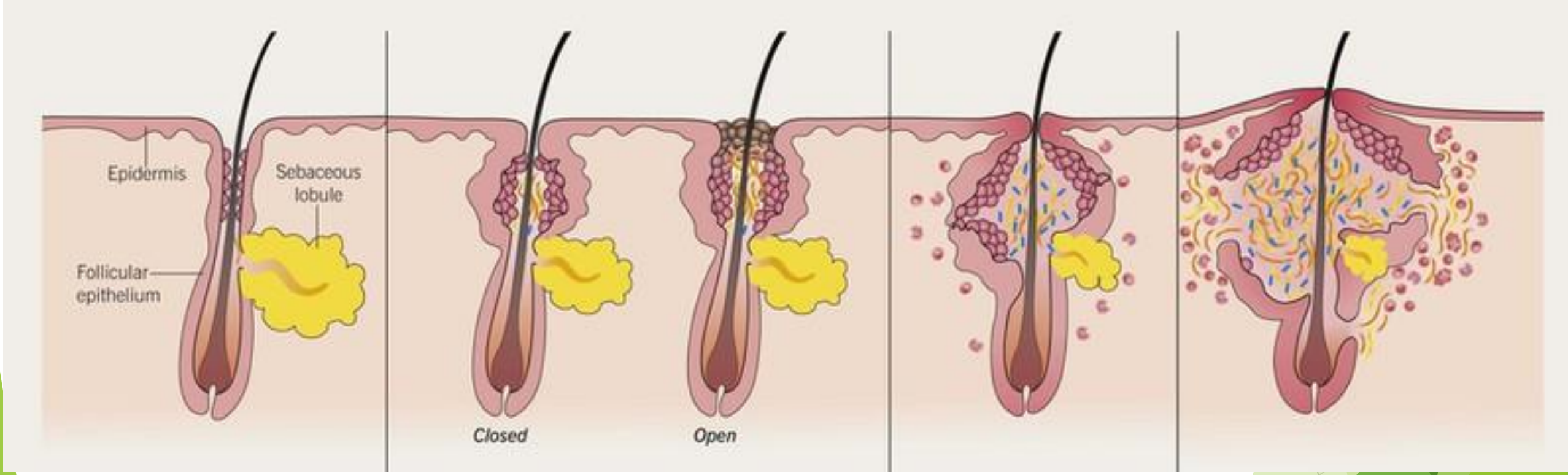


- disorder of the pilosebaceous unit
- affects certain areas of the body:
  - face > trunk >> buttocks
- manifests during adolescence, but can occur at any stage of life
- comedones, papulopustules, nodules, cysts
- scarring can follow

Epidemiology

- acne affects approximately 85% of adolescents
- onset during puberty (10-19 y/o); may appear after age 25
- more severe in men
- higher incidence in caucasians and indigenous population
- inheritance: multifactorial; most patients with cystic acne have parental history of severe acne

Pathogenesis



- Corneocyte
- Sebum
- *Propionibacterium acnes*
- Inflammatory cell

Drugs

TABLE 1
Medications that Trigger or Exacerbate Acne

More commonly	*Less commonly*
Anabolic steroids (e.g., danazol [Danocrine], testosterone)	Azathioprine (Imuran)
Bromides	Cyclosporine (Sandimmune, Neoral)
Corticosteroids (e.g., prednisone [Deltasone])	Disulfiram (Antabuse)
Corticotropin (H.P. Acthar)	Phenobarbital
Isoniazid (Nydrazid)	Quinidine
Lithium	Tetracycline
Phenytoin (Dilantin)	Vitamins B_1, B_6, B_{12}, and D_2

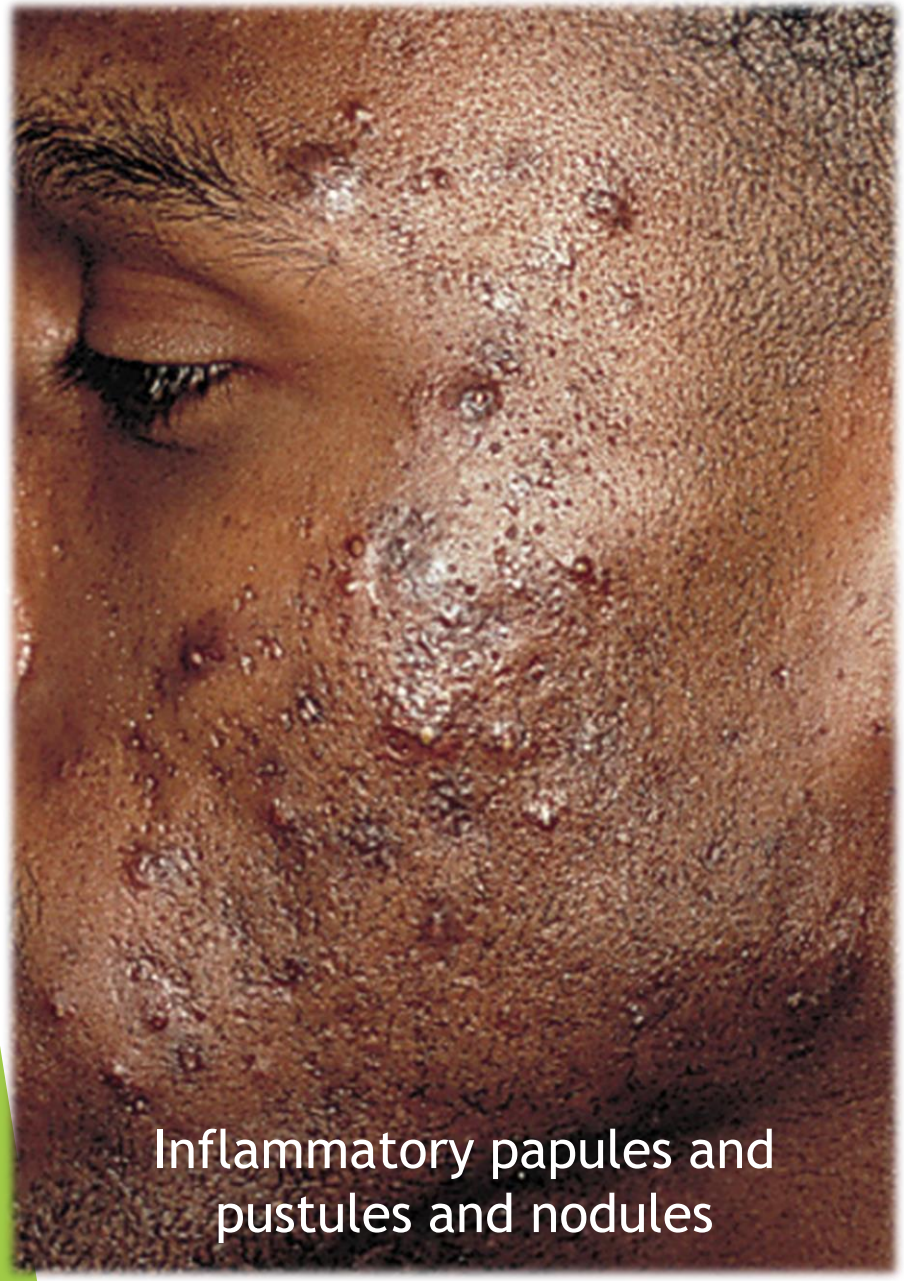
Adapted with permission from Zaenglein AL, Thiboutot DM. Acne vulgaris. In: Bolognia JL, Jorizzo JJ, Rapini RP, eds. Dermatology. New York: Mosby, 2003:533–4.

Diet

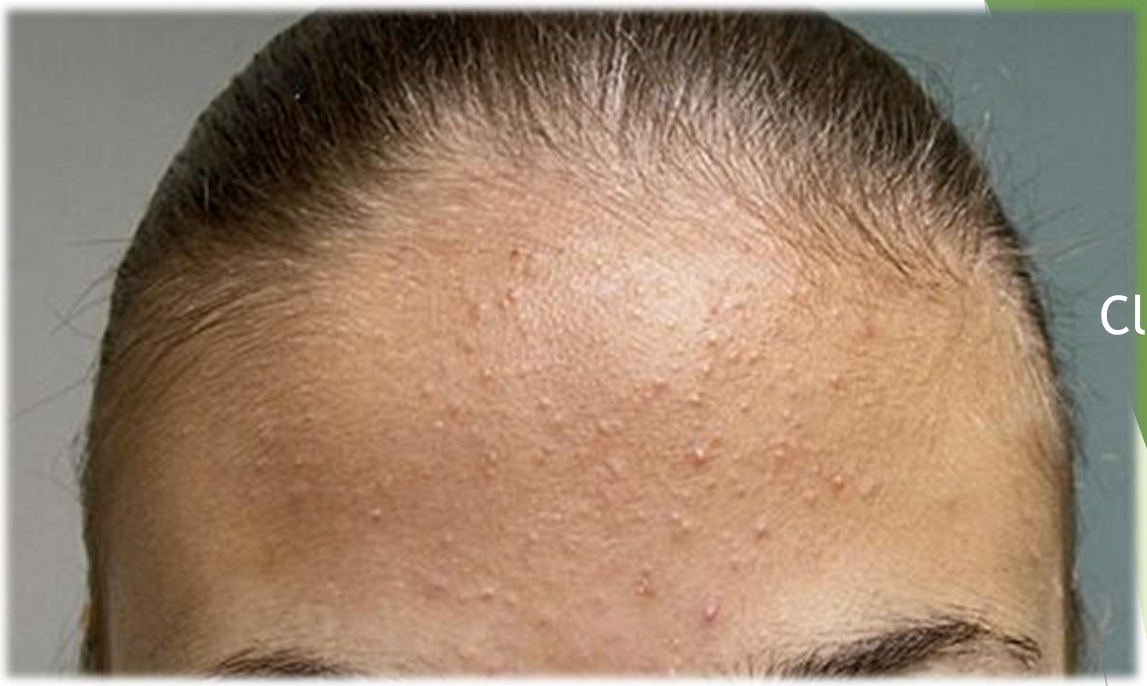
- Recent JAAD review points to **high glycemic load diets** and diets rich in **dairy products** as possible aggravating factors
  - skim milk found to be worst culprit -- associated with higher plasma IGF-1 levels
  - milk contains 5alpha-reduced steroids (testosterone precursors) = increased comedogenicity

got ~~milk~~?

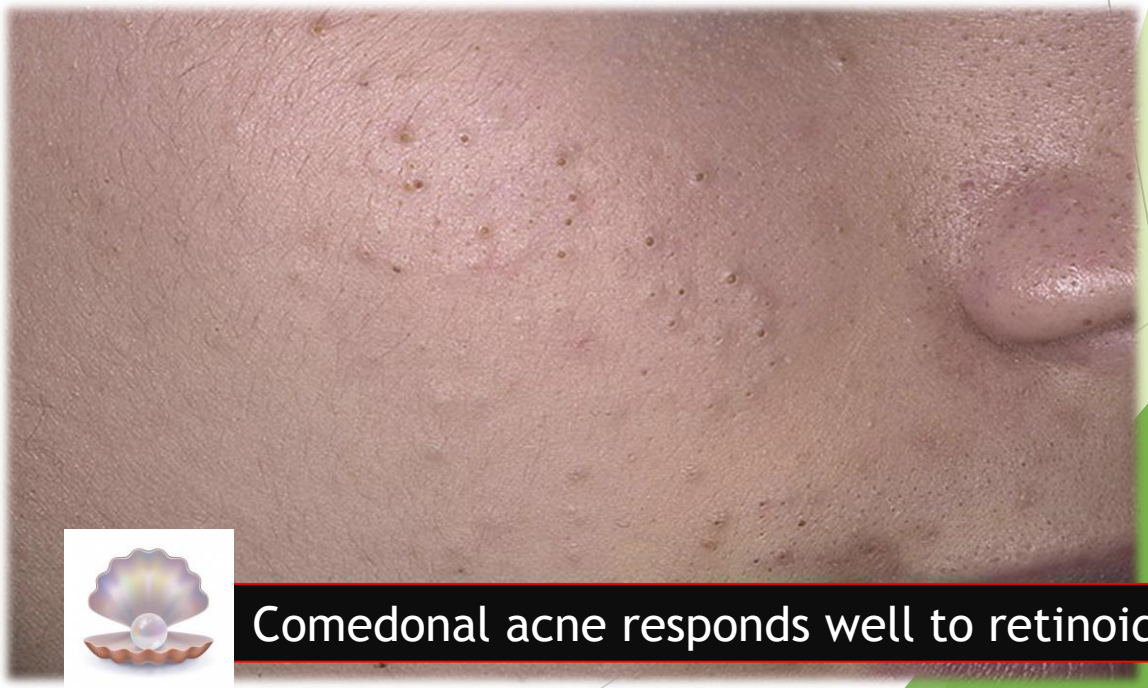
ACNE?



Inflammatory papules and pustules and nodules



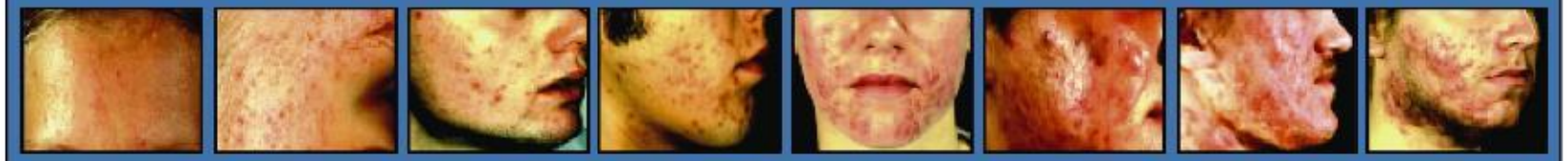
Closed comedones (whiteheads)



Open comedones (blackheads)

Comedonal acne responds well to retinoid therapy

Global Alliance Acne Treatment Algorithm



	MILD		MODERATE		SEVERE
	Comedonal	Papular/pustular	Papular/pustular	Nodular[2]	Nodular/Conglobate
1st Choice	Topical Retinoid	Topical Retinoid + Topical Antimicrobial	Oral Antibiotic + Topical Retinoid +/- BPO	Oral Antibiotic + Topical Retinoid + BPO	Oral Isotretinoin[3]
Alternatives	Alt. Topical Retinoid or Azelaic acid* or Salicylic acid	Alt. Topical Antimicrobial Agent + Alt. Topical Retinoid or Azelaic Acid*	Alt. Oral Antibiotic + Alt. Topical Retinoid +/- BPO	Oral Isotretinoin or Alt. Oral Antibiotic + Alt. Topical Retinoid +/- BPO/Azelaic Acid*	High Dose Oral Antibiotic + Topical Retinoid + BPO
Alternatives for Females	See 1st Choice	See 1st Choice	Oral Antiandrogen[5] + Topical Retinoid/ Azelaic Acid* +/- Topical Antimicrobial	Oral Antiandrogen[5] + Topical Retinoid +/- Oral Antibiotic +/- Alt. Antimicrobial	High Dose Oral Antiandrogen[5] + Topical Retinoid +/- Alt. Topical Antimicrobial
Maintenance therapy	Topical Retinoid		Topical Retinoid +/- BPO		

[1]Consider physical removal of comedones; [2]With small nodules (>0.5 - 1 cm); [3]Second course in case of relapse; [4]For pregnancy, see text; [5]See text
*There was not consensus on this alternative recommendation, however, in some countries Azelaic acid prescribing is appropriate practice

Topical therapy

- Retinoids
  - Tretinoin
  - Adapalene
  - Tazarotene
- Antibiotics
  - Erythromycin,
  - Clindamycin,
  - Dapsone
- Others
  - Benzyl Peroxide,
  - Salicylic acid,
  - Azaleic Acid

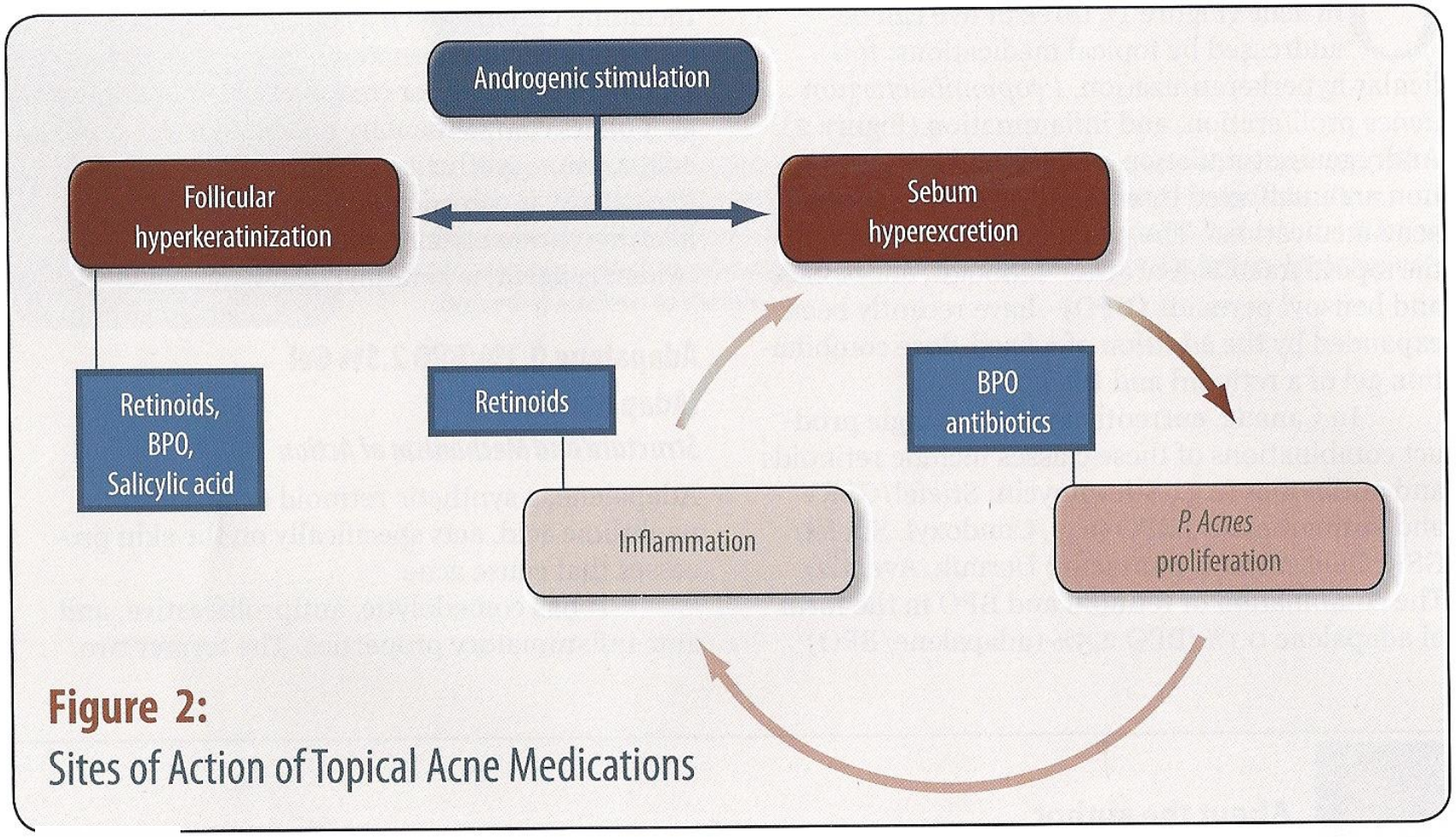
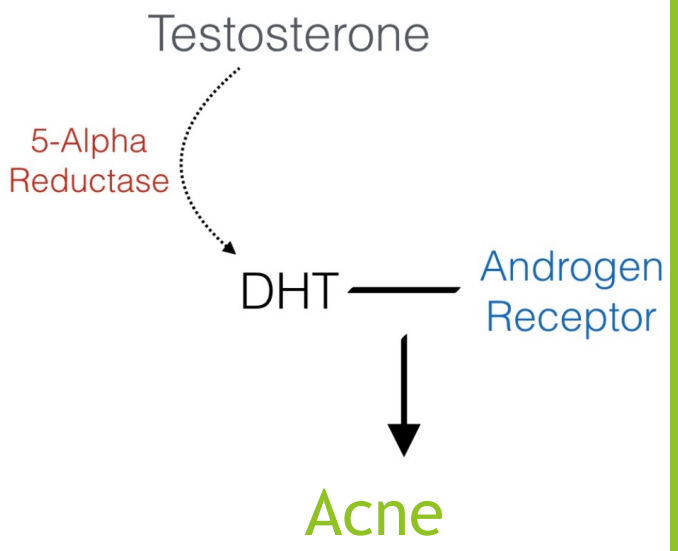


Figure 2:
Sites of Action of Topical Acne Medications

Antibiotics should never be used as monotherapy for acne. Period

Hormone Therapy

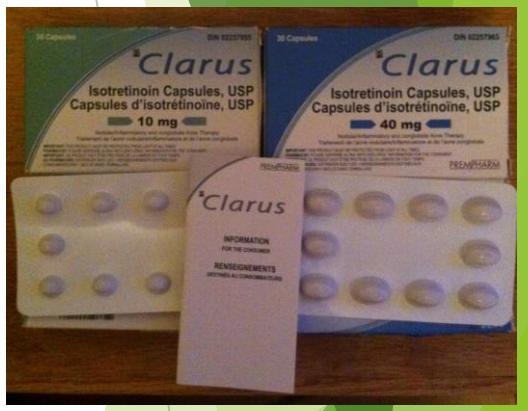
- Important component of acne treatment in <u>females</u>
- **Oral contraceptive pills (OCP)** decrease free testosterone by increasing levels of sex hormone binding globulin produced by the adrenals
  - Tri-cyclen, Alesse, Diane 35, Yasmin, Yaz
  - Can take up to 6 months for optimal effect
- **Spironolactone** (50-200mg/day) is an "anti-androgen"; blocks androgen receptors. Pregnancy category X!



Isotretinoin – Oral Retinoid

- Available as Accutane, Clarus, Epuris
- Discontinue ALL other acne treatment

- Treatment goal is **120-150mg**/kg TOTAL DOSE



- Start dose at 0.5mg/kg/day for 1 month, Subsequent months, increase dose to 1.0mg/kg/day

- YOU MUST MONITOR YOUR PATIENTS
- FEMALES NEED 2 FORMS BIRTH CONTROL

- Notify patients that their acne will *flare* during the first month on isotretinoin
  "Things will get worse before they get better"

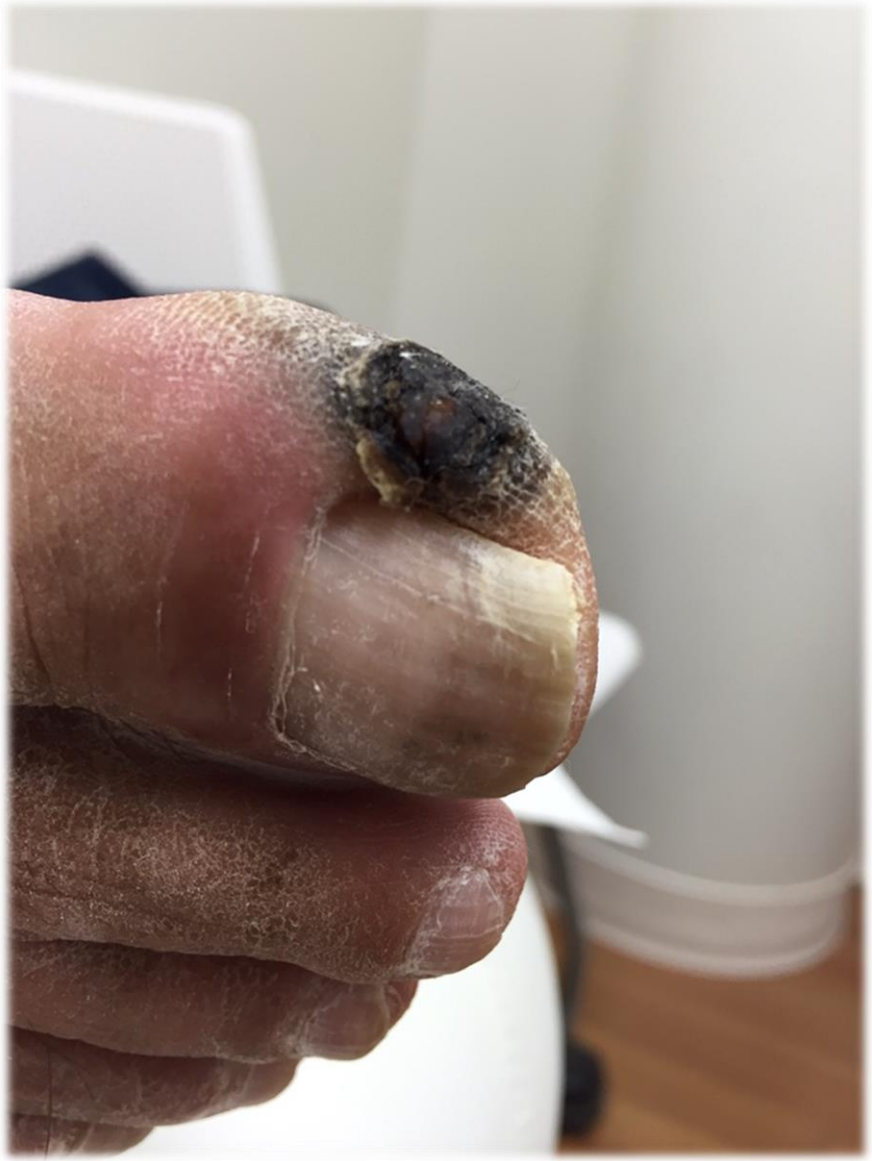
Isotretinoin - side effects

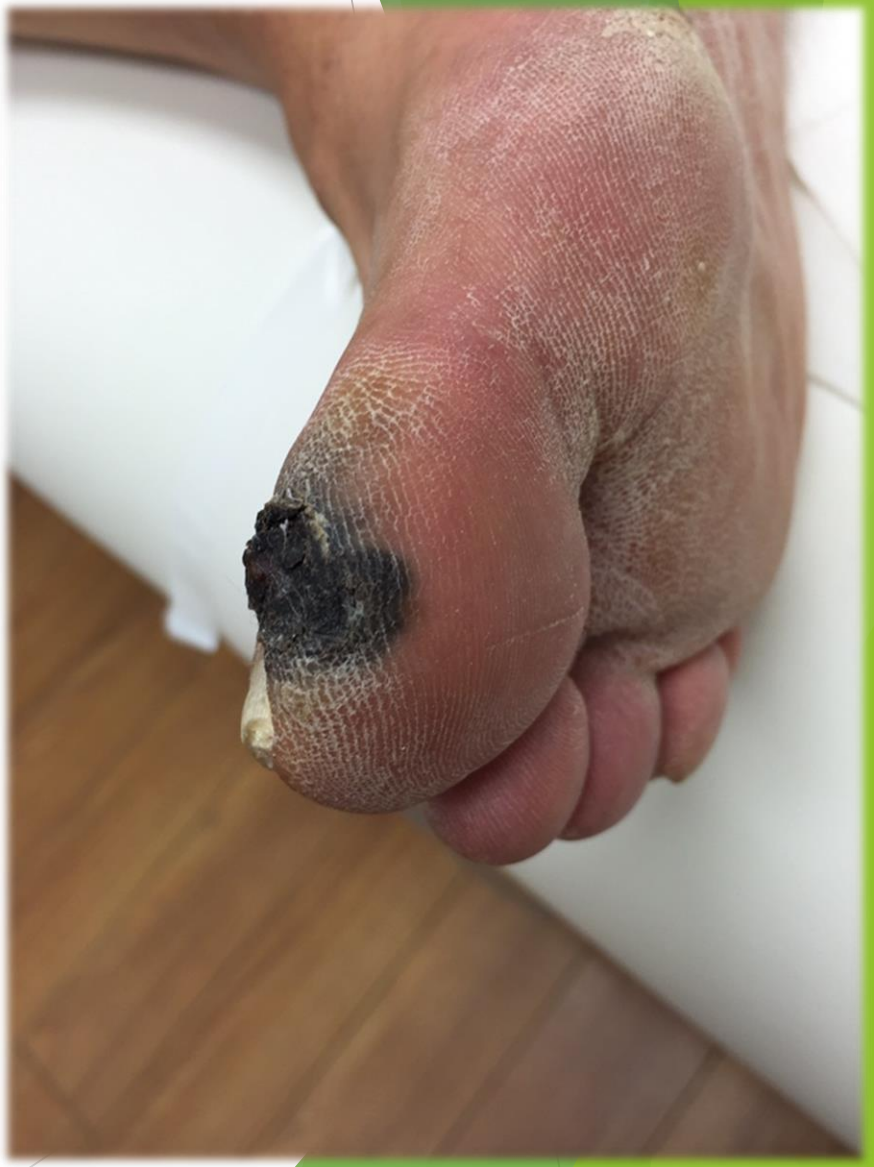
- pseudotumor cerebri (in combination with tetracycline)
- increased plasma TG, HDL and/or cholesterol; AST and ALT elev'n
  - baseline bloodwork is required; monthly lipids and LFTs, BHCG's
- common: chelitis, xerosis, dry nasal mucosa, dry eyes
- less common: hair thinning, photosensitivity, bone and joint pain, HA
- controversy re: depression and IBD -- ask hx, fhx, and ROS

Patient case #1

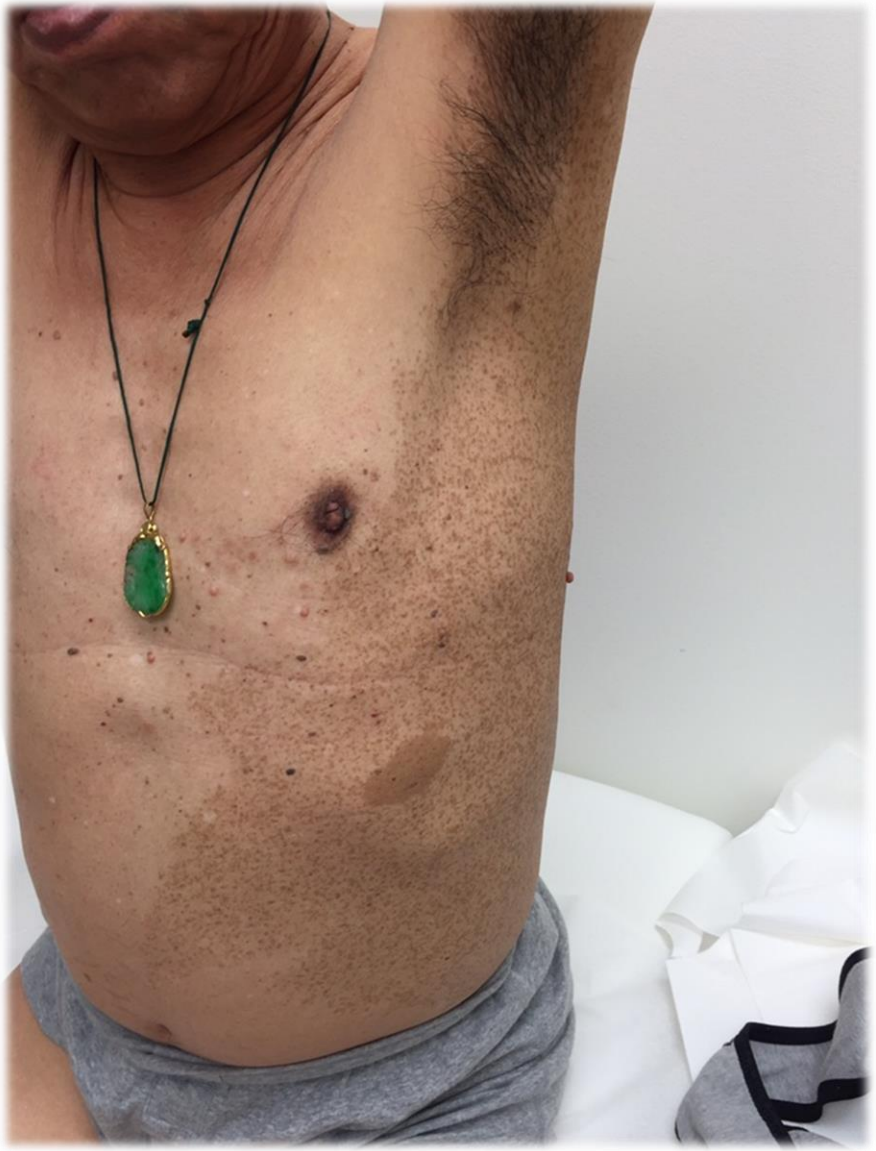
67yoM

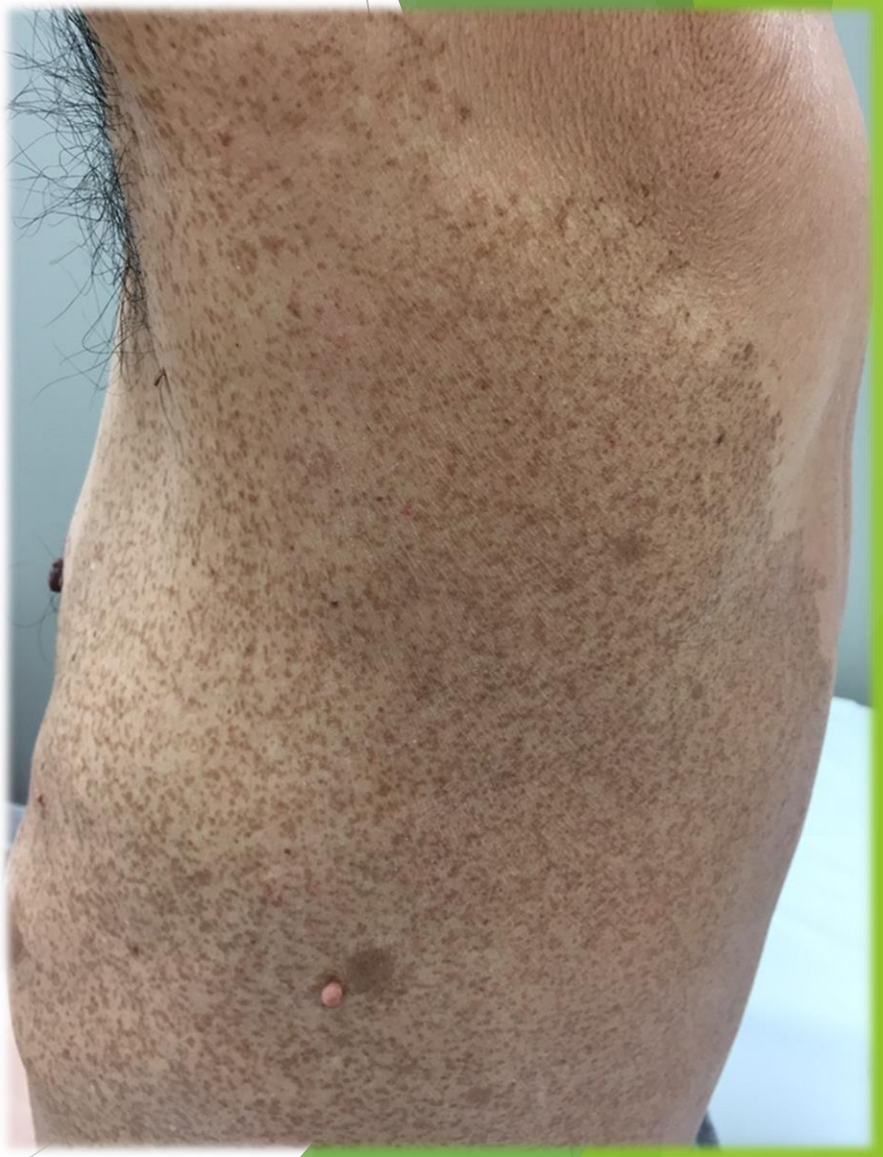
- “hx of right big toe fungal infection with discolouration of the skin”
- “Medial side of the distal phalanx of the big toe is dark brownish in colour”
- Was treated with both lamisil po and lamisil cream for total of 1 year - not responding to therapy.





- You decide to do a full skin check.
- You see speckled pigmentation unilaterally with several CALMs and small skin coloured pedunculated papules

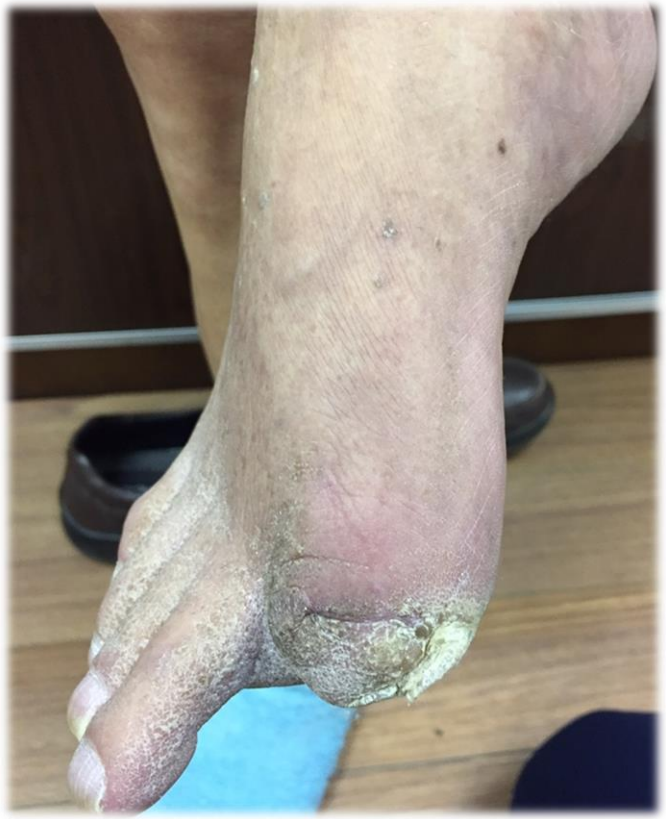


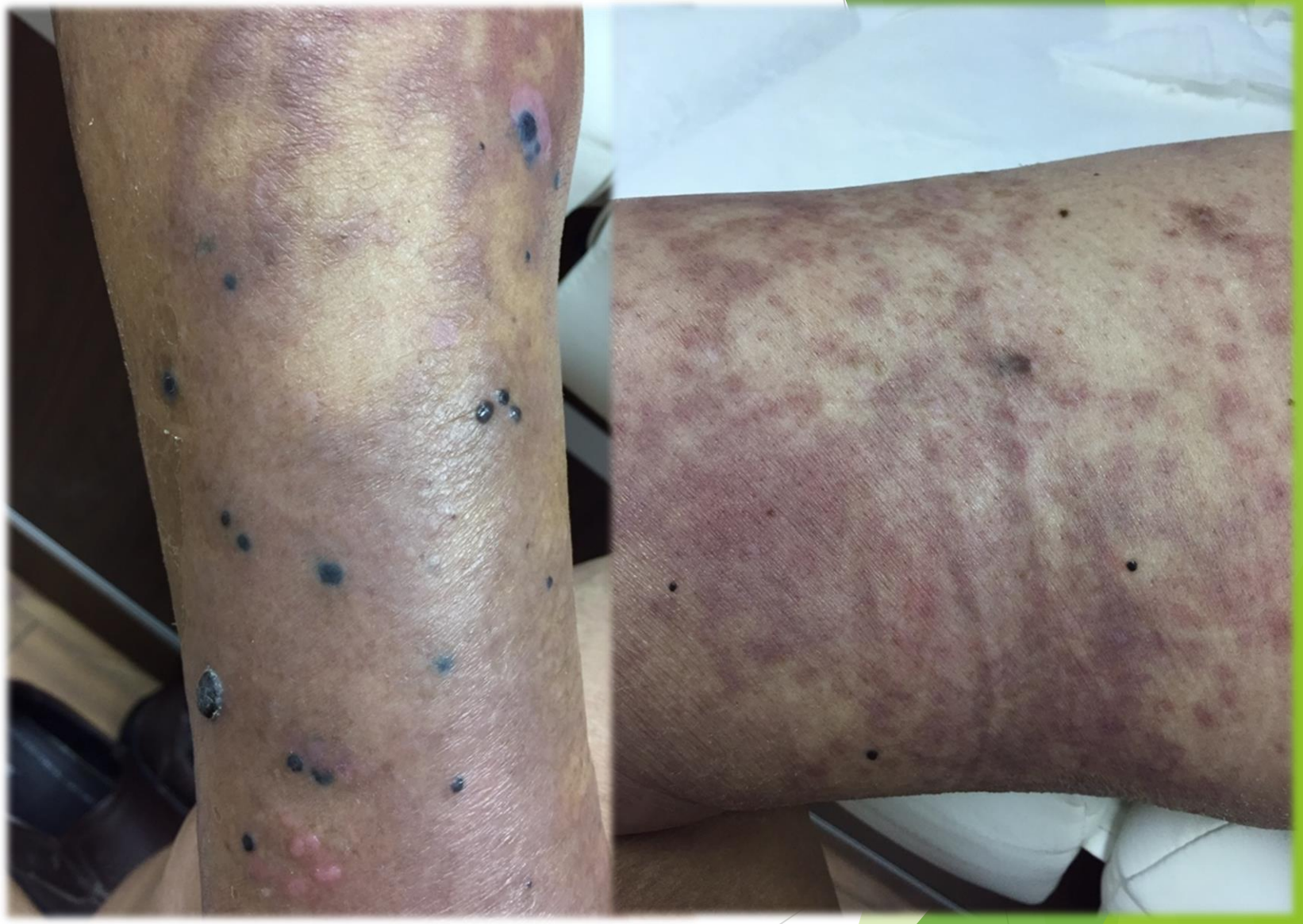


Question – What is the next step here?

- A – Referral to plastics for urgent amputation
- B – Skin scrapings for fungal organisms and sensitivities
- C – Referral to Ophthalmology
- D – Punch biopsy of the large toe

- Sent to Plastics urgently and amputation done within the week.
- Patient lost to f/u and gets referred one year later for skin surveillance

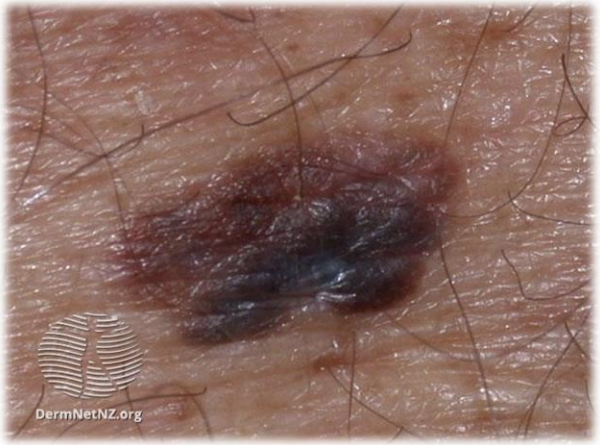


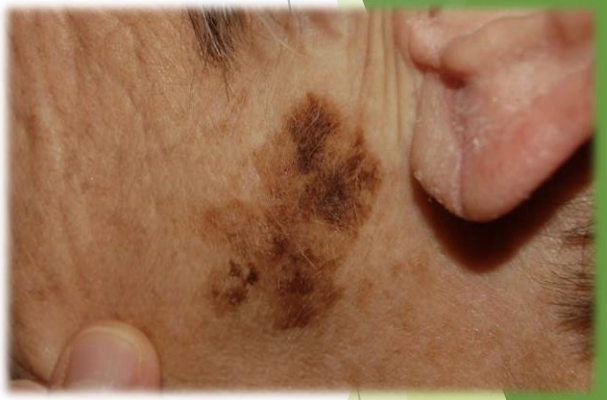


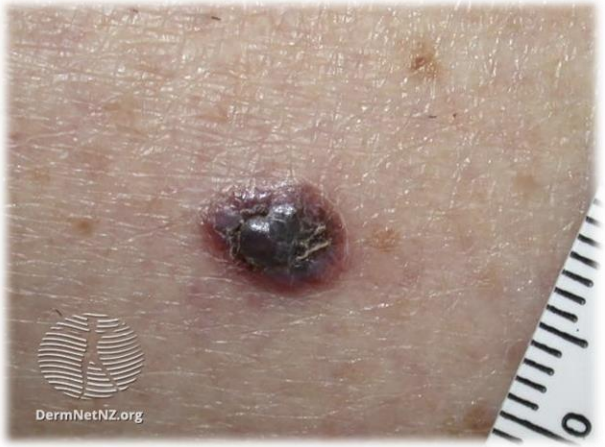
Lesson #1 – You **MUST** know what melanoma looks like
Lesson #2 – If not responding to antifungals, it's not fungal
Lesson #3 – ALWAYS do a quick full skin exam on routine physicals

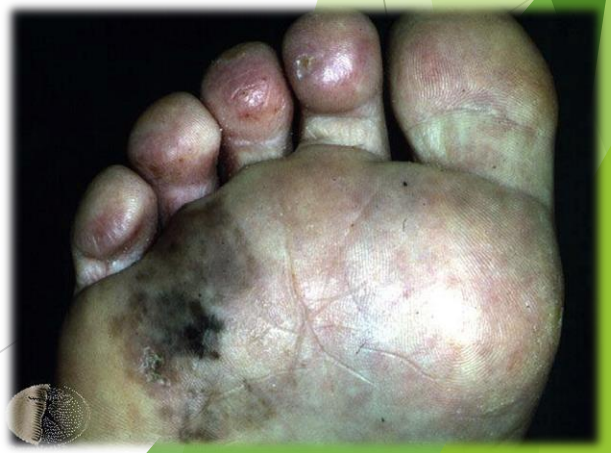
4 Clinical types of melanoma

- Superficial spreading melanoma
- Lentigo maligna melanoma
- Nodular melanoma
- Acral lentiginous melanoma

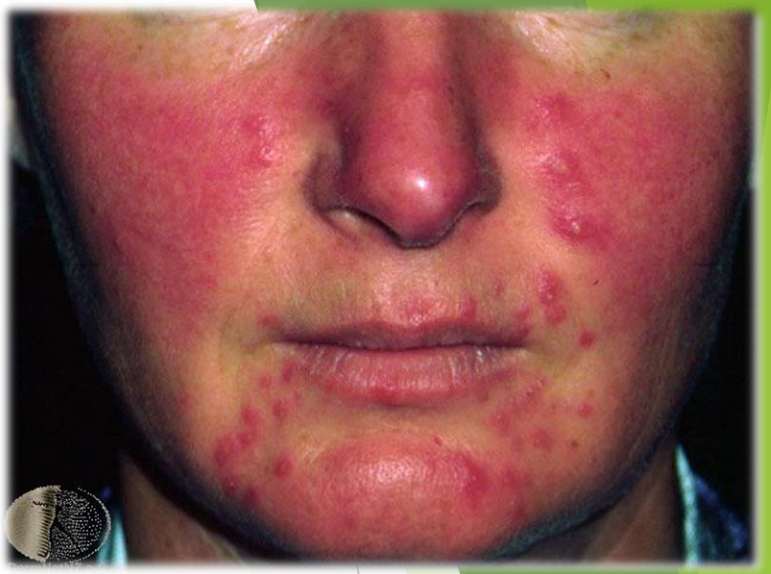








Rosacea

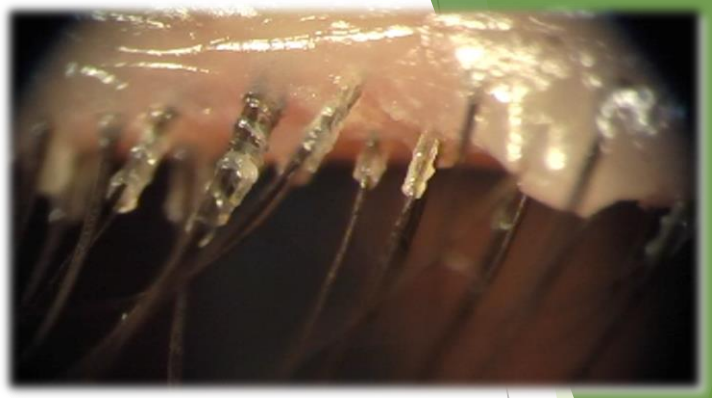


- Common disease
- Most common in fair skinned individuals (Fitzpatrick type I and II)
- Peak incidence and severity in 3rd and 4th decades of life
- Many people with acne evolve into rosacea
- Misconception with red face and large noses that people are alcoholics

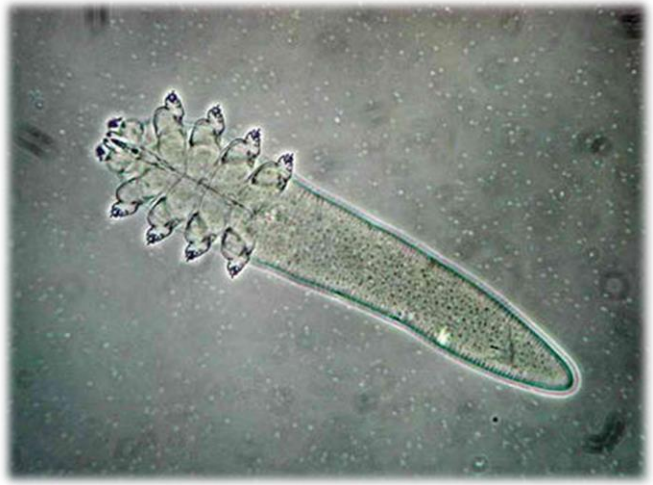
Pathogenesis

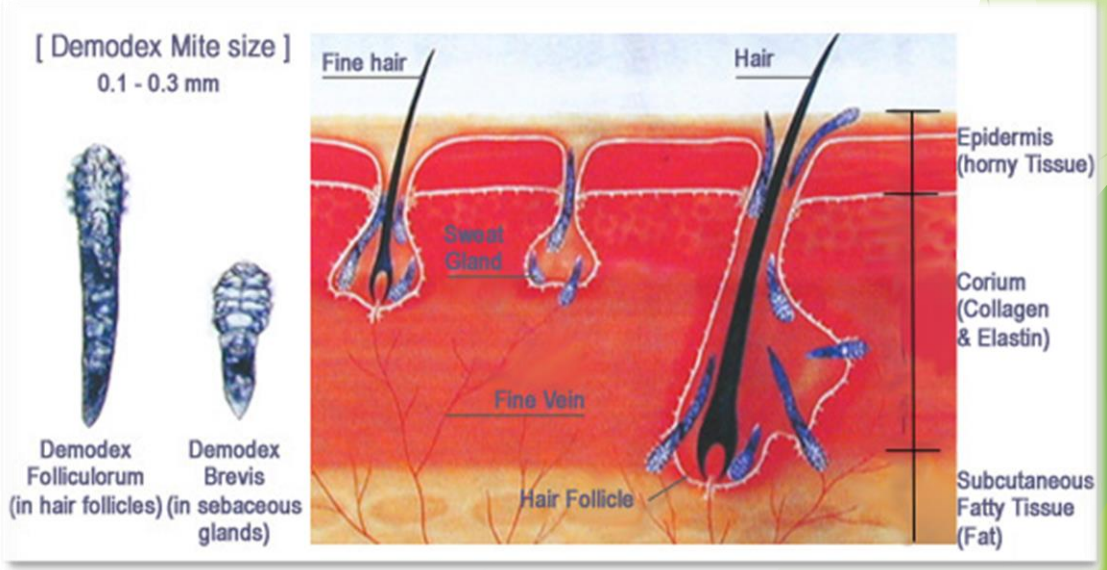
- Multifactorial
- Vascular hyper reactivity
  - History of easy blushing, gradual reddening of their complexion
- Triggers – spicy or hot temperature foods, alcohol, heat, sun, exercise
- Believed that extravasated plasma during blushing induces inflammatory response – which is enhanced with repeated episodes

Pathogenesis



- Demodex folliculorum (mite) – lives in lumen of sebaceous follicles of the head (central face)
  - Unclear if this is a cause of rosacea but increased in number in people with rosacea
  - Exacerbating factor





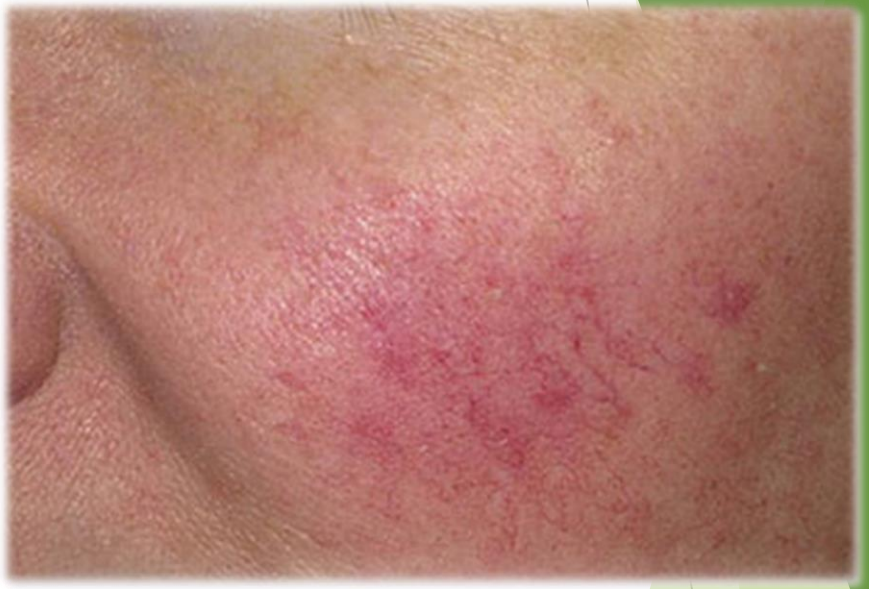
Clinical features

- Primary features
  - Flushing (transient erythema)
  - Non-transient erythema
  - Papules and pustules
  - Telangiectasia's
- Secondary features
  - Burning or stinging of malar skin
  - Plaques
  - Dry appearance (central facial skin)
  - Soft or solid facial edema
  - Ocular manifestations
  - Peripheral location
  - Phymatous changes

Acne	Rosacea
• Disorder of the sebaceous glands and hair follicles	• A neurovascular disorder
• Most commonly emerges from 14-19 years of age. Males often suffer more severely than females	• Presents most commonly between ages of 30 and 50
• Features comedones (whiteheads and blackheads)	• No comedones are present
• Can appear anywhere on the face or body	• Usually occurs on the face and is restricted to flushing zones
• Erythema and telangiectasia are not major features	• Erythema and telangiectasia are primary hallmarks

Clinical features 4 subtypes

1. **Erythematotelangiectatic** (BLOOD VESSEL)- flushing and persistent central facial erythema with or without telangiectasia's

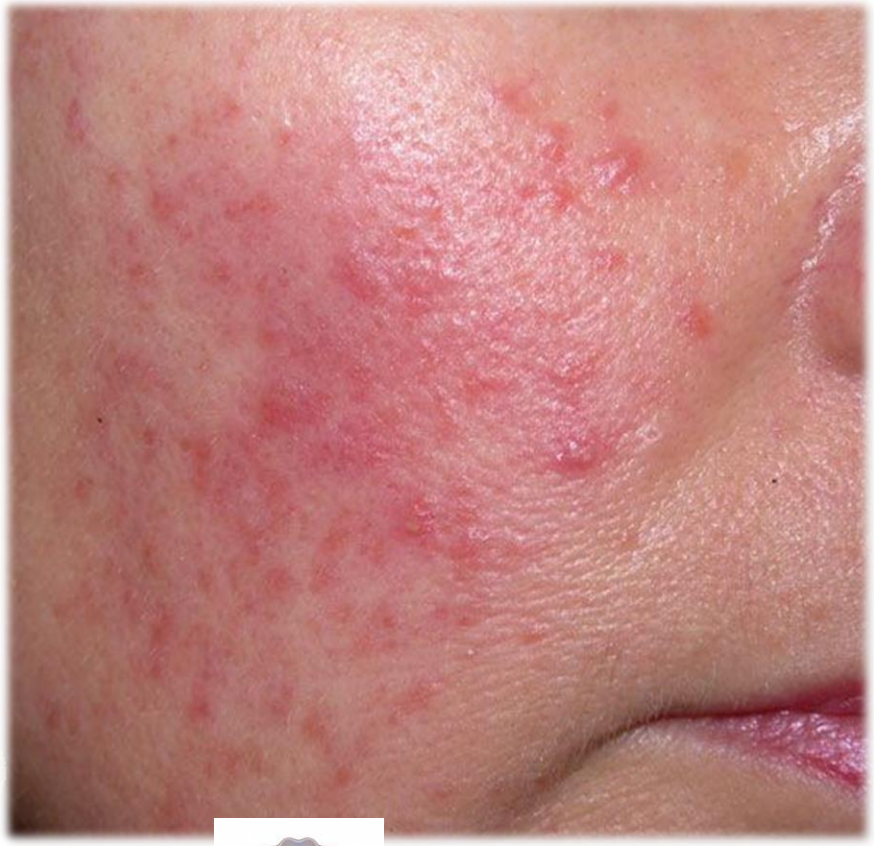


Treatment Options

- Avoid causes of flushing if possible
- Sun protection measures – UV blockers
- IPL – Intense Pulsed Light – laser device
- Brimonidine (Onreltea) gel
- Electrodessication of larger vessels

Metro products and other typical rosacea products do NOT work well on this type of rosacea

2. **Papulopustular** (RED BUMP) – persistent central facial erythema with transient papules or pustules

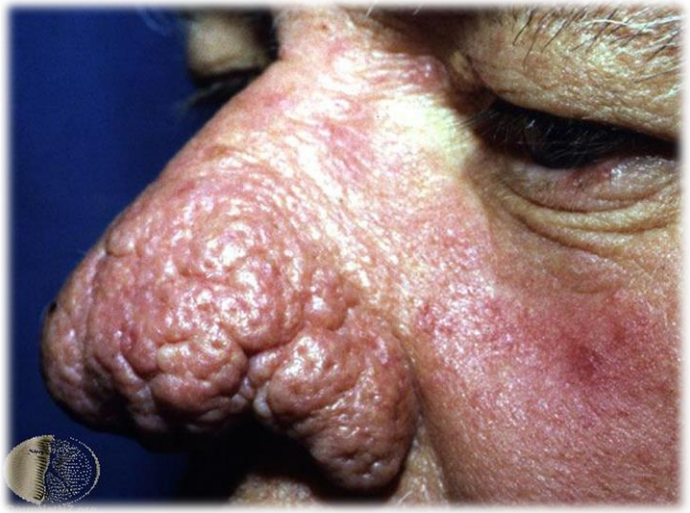


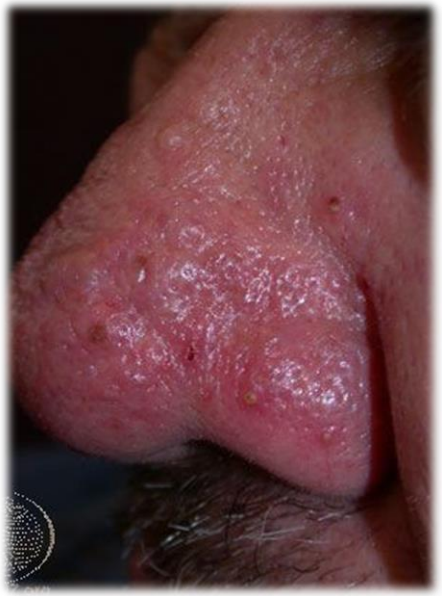
Treatment Options

- Gentle Skin care regime
- Sun protection measures
- Topicals
  - Metrogel, Metrocream, Noritate
  - Ivermectin (Rosiver) cream
  - Azaleic Acid (Finacea)
  - Sodium sulfacetamide
  - Retinoids
- Low dose Doxycycline (Apprilon)
- Doxycycline or Minocycline
- Low dose Isotretinoin

Topical and systemic steroids should NEVER be used in rosacea

3. Phymatous – thickening skin, irregular surface nodularities and enlargement
   - more common in men > women
   - Nose (rhinophyma), chin (gnathophyma), forehead (metophyma), eyelids (blepharophyma), and ears (otophyma)

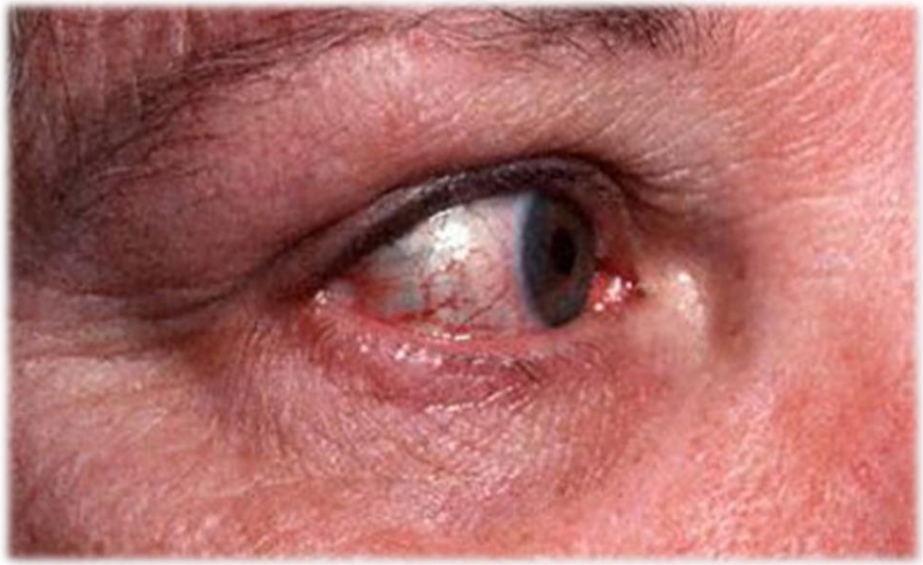


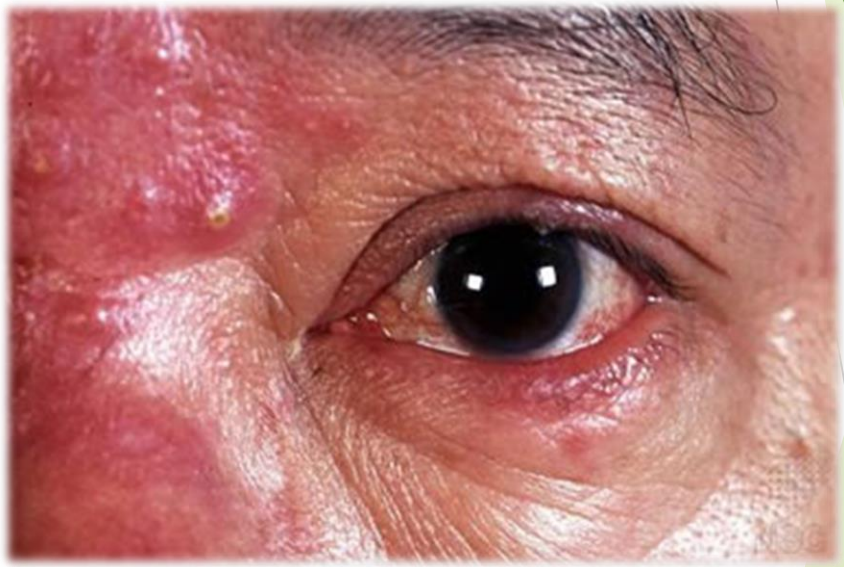


Treatment Options

- High dose Isotretinoin
- CO2 laser
- Electrodessication/electrosurgery

4. Ocular – foreign body sensation, burning or stinging, itching, photosensitivity, telangiectasia's of sclera or perioribital edema
   - Blepharitis, conjunctivitis, keratitis, hordoelum, chalazion, corneal ulcers





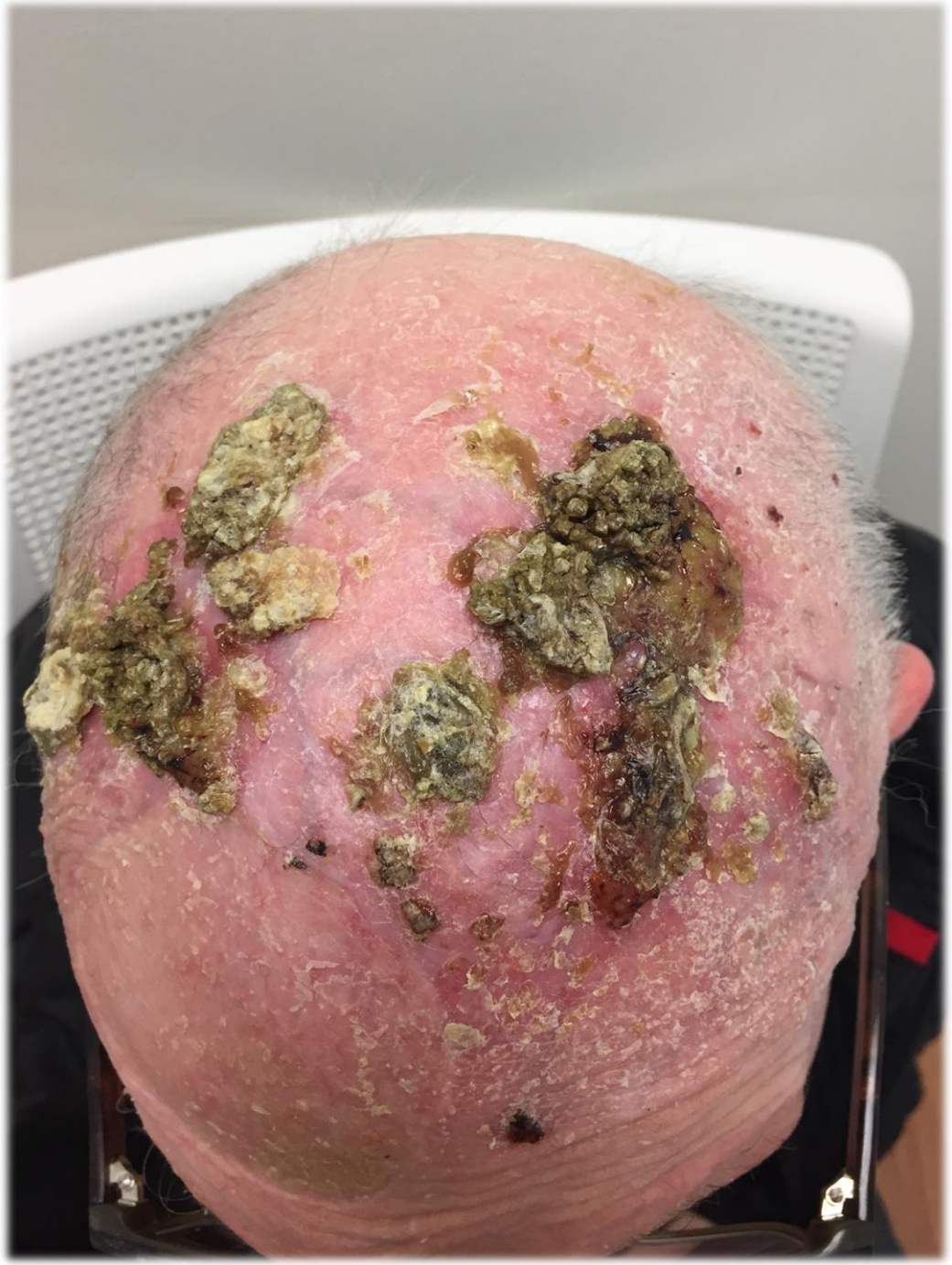
Treatment Options

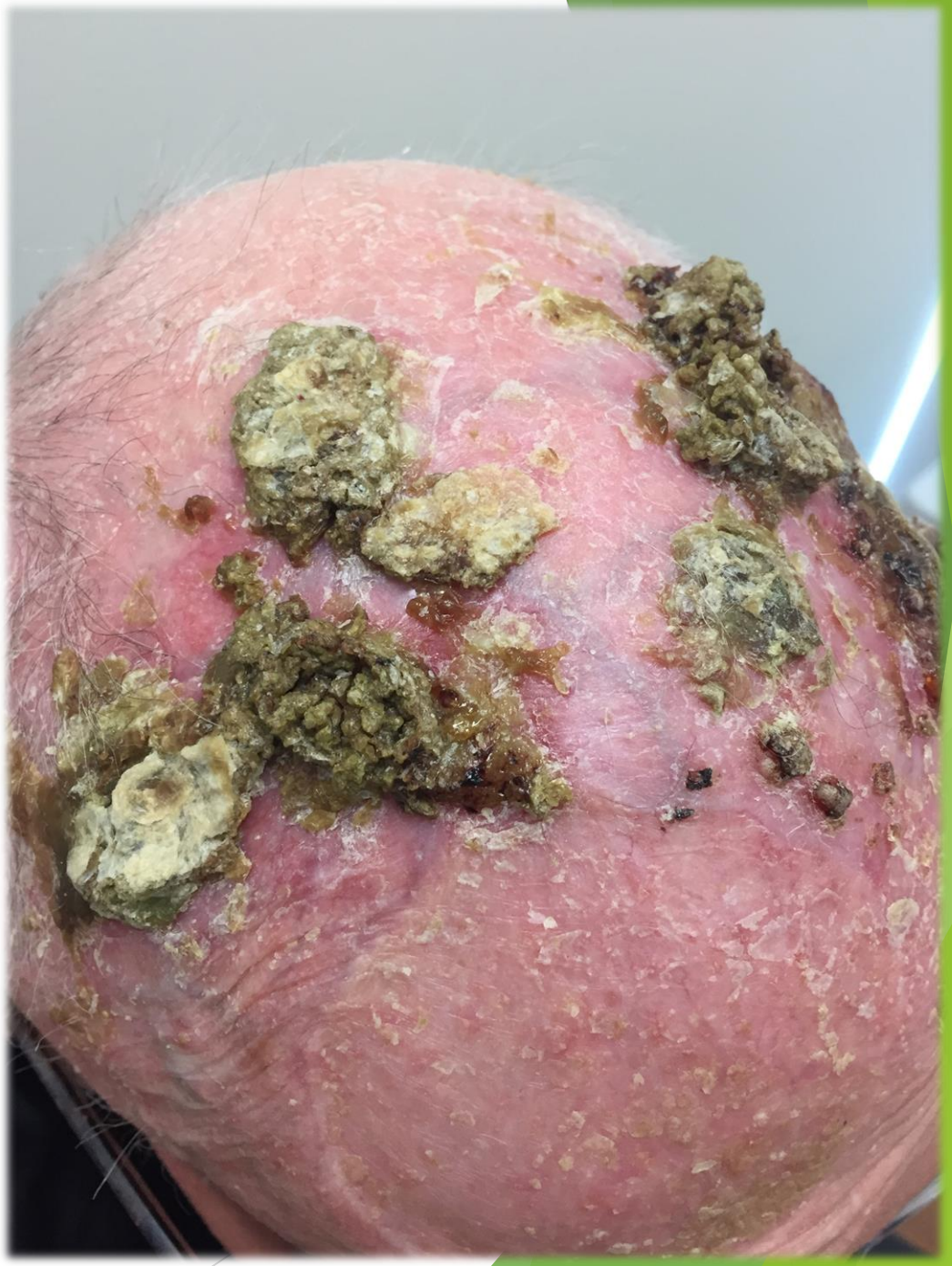
- Warm compresses, general measures
- Oral tetracyclines – doxycycline, minocycline
- Artificial tears
- Ophtho consult if worried about complications

Patient case #2

72yoM

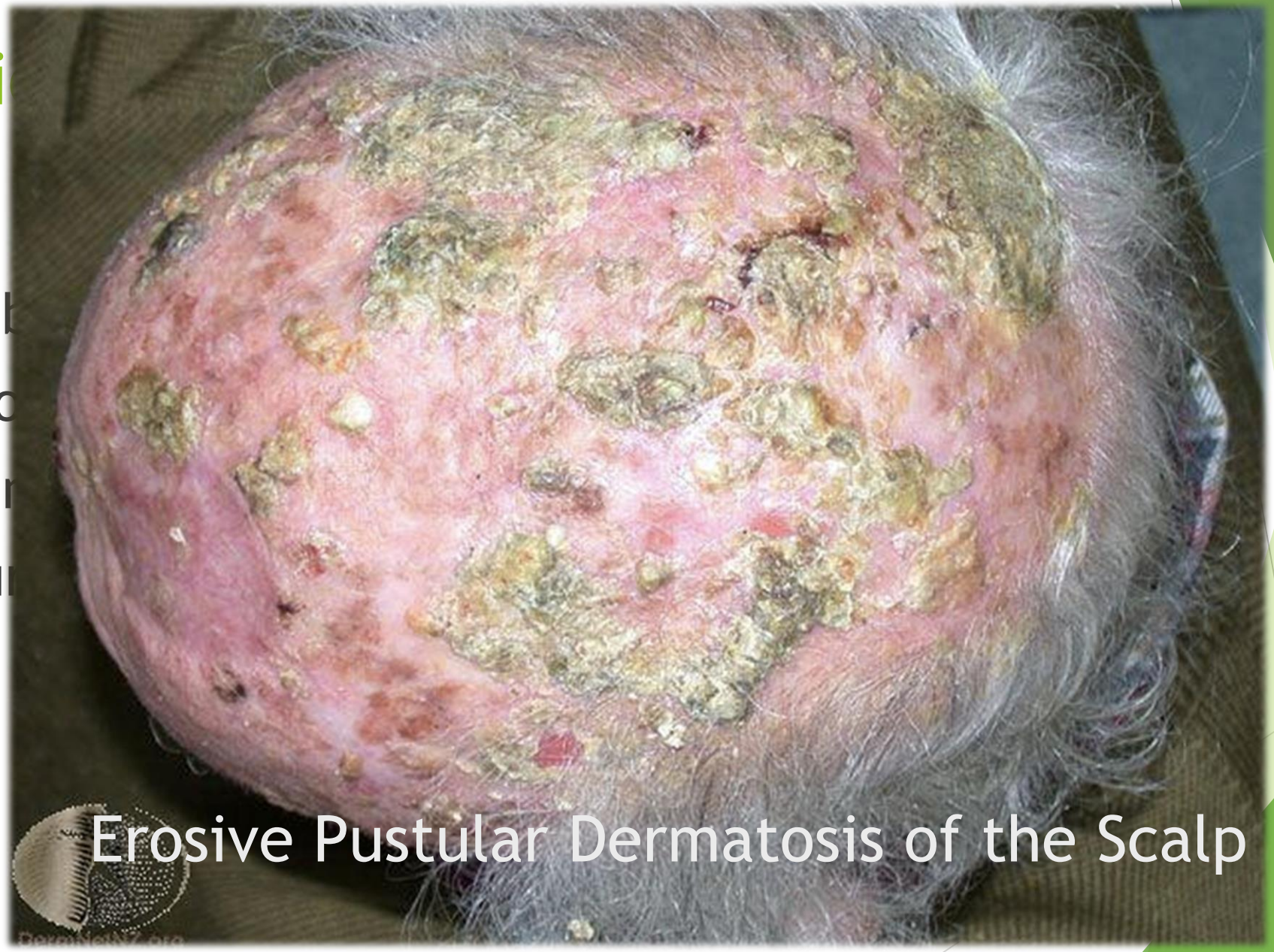
- Previously seen plastics – ddx with several SCC's to the scalp completely excised
- Referred for 3 thick scaly plaques to scalp
- Shave biopsies confirmed –
  - Two SCC's (one completely excised and one margins positive) and
  - One SCC in situ (margins positive)
- Brought back and performed aggressive EDC's to 3 sites.
- Path results showed no residual SCC in fragments analyzed
- f/u in 2 months for reassessment ….





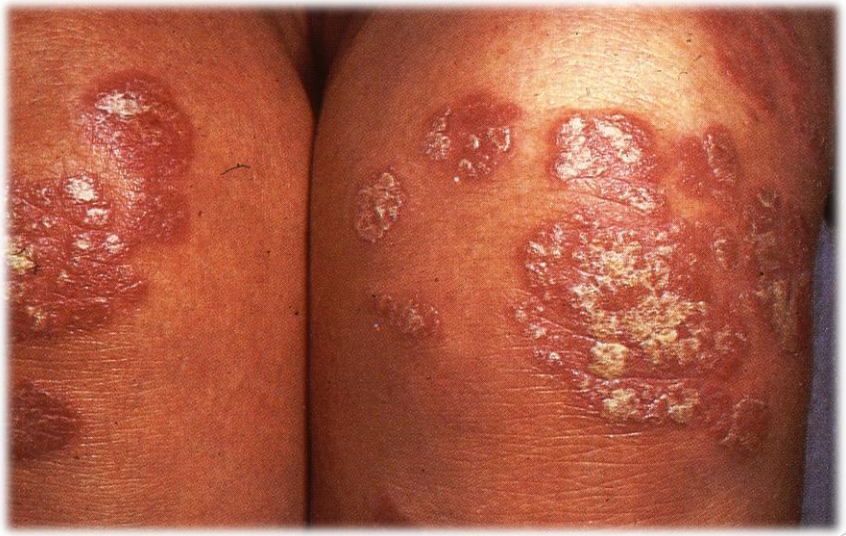
Questi

- A – Rel
- B – Clo
- C – Par
- D – Fu



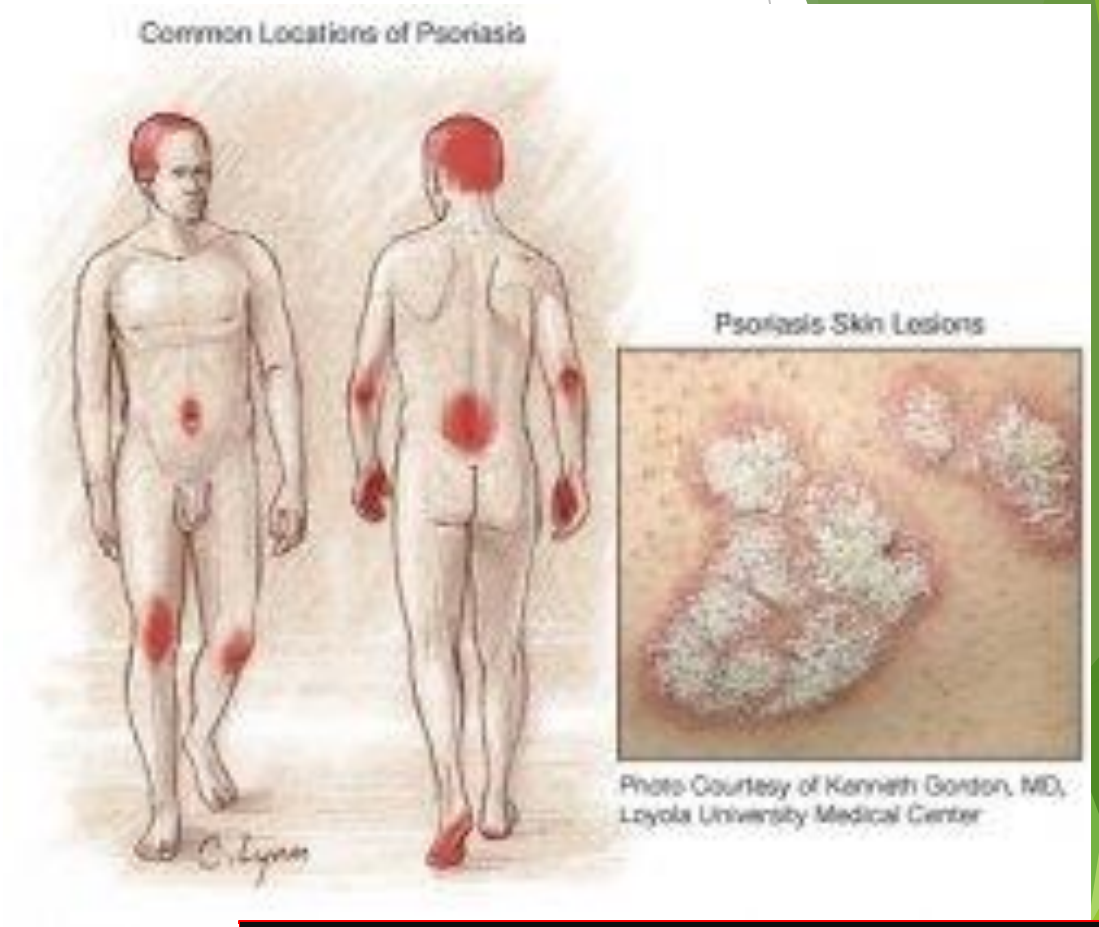
Psoriasis

- Affects ~2% of Canadians
- Affects both men and women equally
- Two primary age ranges for initial onset/diagnosis: Late teens to early adulthood; and again in late 50 to early 60s
- 10% to 15% of psoriasis patients are affected before age 10



Psoriasis

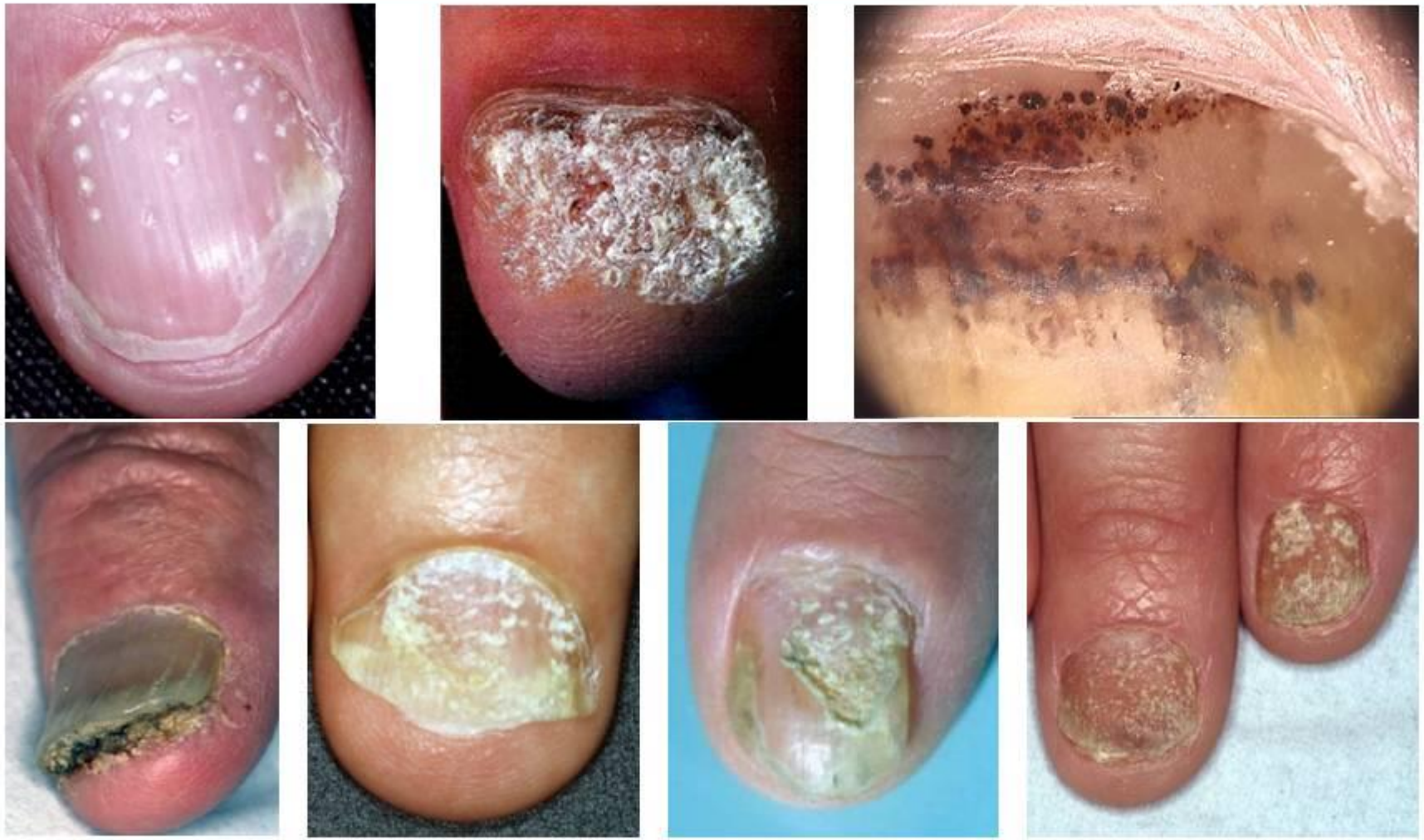
- Commonly affected areas are :
  - Elbows
  - Knees
  - Buttocks/gluteal area
  - Scalp
  - Inner ears
  - Navel
  - Nails, palms, soles
- Psoriatic lesions are:
  - Red
  - White or silvery scaling
  - Usually very itchy



If unsure of the diagnosis– ALL of these locations should be looked at to help build the diagnosis of psoriasis

Psoriasis, 2nd Edn. Key Porter Books Ltd., Langley RGB. Revised Edn (Apr 23, 201). P.8
The Canadian Guide to Psoriasis.. Papp KA. John Wiiley & sons Canada, Ltd 2011. p.12

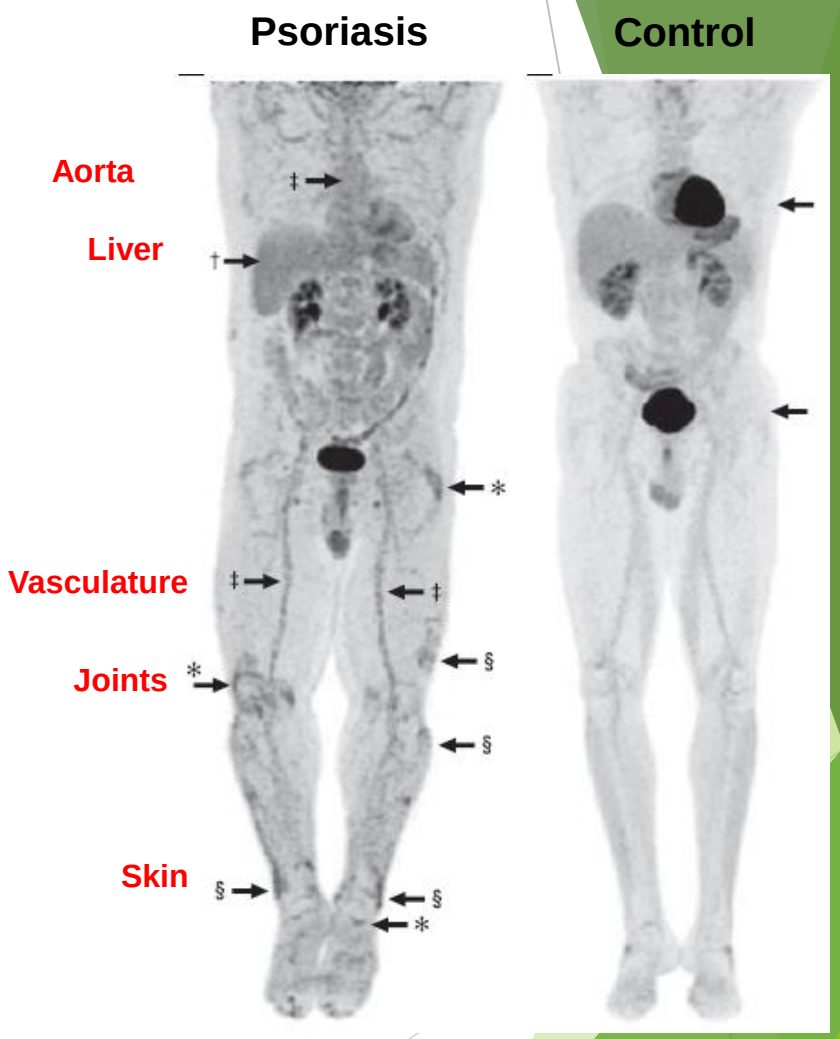
Manifestations of nail psoriasis



Slide courtesy of Prof. Kristian Reich, M.D.

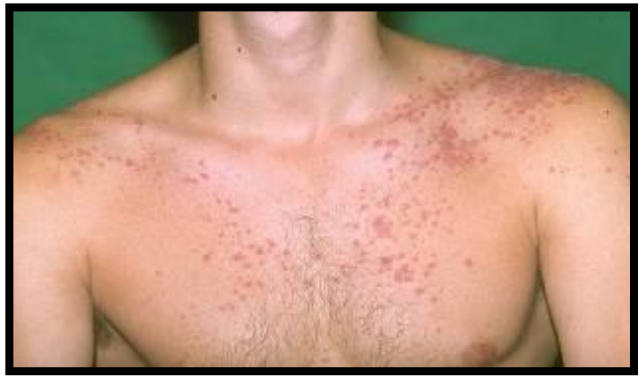
Psoriasis

- Chronic (long-term condition)
- Recurring – no cure
- Full body inflammation
- Non-contagious (cannot catch it from anyone or give it to someone else)

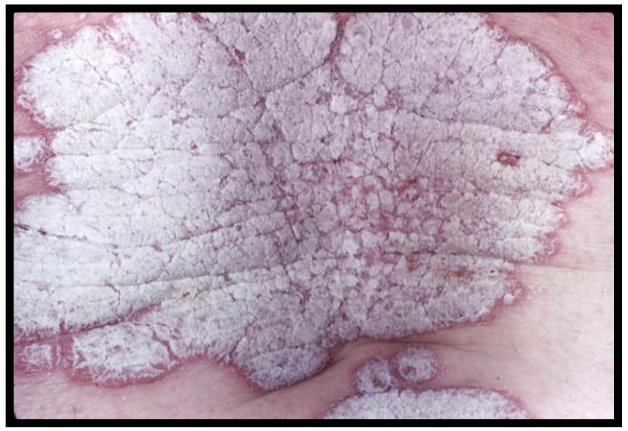


The Canadian Guide to Psoriasis.. Papp KA. John Wiiley & sons Canada, Ltd 2011. p.2.
Mehta NN, *et al. Arch Dermatol.* 2011;147:1031–9.

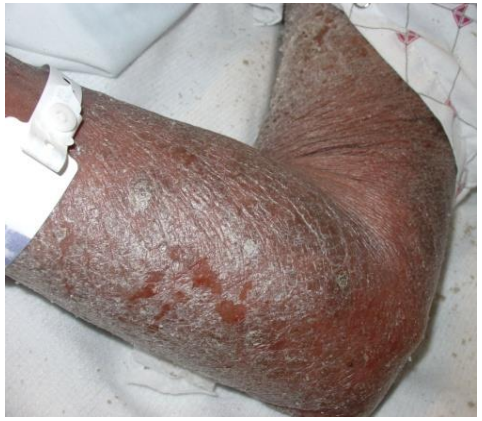
Major types of psoriasis



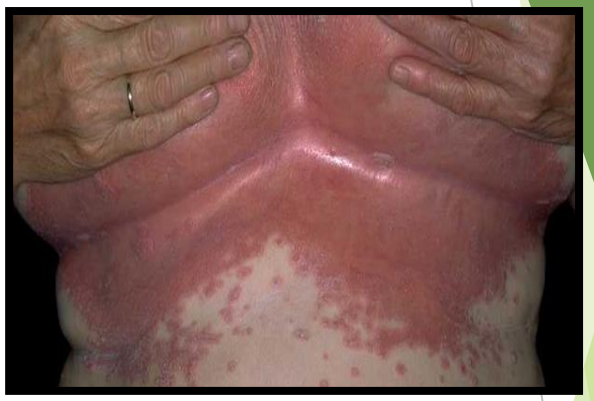
Guttate Psoriasis



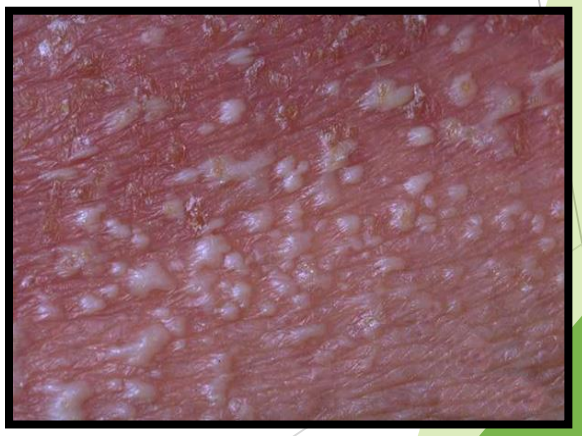
Plaque Psoriasis



Erythrodermic Psoriasis



Inverse Psoriasis

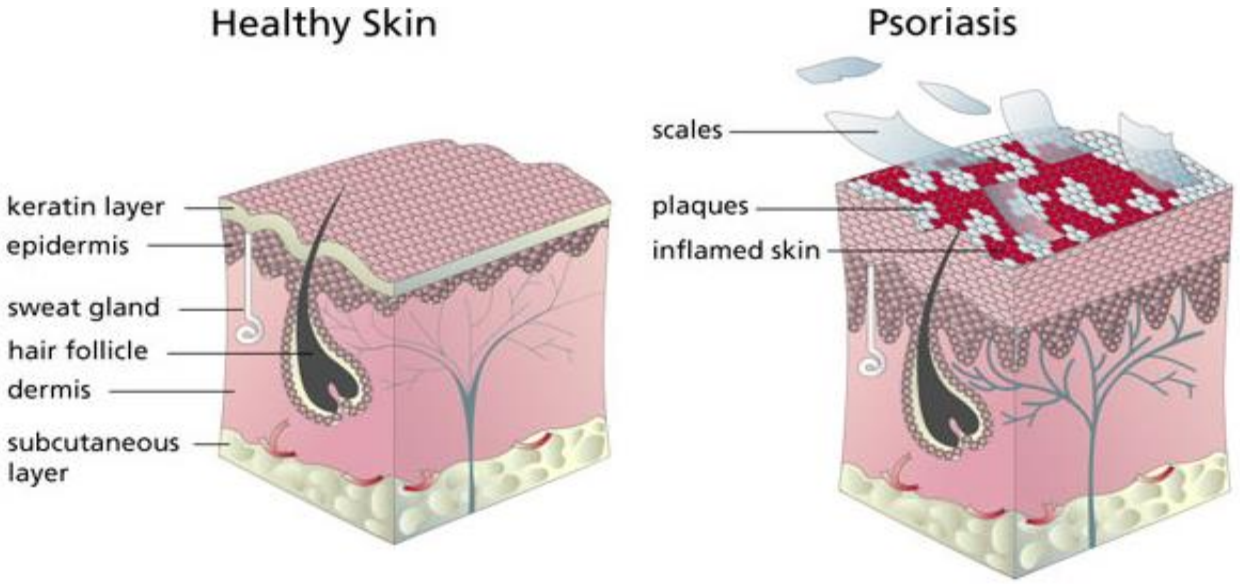


Pustular Psoriasis

Photos from Habif 2004. Clinical Dermatology: A Color Guide to Diagnosis and Therapy

Psoriasis plaque

- Usually skin cells replace themselves every 28 days
- In psoriasis plaque, cells replace themselves during 3-5 days



Psoriasis, 2nd Edn. Key Porter Books Ltd., Langley RGB. Revised Edn (Apr 23, 201). Pp. 25-26.

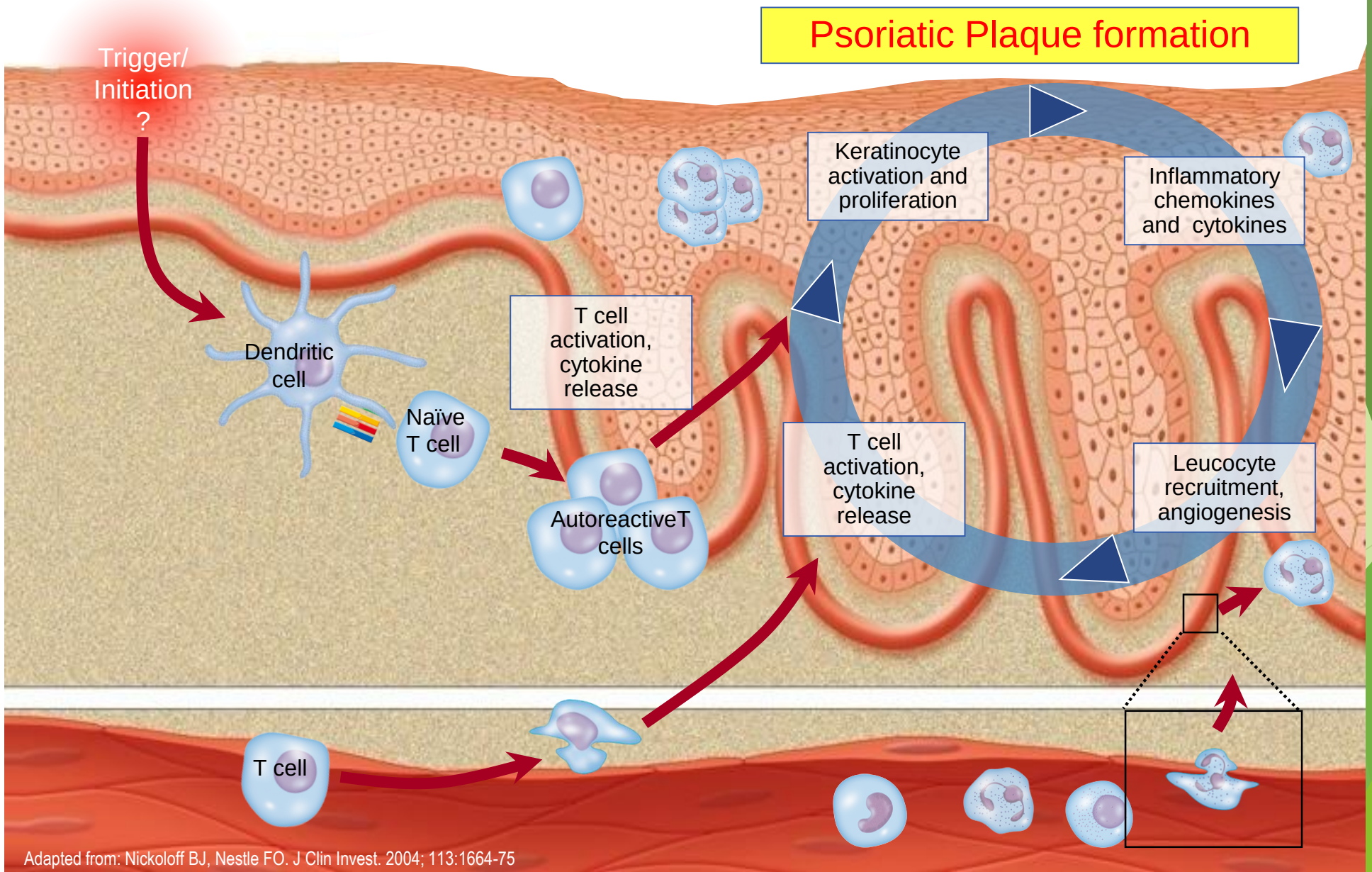
Causes of psoriasis

- No known single cause but three main factors contribute to someone developing psoriasis :

Genetic	Immunologic	Environmental
• Several genes identified • Caucasians more affected • ≃ 30% patients who suffer from psoriasis have a 1st degree relative with psoriasis	• T cells play a central role • Many parts of immune system involved (TNF, interleukins, interferon)	• Climate • Skin injury • Stressful life events • Infection • Medications • Smoking • Alcohol

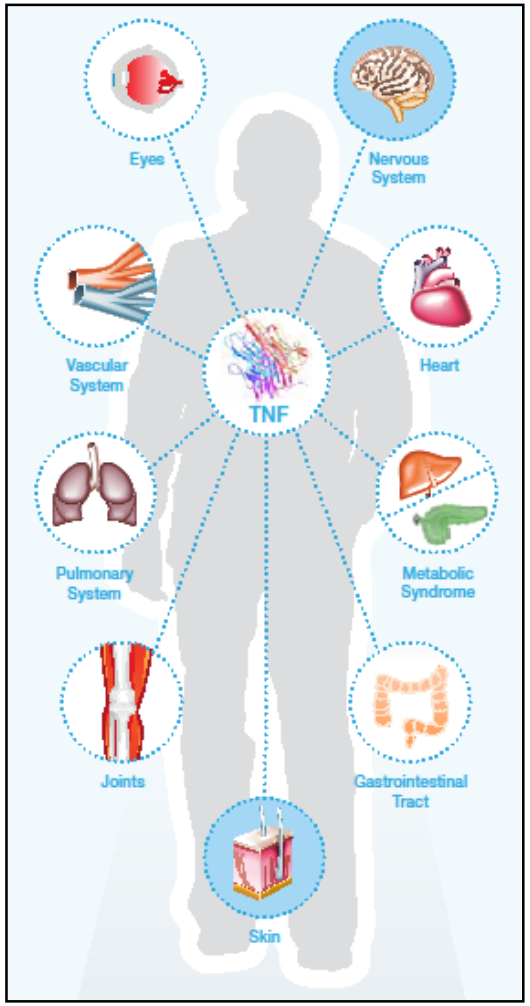
1. Psoriasis, 2nd Edn. Key Porter Books Ltd., Langley RGB. Revised Edn (Apr 23, 201). Pp. 25-33
2. The Canadian Guide to Psoriasis.. Papp KA. John Wiiley & sons Canada, Ltd 2011. p.8-9

Psoriasis is an Immune-Mediated Disease



Adapted from: Nickoloff BJ, Nestle FO. J Clin Invest. 2004; 113:1664-75

Main psoriasis associated diseases



1. Psoriatic arthritis
2. Hypertension
3. Obesity
4. Diabetes
5. Dyslipidemia
6. Cardiovascular diseases
7. Anxiety
8. Depression
9. Gastrointestinal diseases (Crohn's disease, ulcerative colitis)

Canadian Guidelines for the management of plaque psoriasis, 1st edition, June 2009.

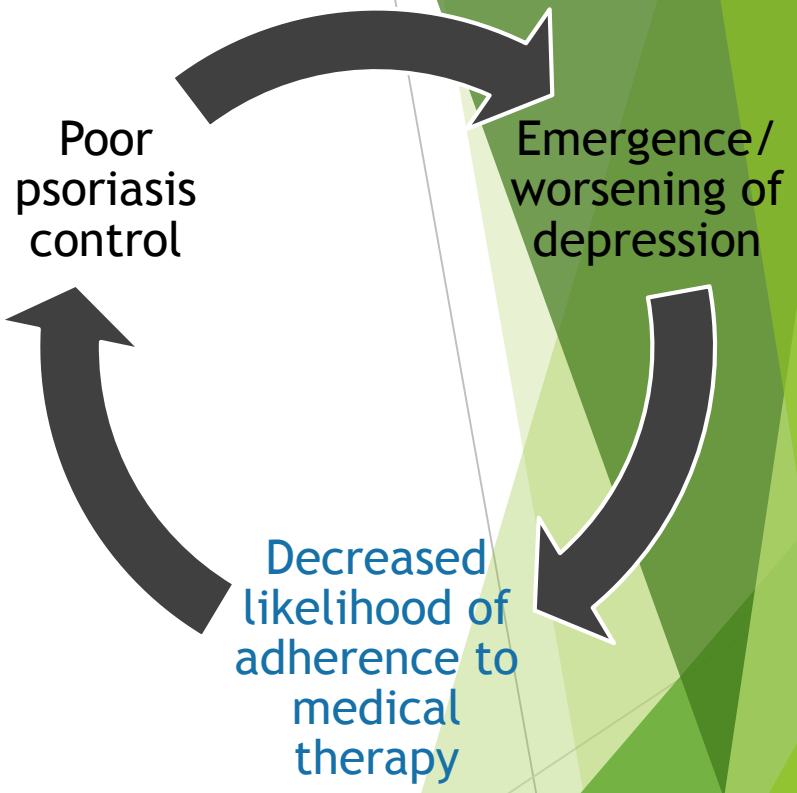
Psoriatic arthritis (PsA)

- Approximately 25-30% of patients with psoriasis will develop PsA
- In 85% of patients, skin disease precedes joint disease
- PsA is frequently undiagnosed
- Higher risk of developing PsA in presence of :
  - Scalp psoriasis
  - Nail disease
  - Intergluteal/ perianal disease

1. Menter A et al. *JAAD*. 2011. 65:137-174.
2. NPF Website-About PsA www.psoriasis.org. Accessed April 2012.
3. Adapted from Wilson FC, *et al: Arthritis Rheum* 2009; 61(2):233-9

Depression is associated with an increased risk of poor adherence to medical therapy

- Adherence to topical therapies has been shown to be low (50-60% of expected) in real-life studies
- Depression has been associated with a 3-fold risk of nonadherence to medical therapy



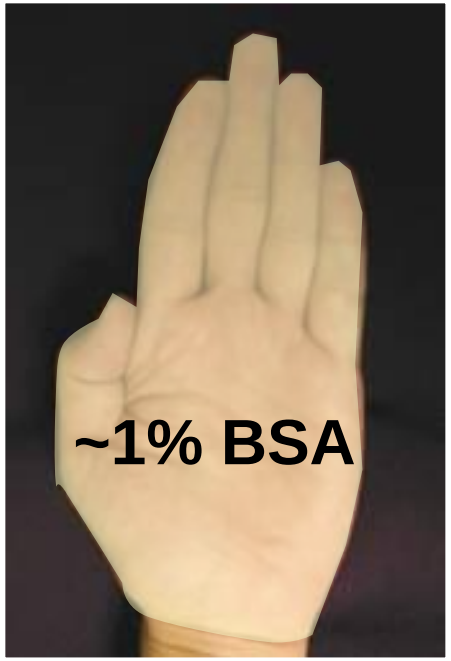
Never diminish the psychological effect of skin diseases on the patients psyche – things are usually more than skin deep

1. Devaux S, *et al*: *J Eur Acad Dermatol Venereol* 2012;26(Suppl.3):61-7.
2. DiMatteo MR, *et al*: *Arch Intern Med* 2000;160(14):2101-7.

Assessing severity
Body surface area – Palm method

- Area of palm plus 5 fingers ≈ 1% of total BSA:

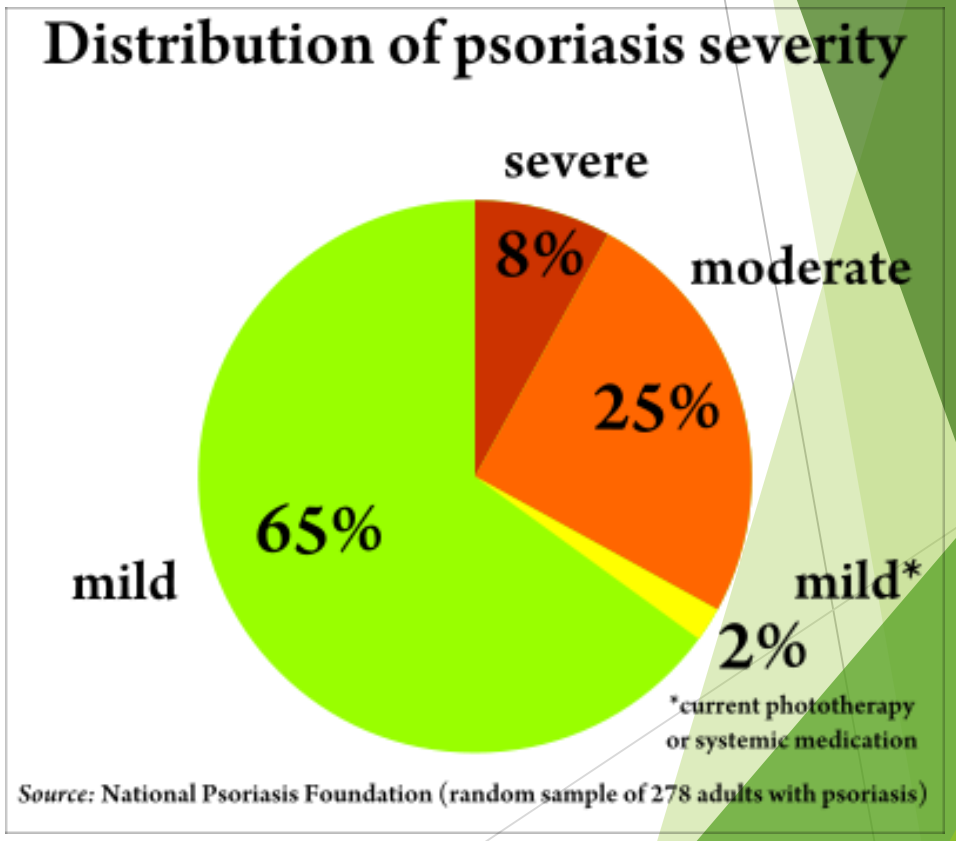
Body Area	% BSA	Number of Palms
Head and Neck	10	10
Upper extremities	20	20
Trunk (axillae and groin)	30	30
Lower extremities (buttocks)	40	40
TOTAL	100	100



1. Finlay AY. Br J Dermatol. 2005;152:861-7.

Severity of psoriasis

- % body surface area affected (BSA)
  - Mild : < 5%
    - Topicals
  - Moderate : 5-10%
    - Topicals + systemic or photo
  - Severe : > 10%
    - Topicals + Biologics



Distribution of psoriasis severity. Available at: en.wikipedia.org/wiki/Psoriasis
Canadian Guidelines for the management of plaque psoriasis, 1st edition, June 2009.

Treatment goal : patient satisfaction

- Decrease the extent and severity of psoriasis :
  - Reduce pain and pruritus
  - Improve manual dexterity
  - Relieve cosmetic problems
  - Complete clearance – achievable with some new therapies
- Desired features :
  - Sustainable therapy
  - Acceptable safety profile
  - Feasible for the individual patient

Factors influencing the choice of psoriasis treatment

- Type of psoriasis
- Extent of disease
- Area affected
- Age & gender
- Pregnancy
- Medical history
  - Other health problems
- Lifestyle
- Occupation
- Impact of psoriasis on patient's quality of life
- Geographic location
- Treatment affordability
- Patient's willingness to stick with treatment

1. Psoriasis, 2nd Edn. Key Porter Books Ltd., Langley RGB. Revised Edn (Apr 23, 201). P. 96.

Current therapeutic options in psoriasis

Topical therapy	Phototherapy	Synthetic systemic therapy	Biologic therapy
Corticosteroids	nbUVB	Acitretin (Soriatane)	Adalimumab
Vitamin D3 analogues	PUVA	Cyclosporine	Etanercept
Retinoids (Tazarotene)		Methotrexate	Infliximab
Anthralin, tars, Salicylic acids		Apremilast (Otezla)	Ustekinumab
Combination of Vitamin D3 analogues and corticosteroids			Secukinumab
Calcineurin inhibitors			Ixekizumab
Intralesional Kenalog			Guselkumab

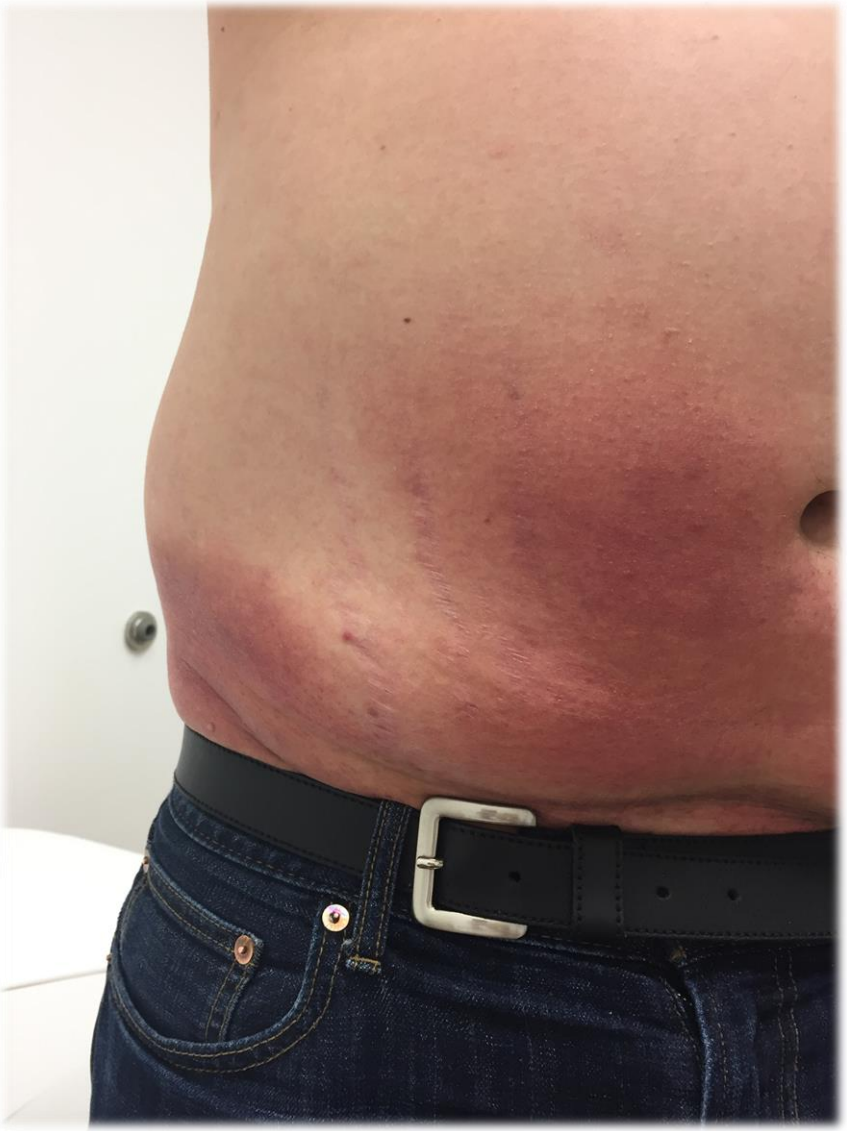
Biologics for Psoriasis

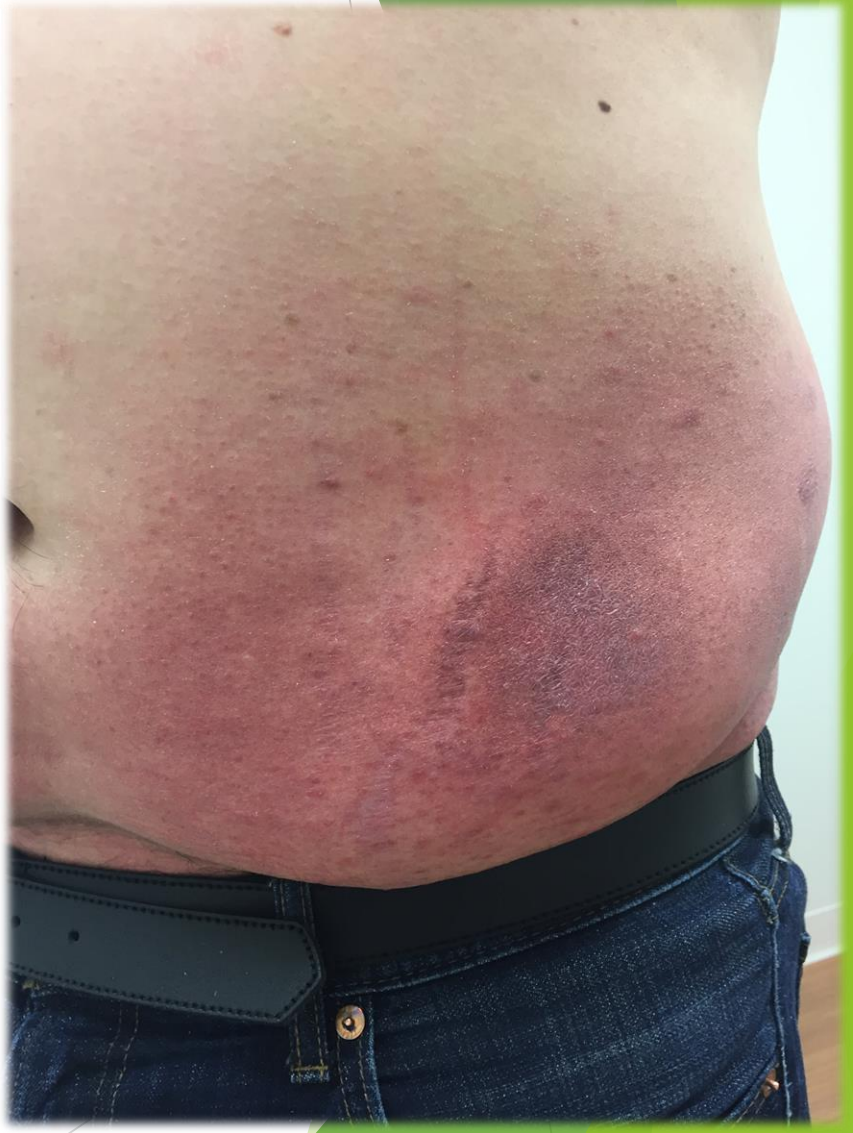
- Several biologics available:
  - Adalimumab (Humira) - TNF
  - Etanercept (Enbrel) - TNF
  - Infliximab (Remicade) - TNF
  - Ustekinumab (Stelara) - IL12/23
  - Secukinumab (Cosentyx) – IL17A
  - Ixekizumab (Taltz) –IL17A
  - Guselkumab (Tremfya) – IL-23
  - Several new biologics in trials (Brodalumab, Risankizumab, Tildrakizumab and more!)
- All of these biologics pose increased risk of infections and reactivation of latent TB.
- Patients can be nearly 100% clear

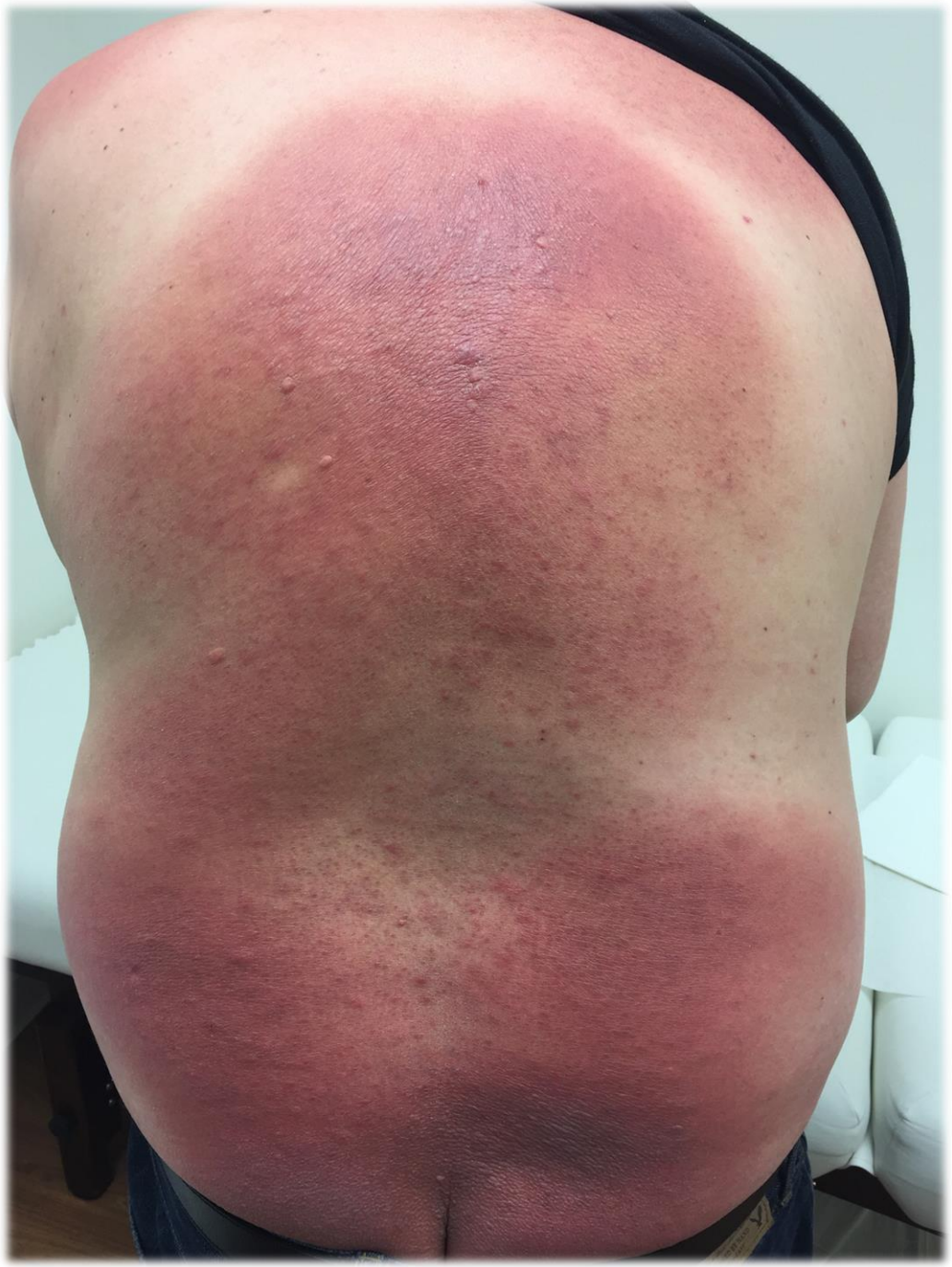
Patient case #3

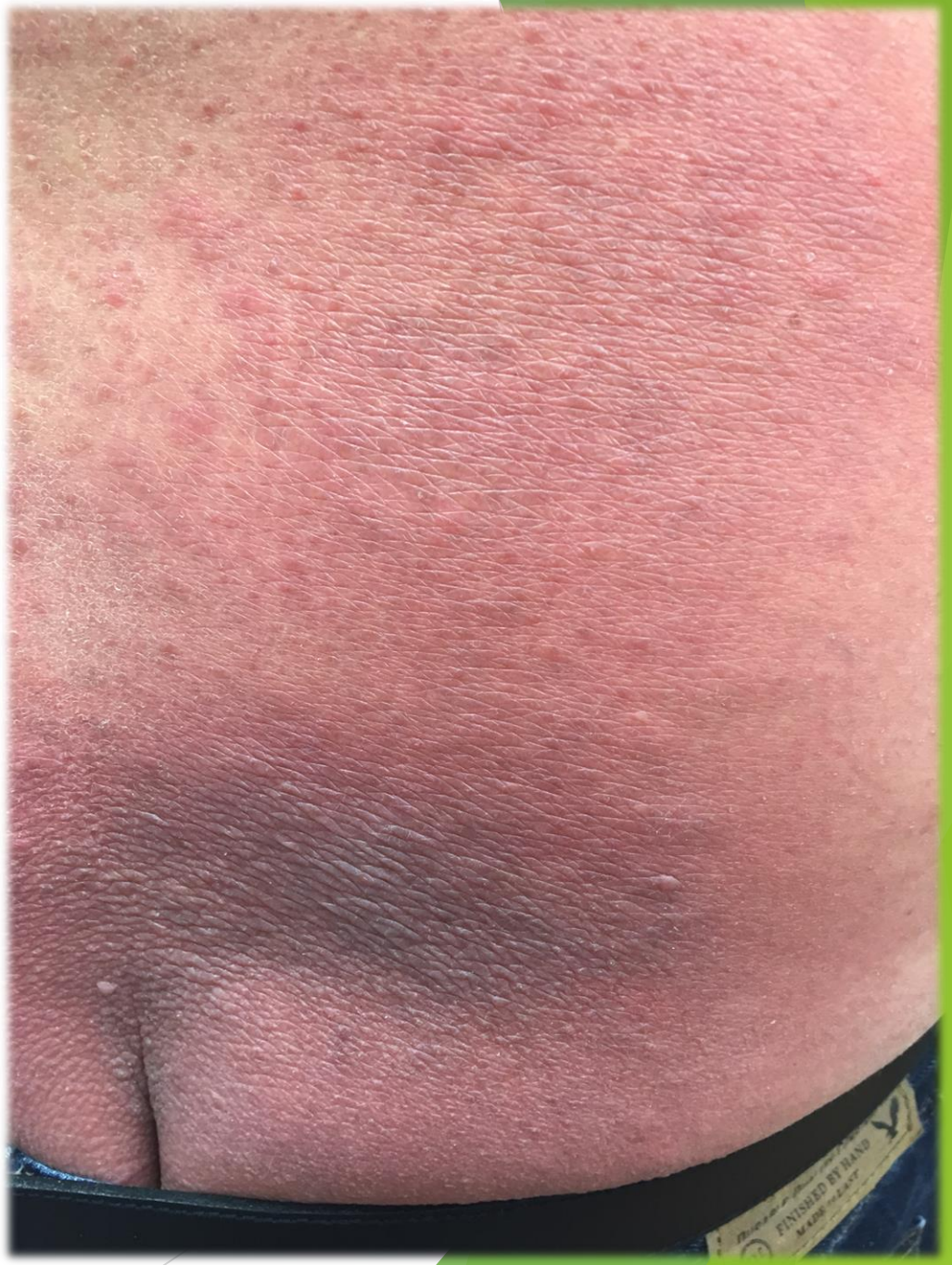
37yM

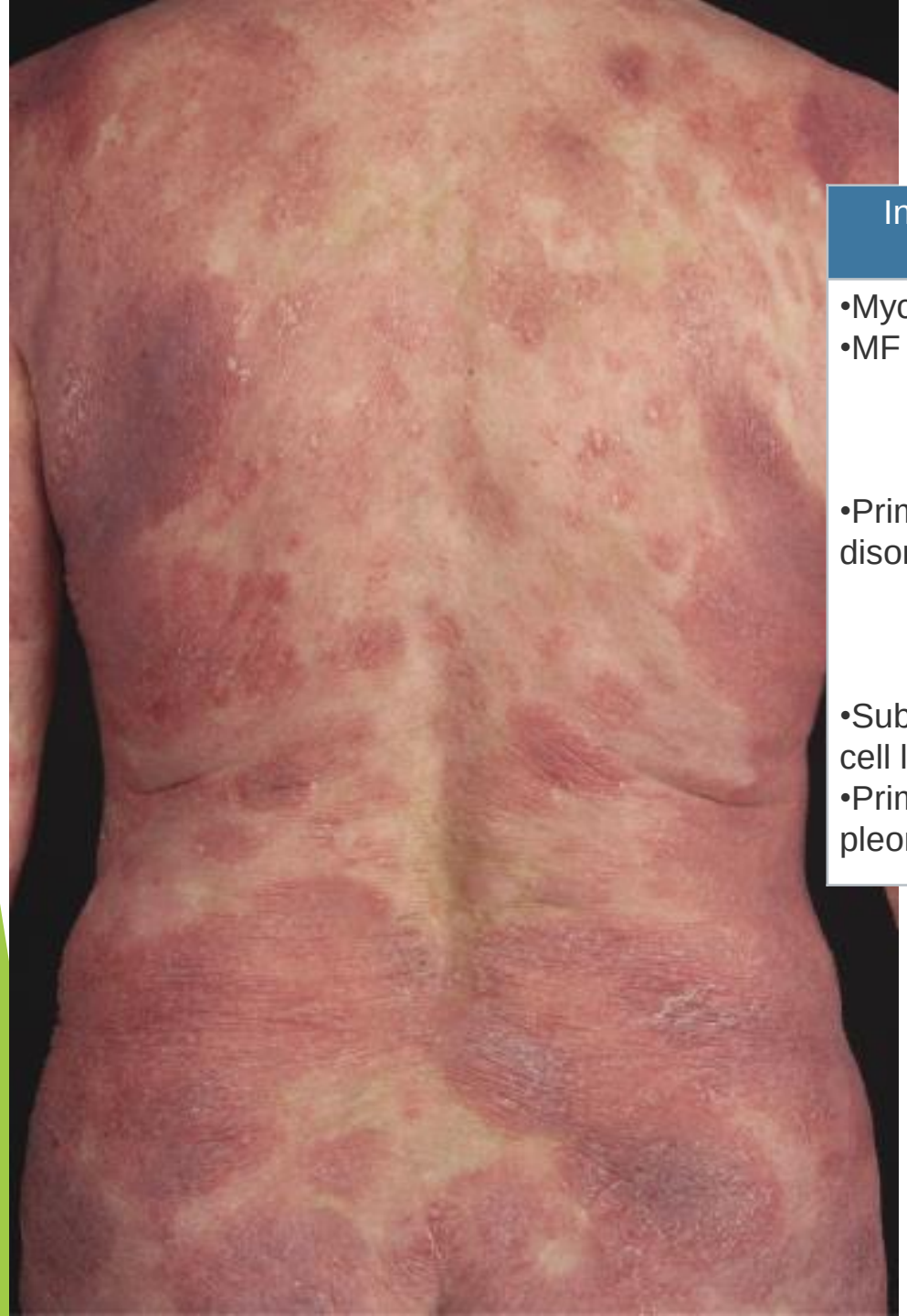
- 4-5 year history of itchy rash to his back , abdomen and arms and legs – favouring the BUTTOCKS as well
- Hx of eczema as a child
- Using Betaderm and 2.5% HC cream with minimal relief
- Otherwise feeling well











Cutaneous T cell Lymphomas

Indolent (low-grade/slow growing) clinical behaviour	Aggressive clinical behaviour
•Mycosis fungoides (MF) •MF variants and subtypes • Folliculotropic MF • Pagetoid reticulosis • Granulomatous slack skin •Primary cutaneous CD30+ lymphoproliferative disorders • Primary cutaneous anaplastic large cell lymphoma • Lymphomatoid papulosis •Subcutaneous panniculitis-like T-cell lymphoma •Primary cutaneous CD4+ small/medium pleomorphic T-cell lymphoma,	•Sézary syndrome •Adult T-cell leukaemia/lymphoma • Extranodal NK/T-cell lymphoma, nasal type; • Primary cutaneous peripheral T-cell lymphoma, unspecified • Primary cutaneous aggressive CD8+ T-cell lymphoma • Cutaneous γ/δ T-cell lymphoma

Always question if you are treating something and it doesn't respond to conventional therapy – what could you be missing?
Also always think MF in non sun exposed rashes.

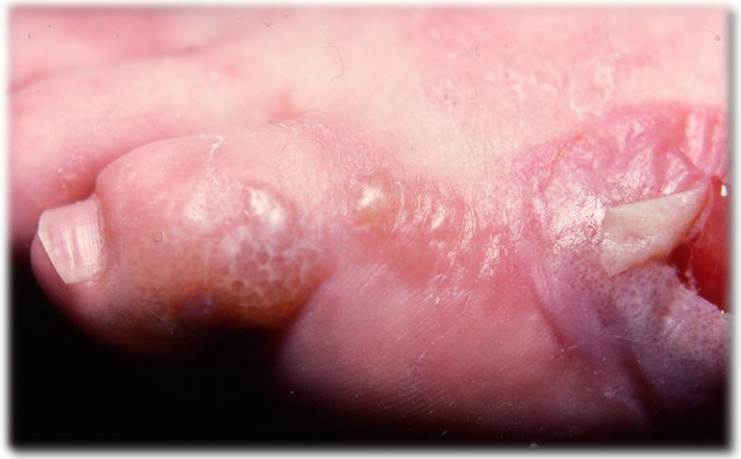
Eczema = dermatitis

Atopic Dermatitis and Contact Dermatitis are the most common types of eczema. Below is a list of some other types of eczema.

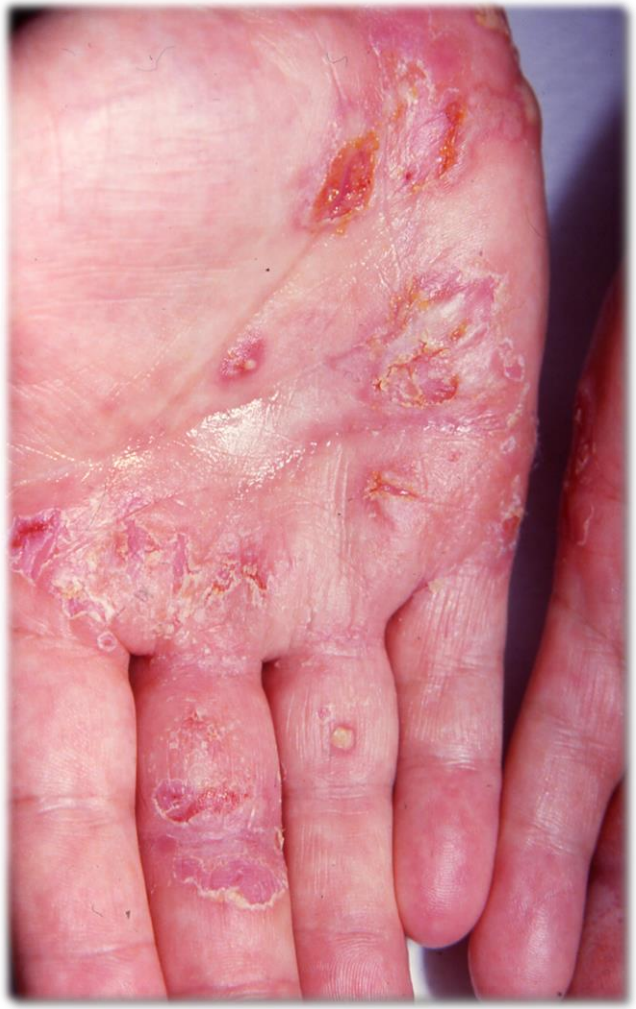
Dyshidrotic Eczema	An acute recurrent eruption of multiple tiny, intensely itchy water blisters on the palms, sides of fingers and soles of the feet.
Lichen Simplex Chronicus	Localized, chronic thick itchy plaques that commonly occur on the sides or back of the neck, wrists, ankles, lower legs and inner area of the thighs.
Nummular Eczema	Multiple, round plaques of eczema that are usually associated with dry skin and occur on the outer surfaces of the hands, arms and legs.
Seborrheic Eczema	Yellowish-brown, greasy, scaly patches on the scalp, eyebrows, nose and chest.
Stasis Dermatitis	A chronic eczema on the inner area of the lower legs and associated with varicose veins.

Eczema - Morphologic Classification

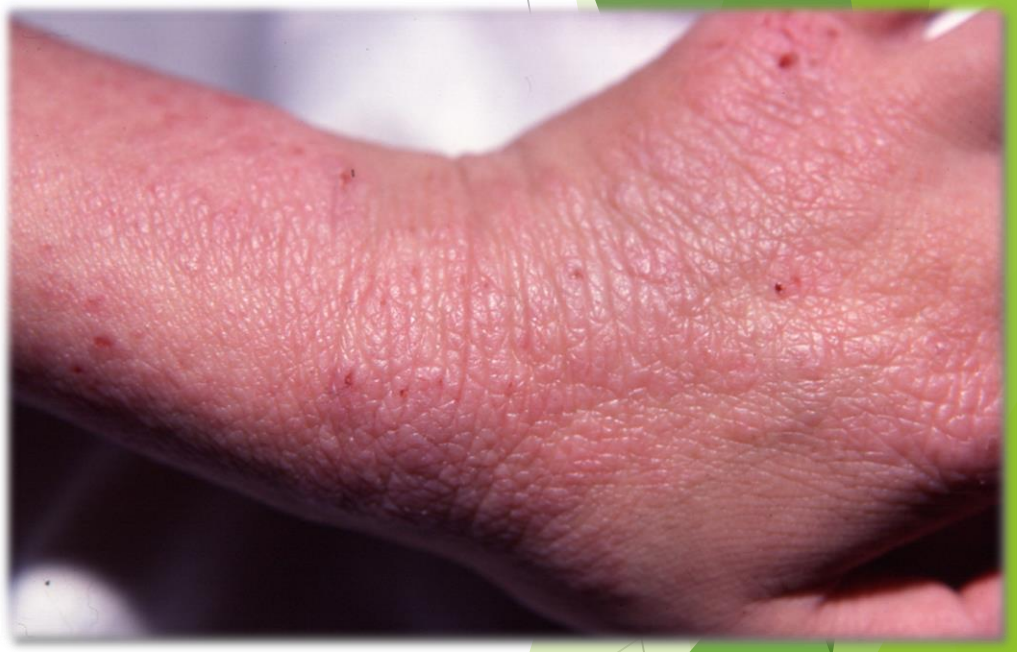
- Acute: vesicles, oozing



- Subacute: scale, crust



- Chronic: scale, fissuring, lichenification

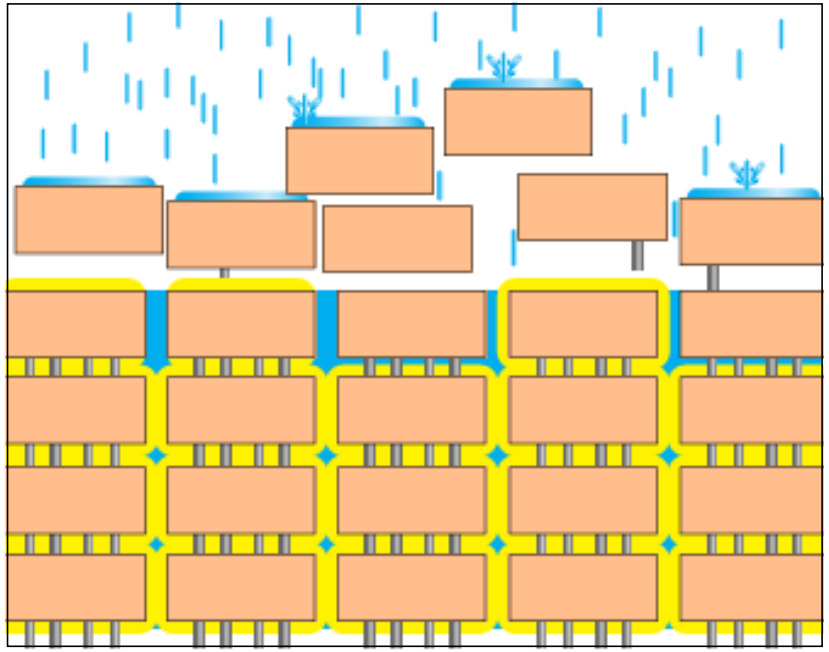


Atopic dermatitis (AD)

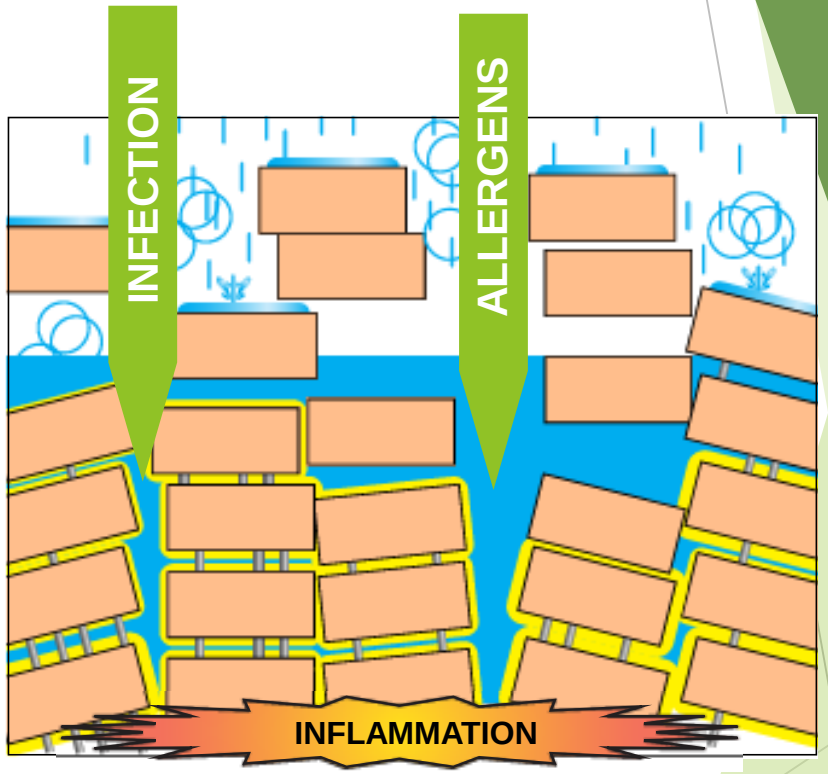
- AD is a chronic, relapsing, highly pruritic inflammatory skin condition
  - Lifetime prevalence is up to 17%, and continues to rise
- Atopic dermatitis is more common in children (15–20%) than adults (2–10%)
  - About 85-90% of cases are identified by age 5
- Episodic, with periods of remission followed by frequent, unpredictable relapses (flares)
- Impacts quality of life (QoL) for patients, their family and friends
- Treatment strategies require a long-term perspective

1. Darsow U, et al. *J Eur Acad Dermatol Venereol*. 2005; 19:286–295.
2. Alomar A, et al. *Br J Dermatol*. 2004; 151 (Suppl 70):3–27.
3. Barbeau M, and Lalonde H. *Int J Dermatol*. 2006 Jan;45(1):31-6.;
4. ISAAC Steering Committee. *Lancet* 1998; 351:1225–1232.;
5. Bieber T. *N Engl J Med*. 2008; 358:1483–1494.

Skin barrier dysfunction in AD



Normal skin barrier

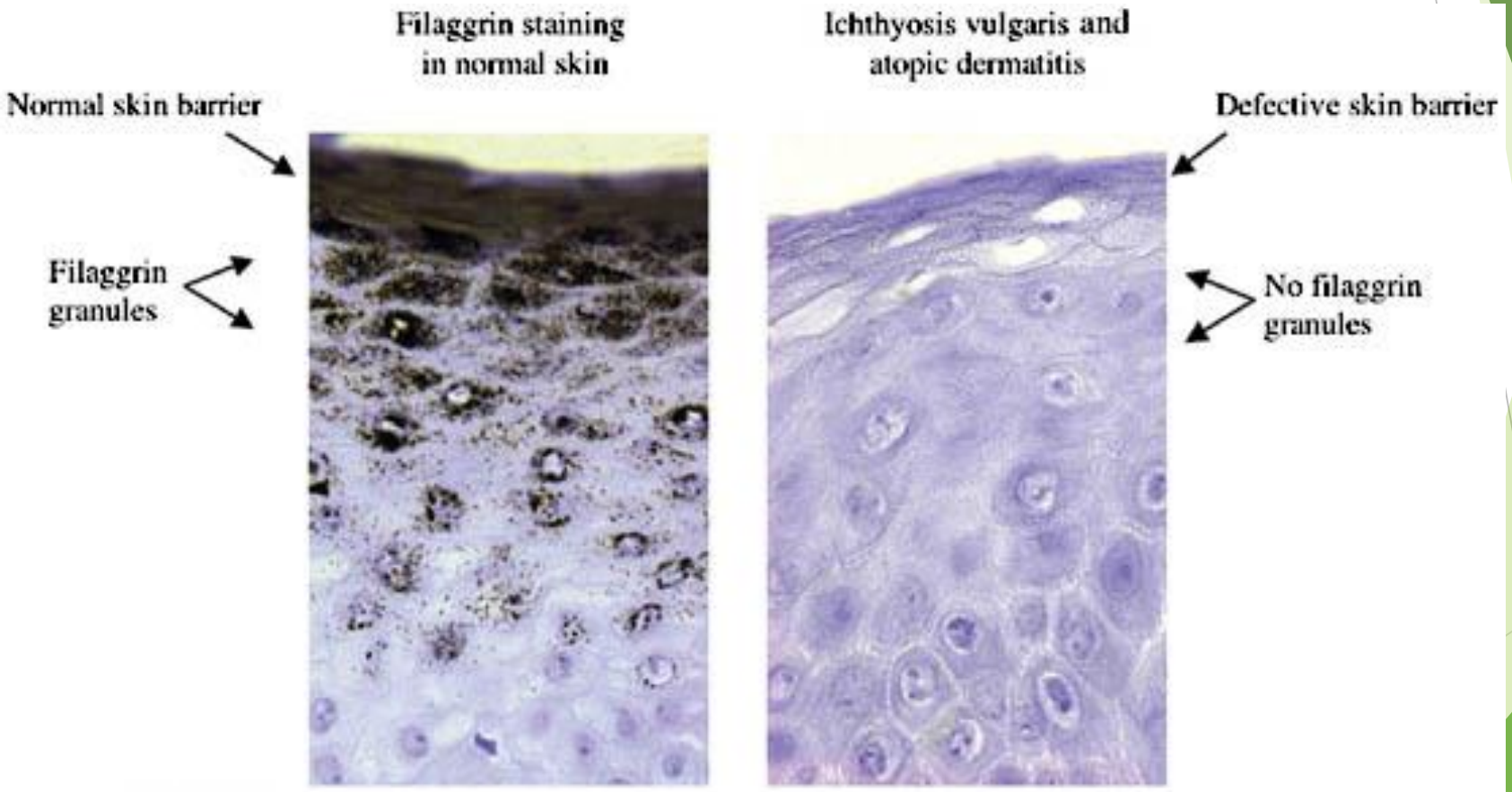


Defective barrier

Corneocytes
Corneodesmosomes
Lipid layer

Cork J, et al. *J Allergy Clin Immunol*. 2006;118(1):3-21.

AD is a genetic disease -Filaggrin mutations



- There is currently no cure for AD
- DON'T TELL PTS THAT THEY WILL GROW OUT OF IT

Hanifin and Rajka diagnostic criteria for AD

Major criteria: Must have three or more of:

1. Pruritus
2. Typical morphology and distribution

- Flexural lichenification or linearity in adults
- Facial and extensor involvement in infants and children

1. Chronic or chronically-relapsing dermatitis
2. Personal or family history of atopy (asthma, allergic rhinitis, atopic dermatitis)

- 4 P's

1. Pruritus
2. Periflexural
3. Persisting
4. Personal atopic hx

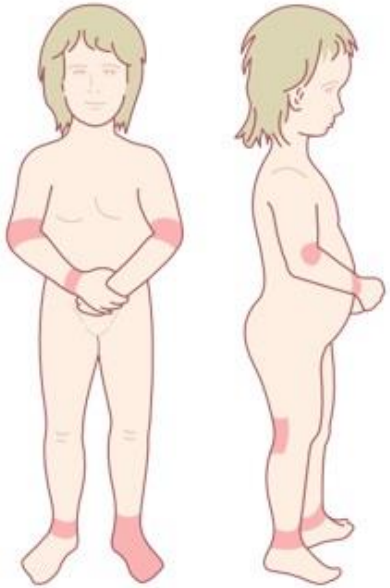
Minor criteria: Should have three or more of:

1. Xerosis
2. Ichthyosis, palmar hyperlinearity, or keratosis pilaris
3. Immediate (type 1) skin-test reactivity
4. Raised serum IgE
5. Early age of onset
6. Tendency toward cutaneous infections (especially *S aureus* and herpes simplex) or impaired cell-mediated immunity
7. Tendency toward non-specific hand or foot dermatitis
8. Nipple eczema
9. Cheilitis
10. Recurrent conjunctivitis
11. Dennie-Morgan infraorbital fold
12. Keratoconus
13. Anterior subcapsular cataracts
14. Orbital darkening
15. Facial pallor or facial erythema
16. Pityriasis alba
17. Anterior neck folds
18. Itch when sweating
19. Intolerance to wool and lipid solvents
20. Perifollicular accentuation
21. Food intolerance
22. Course influenced by environmental or emotional factors
23. White dermographism or delayed blanch

Generally, Eczema commonly occurs in different areas based on age.

Babies

Irritated skin is concentrated on or around the face.



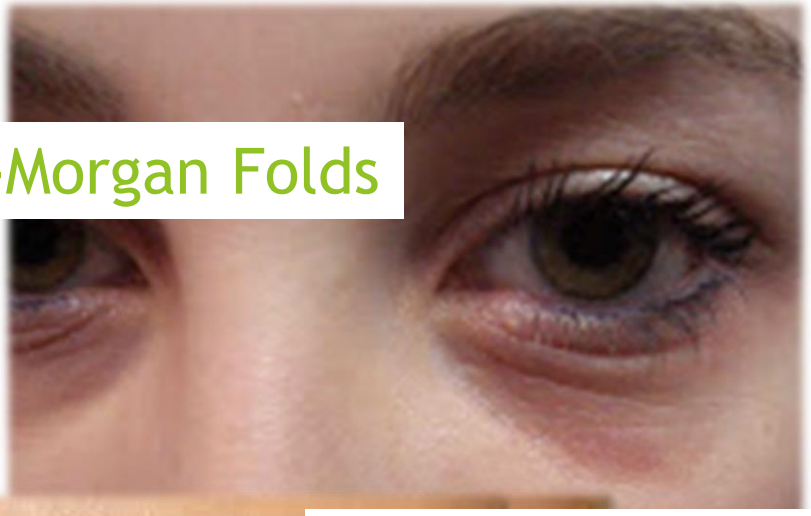
Toddlers & Children

Irritated skin is concentrated in areas with folds and creases, such as elbows and knees.

Adults

Irritation is often concentrated on the hands, the feet, as well as the head and neck region.

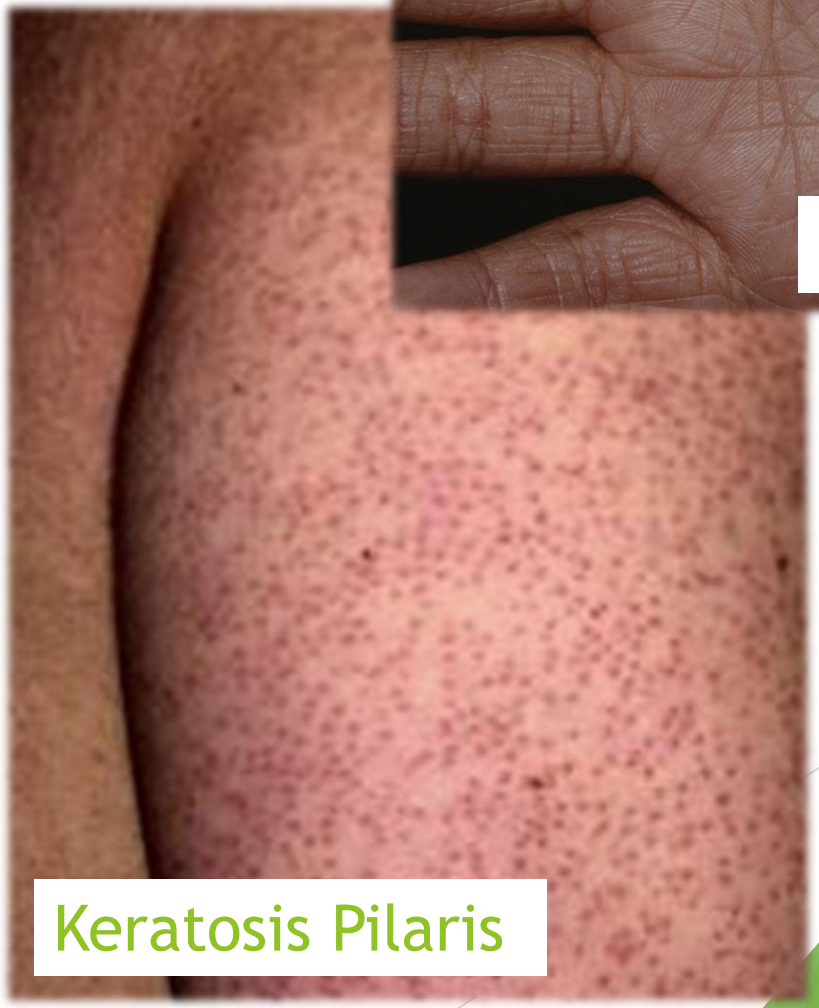
Minor findings



Dennie-Morgan Folds

‘Allergic Shiners’

Pityriasis alba



Keratosis Pilaris

Hyperlinear palms

Treatment –ECZEMA RULES

- Daily baths/showers – NO SOAP
- Fragrance free, bland emollients, thicker the better, multiple times per day as needed – 3 mins rule- new evidence in newborns
- Dilute bleach baths as needed
- Cotton clothing (no wool)
- Laundry - Fragrance free detergent, double rinses, dryer dry, no dryer sheets
- Avoid triggers – cat dander, certain foods, environment extremes, dustmites, heat, stress etc
- Sedating antihistamines at night
- Keep fingernails short, mittens or socks on hands
- Treat secondary infections as needed
- Humidifiers in bedroom

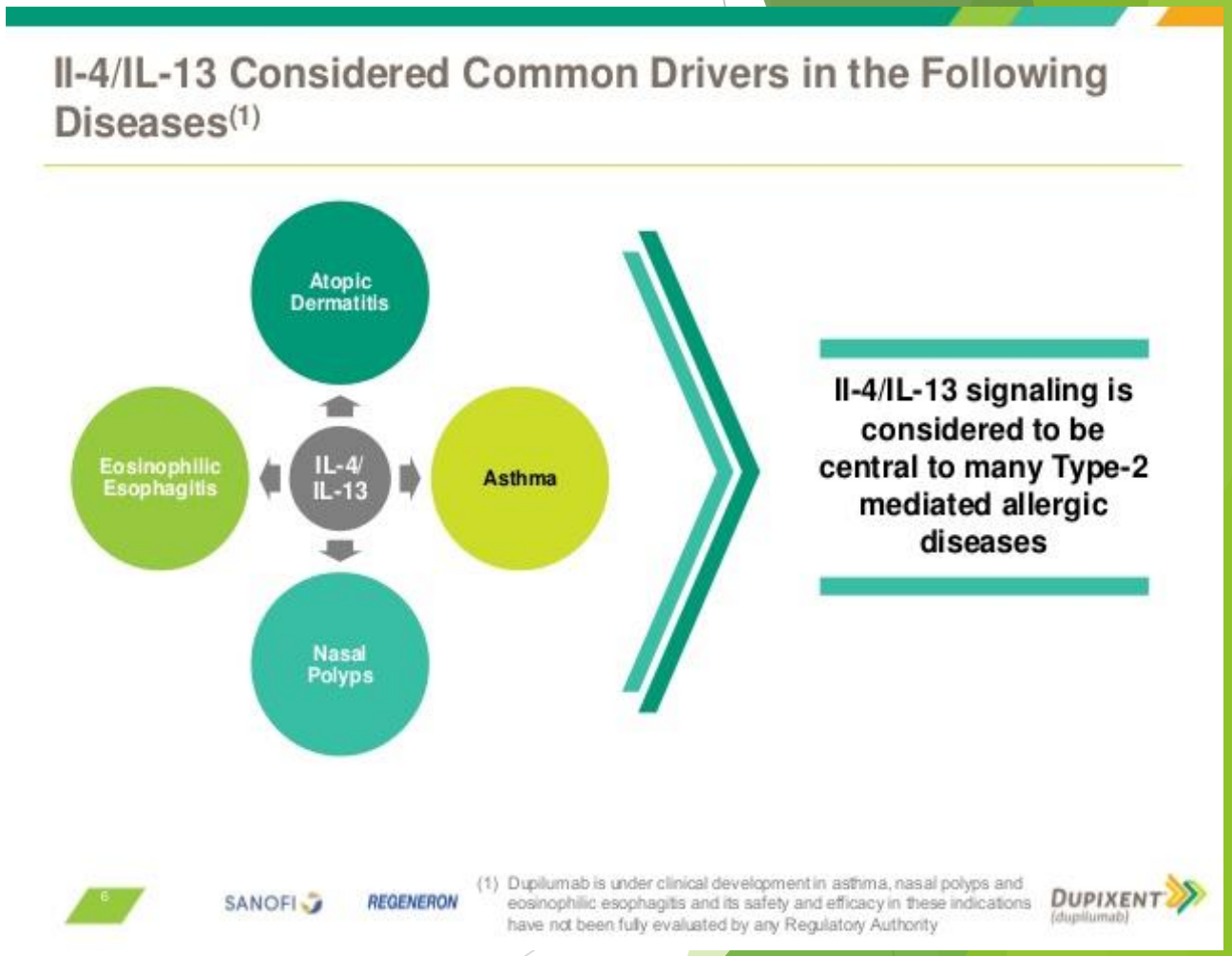
Treatment – Medicated Topicals

- Face and folds
  - low to mid potency steroid CREAMS (class 4-6)
    - Desonide, 2.5% Hydrocortisone, Hydroval, Betaderm 0.05%
  - Topical calcineurin inhibitors
    - Pimecrolimus (Elidel) 1% cream,
    - Tacrolimus (protopic) 0.1% oint
- Body
  - mid to potent steroid OINT (class 1-4)
    - betaderm 0.1%, elocom, lyderm, clobetasol

Analogy – Eczema is like a fire on the skin– put it out with a hose not a water gun ☺

Treatment - Systemic

- nbUVB
- Methotrexate
- Cyclosporine
- Azathioprine
- Short courses of prednisone
- Dupilumab (Dupixent) – first biologic for AD
  - Others – tralokinumab (IL-13), lebrikizumab (IL-13), nemolizumab (IL31R), unnamed IL22, Il-17's

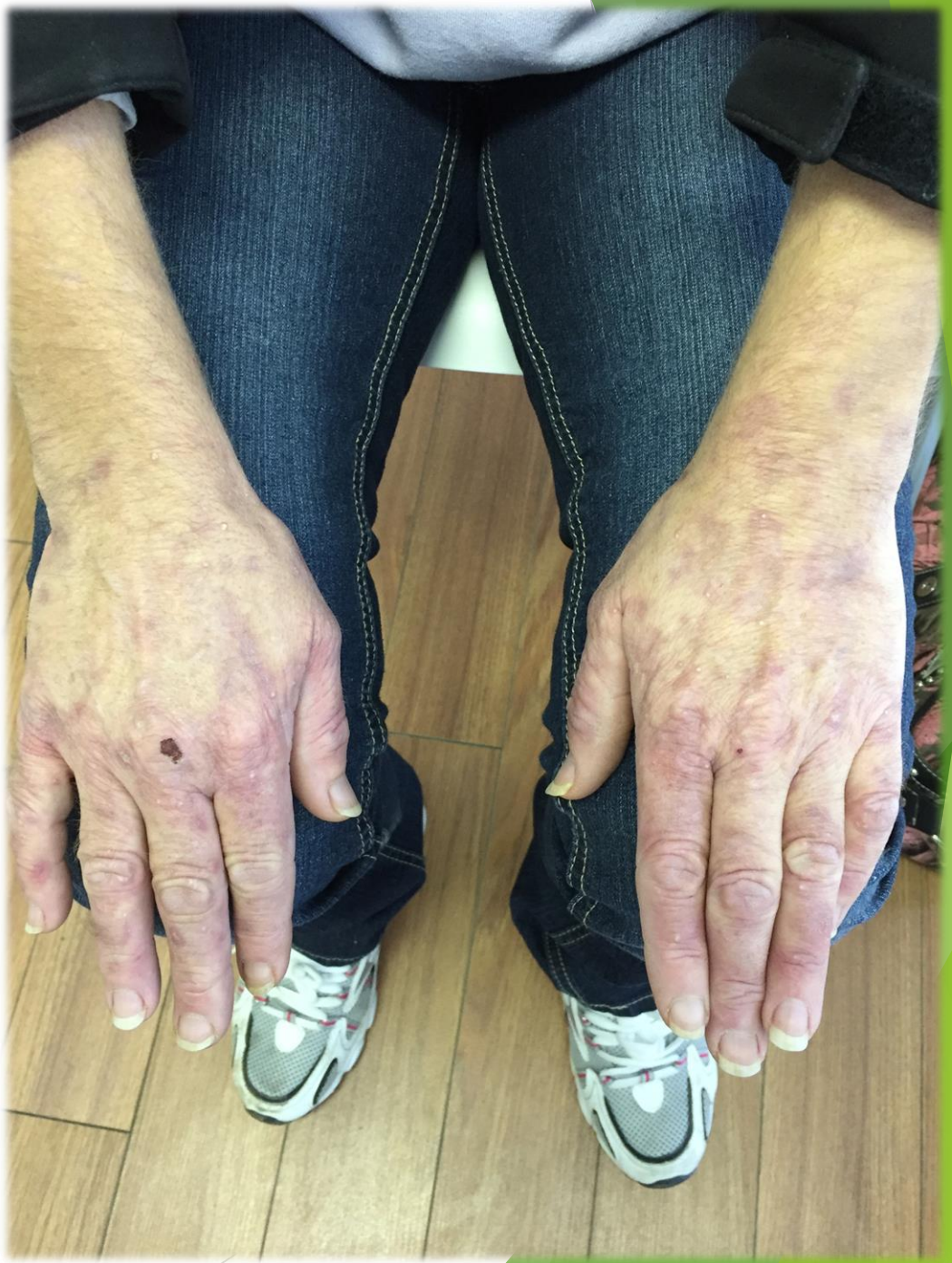


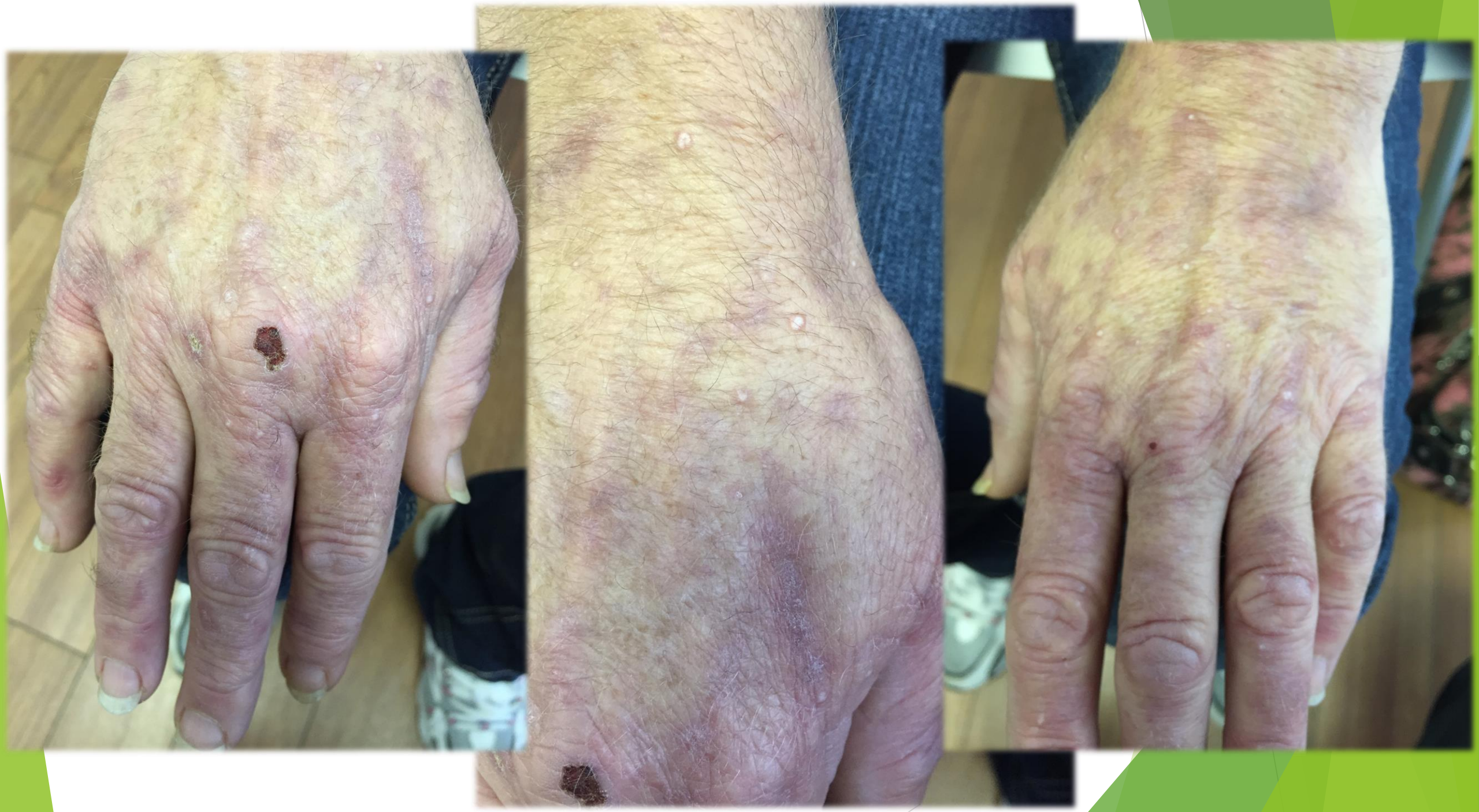
- Steroids – should not be stopped abruptly (<10-14days) for skin conditions without tapering

Patient case #4

54yoF

- 9month hx of blisters to her dorsal hands
- Worse in the summer, generally better in the winter
- Avid gardener
- Blisters heal with scarring
- Hands can get quite itchy but not painful

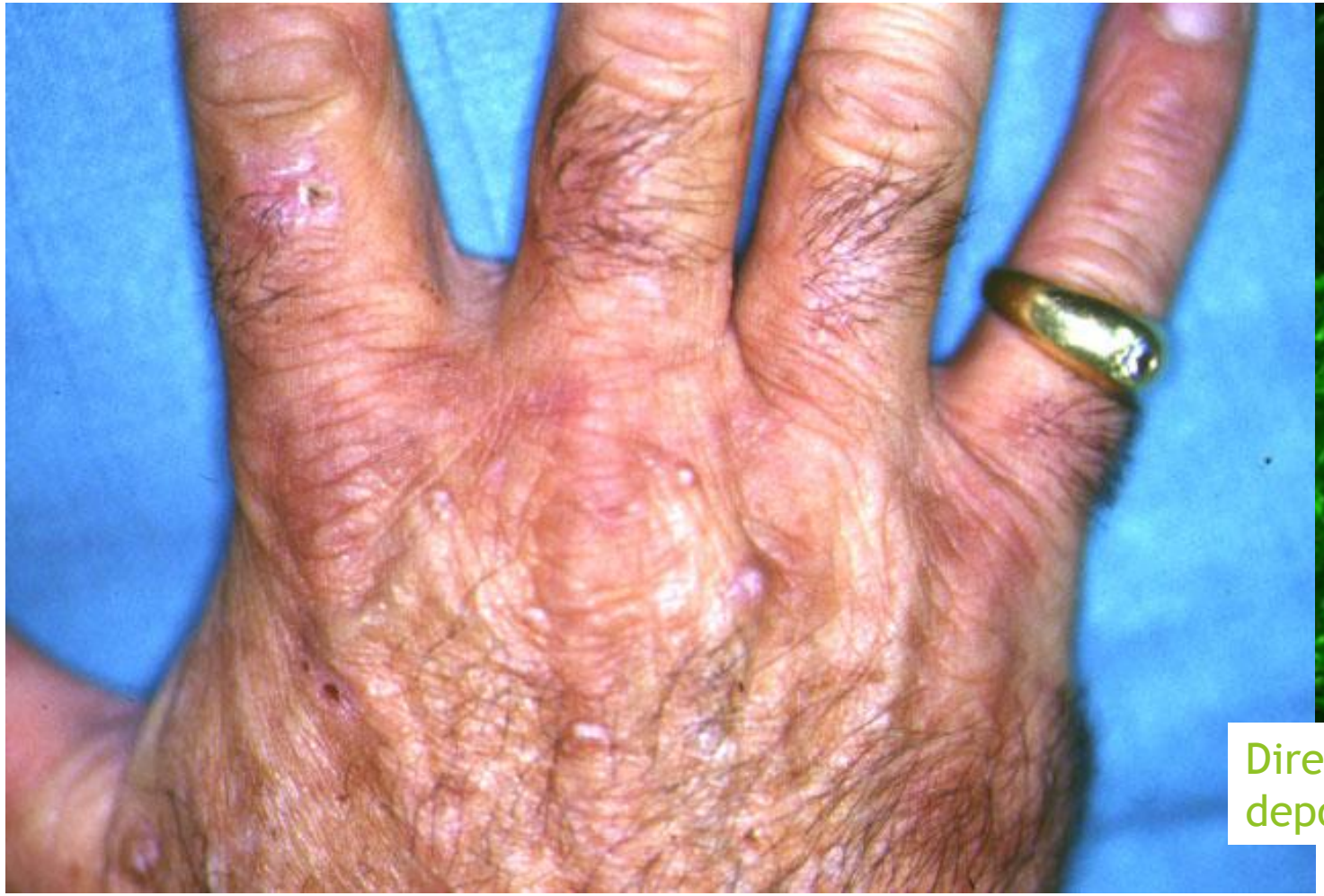




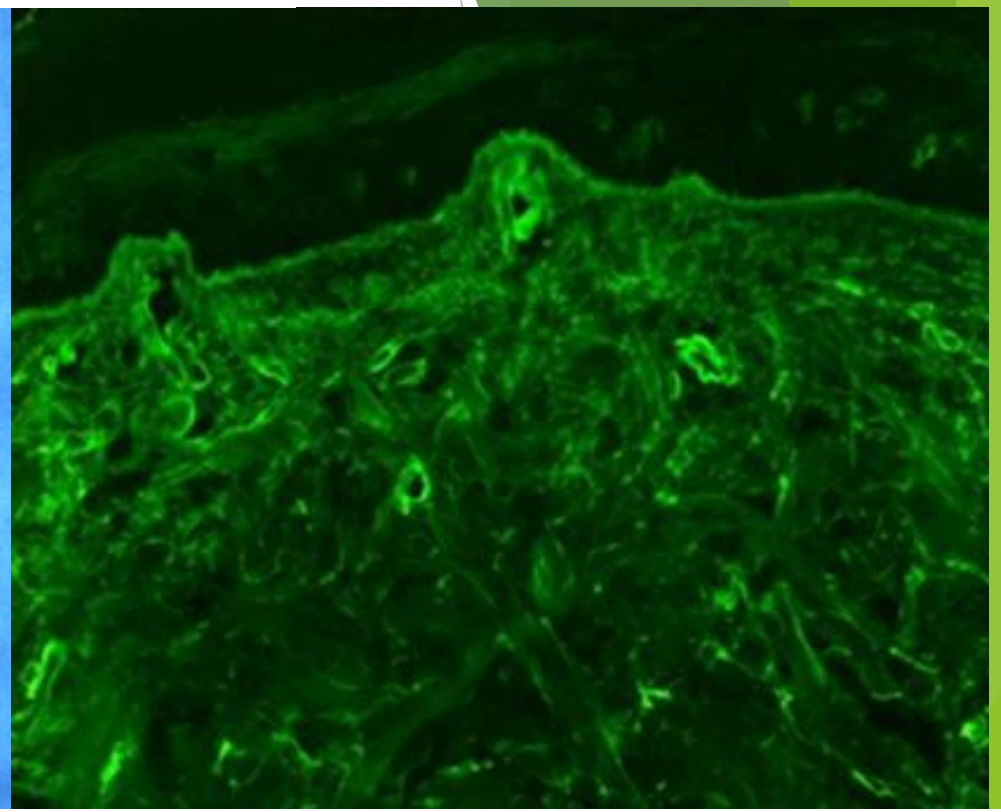
Question – What test will be the most useful in confirming the diagnosis

- A – Antinuclear antibody
- B – Skin biopsy for H+E and direct immunofluorescence
- C – Hormone panel including DHEA-S, LH/FSH, serum testosterone
- D – CT Scan of Chest/abdo/pelvis for underlying malignancy

Porphyria Cutanea Tarda



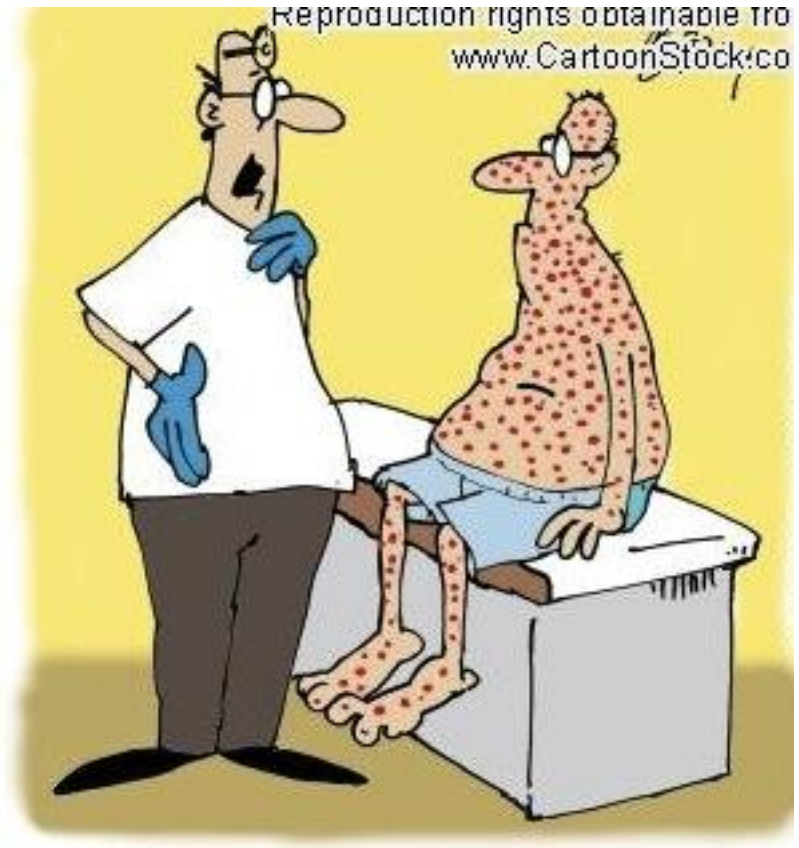
Scarring, vesicles/bulla, hyperpigmentation, milia, hypertrichosis



Direct Immunofluorescence showing IgG and C3 deposits at the DEJ and in vessel walls.

Pay attention to the details and the diagnosis will be made, you just need to confirm it with the appropriate tests.

Thank you!
Comments or questions?



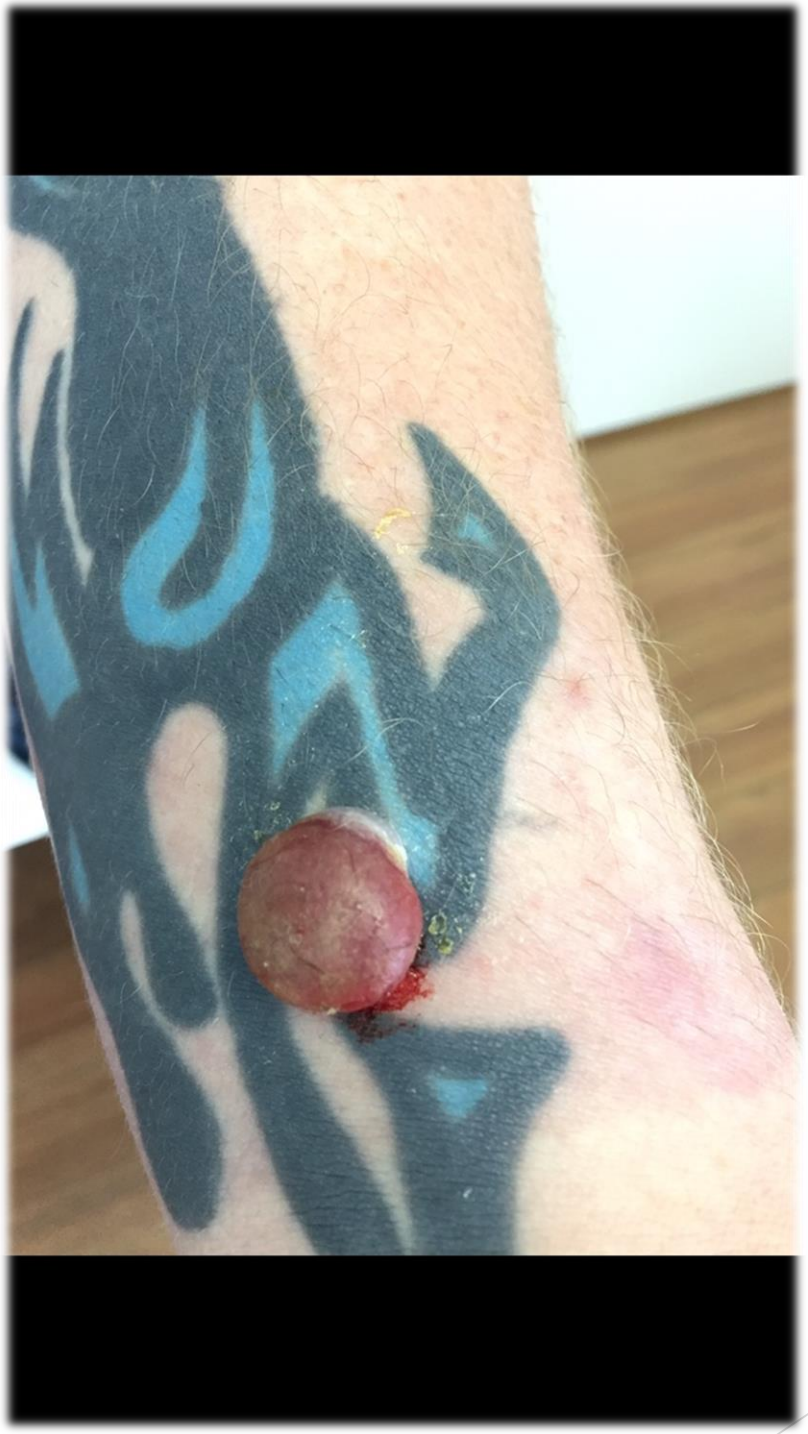
"I'LL HAVE TO THINK ABOUT THIS...I DON'T WANT TO MAKE A *RASH* DECISION!"

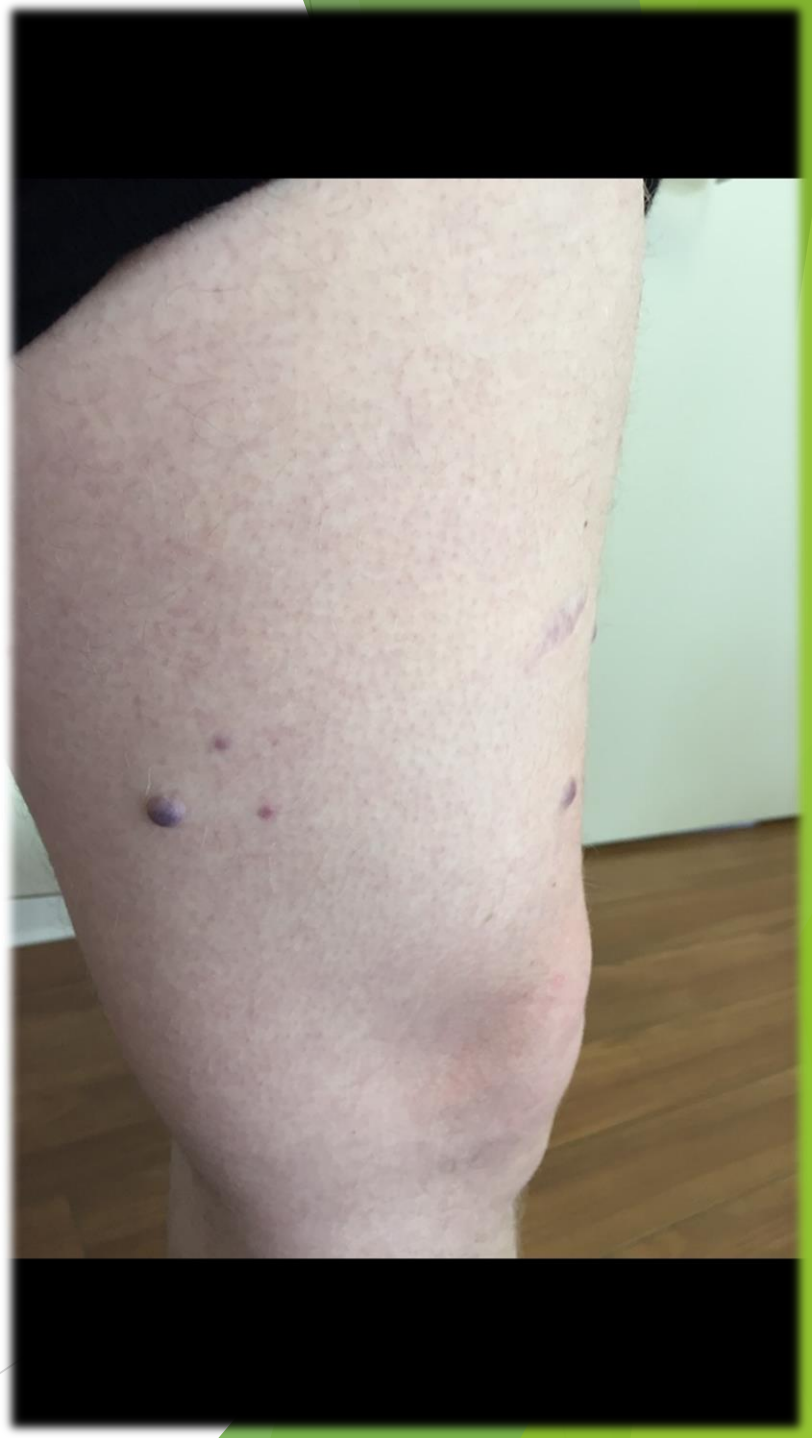
If further time…

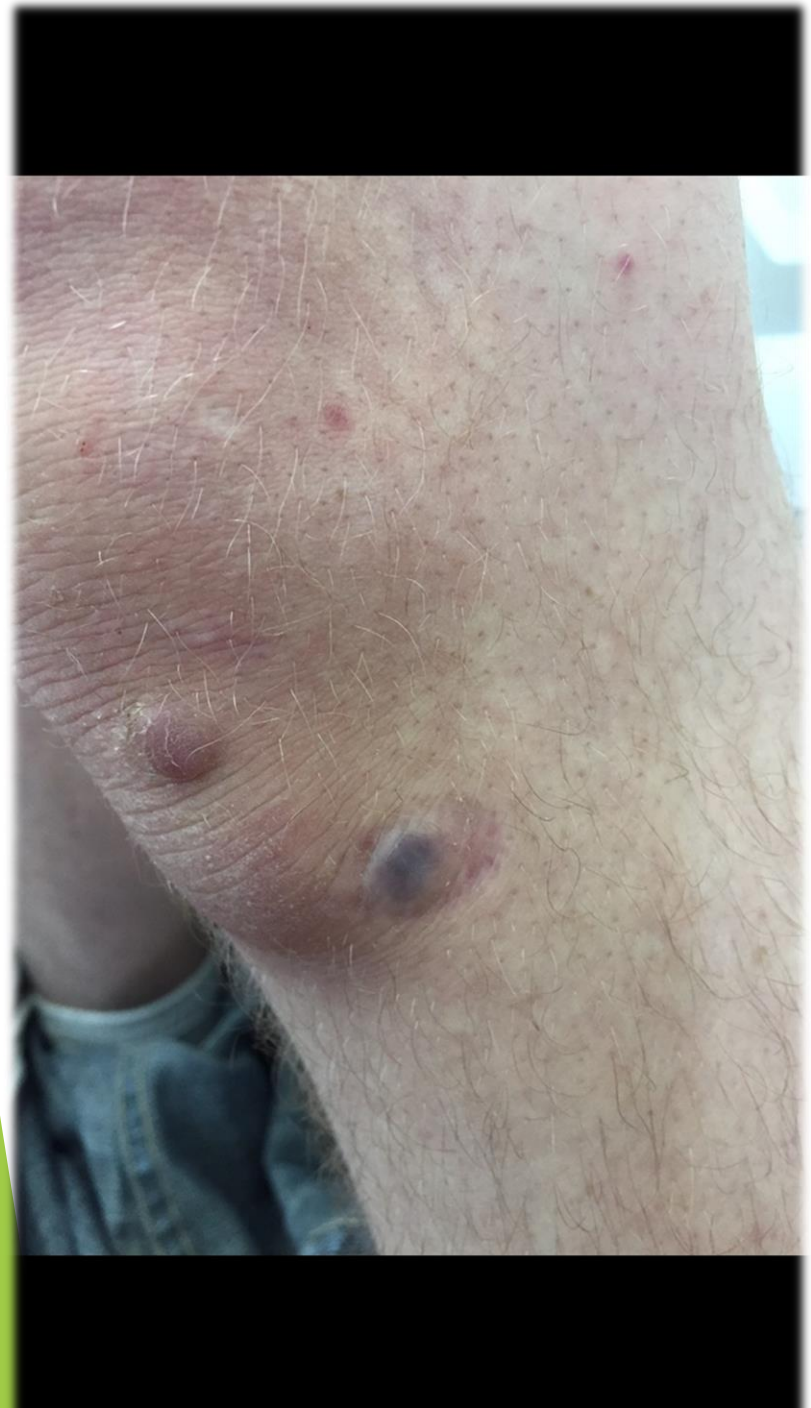
Patient case #5

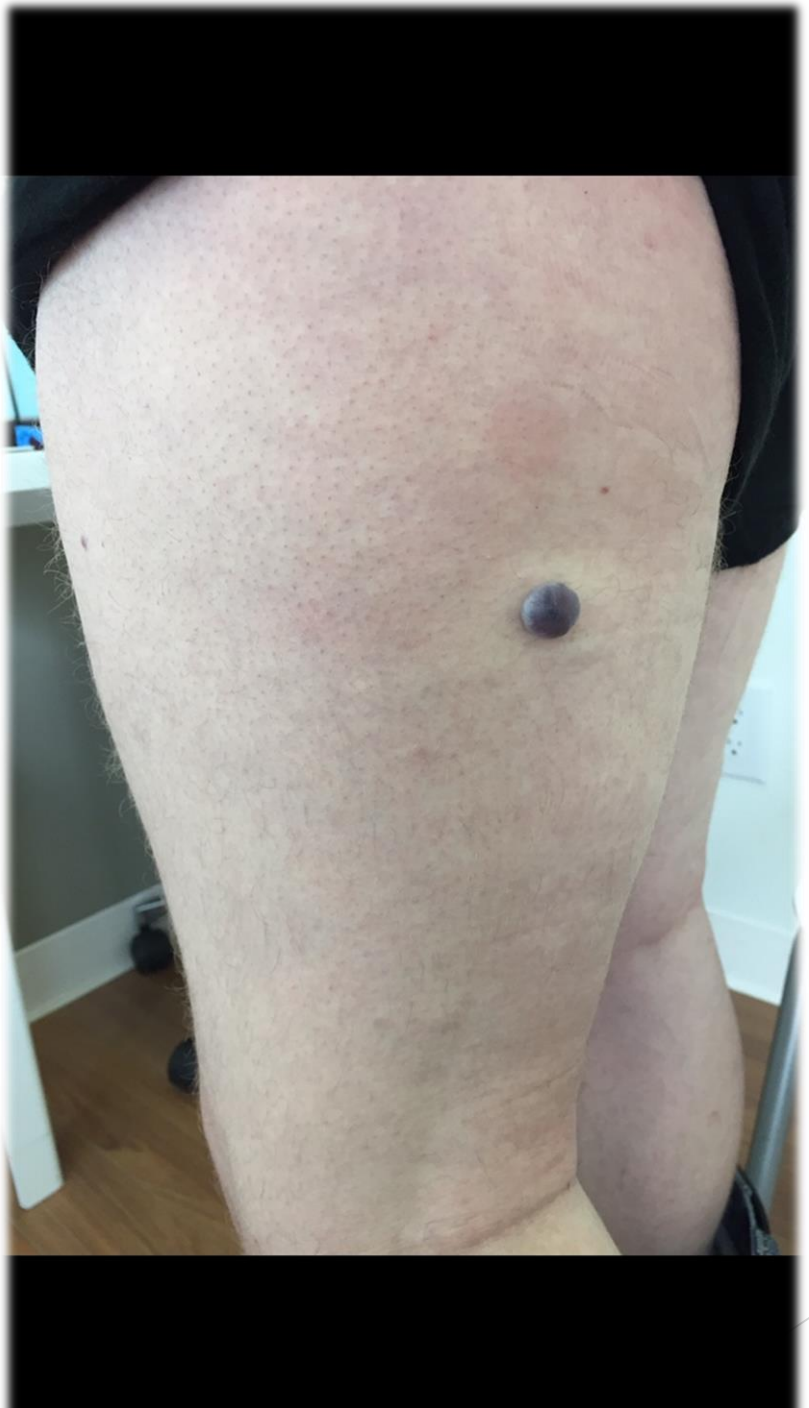
31yoM

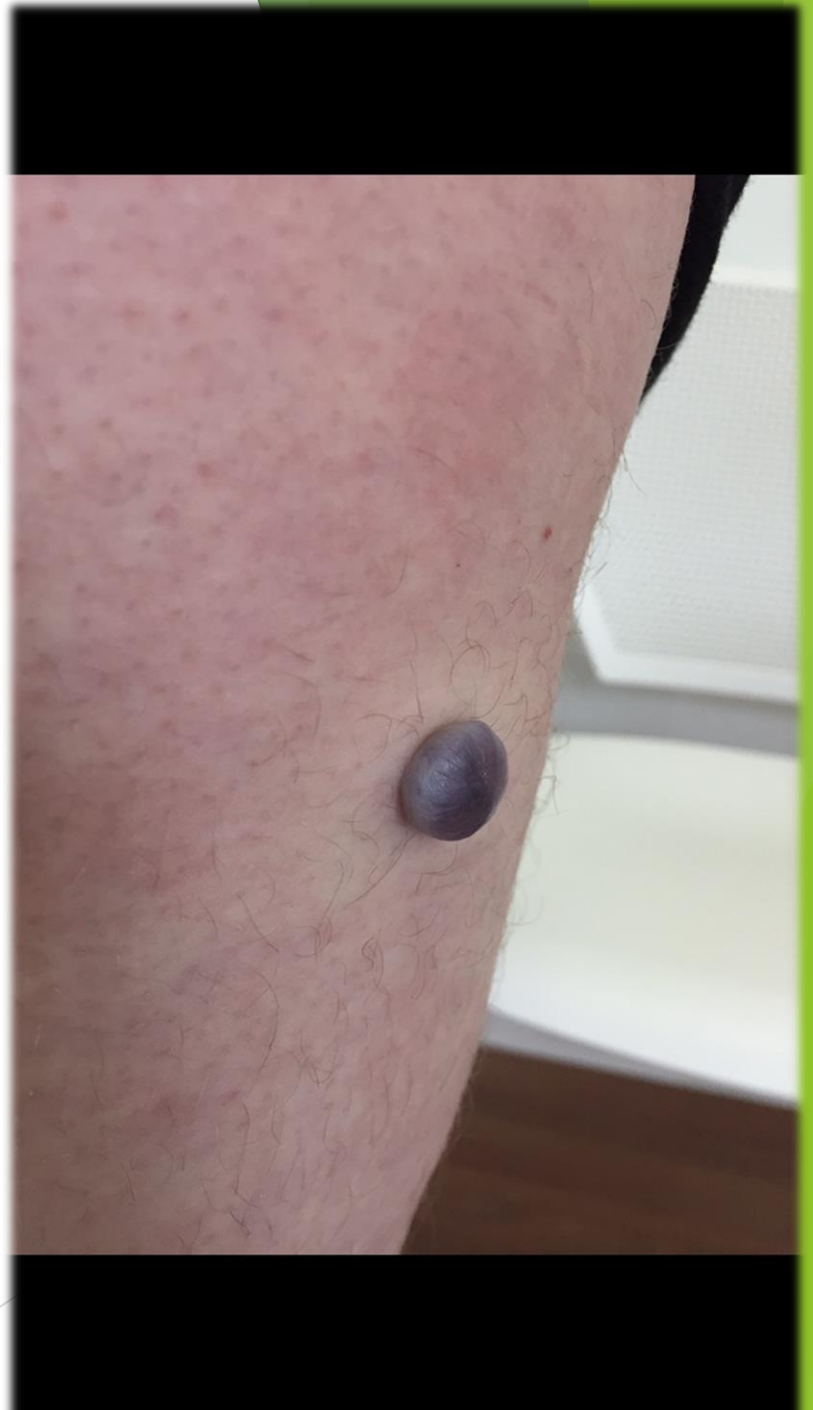
- Lifelong hx of vascular lesions over his whole body
- Painful blue to violaceous nodules
- Bleed easily
- Dad and uncle have similar findings
- Generalized hyperhidrosis









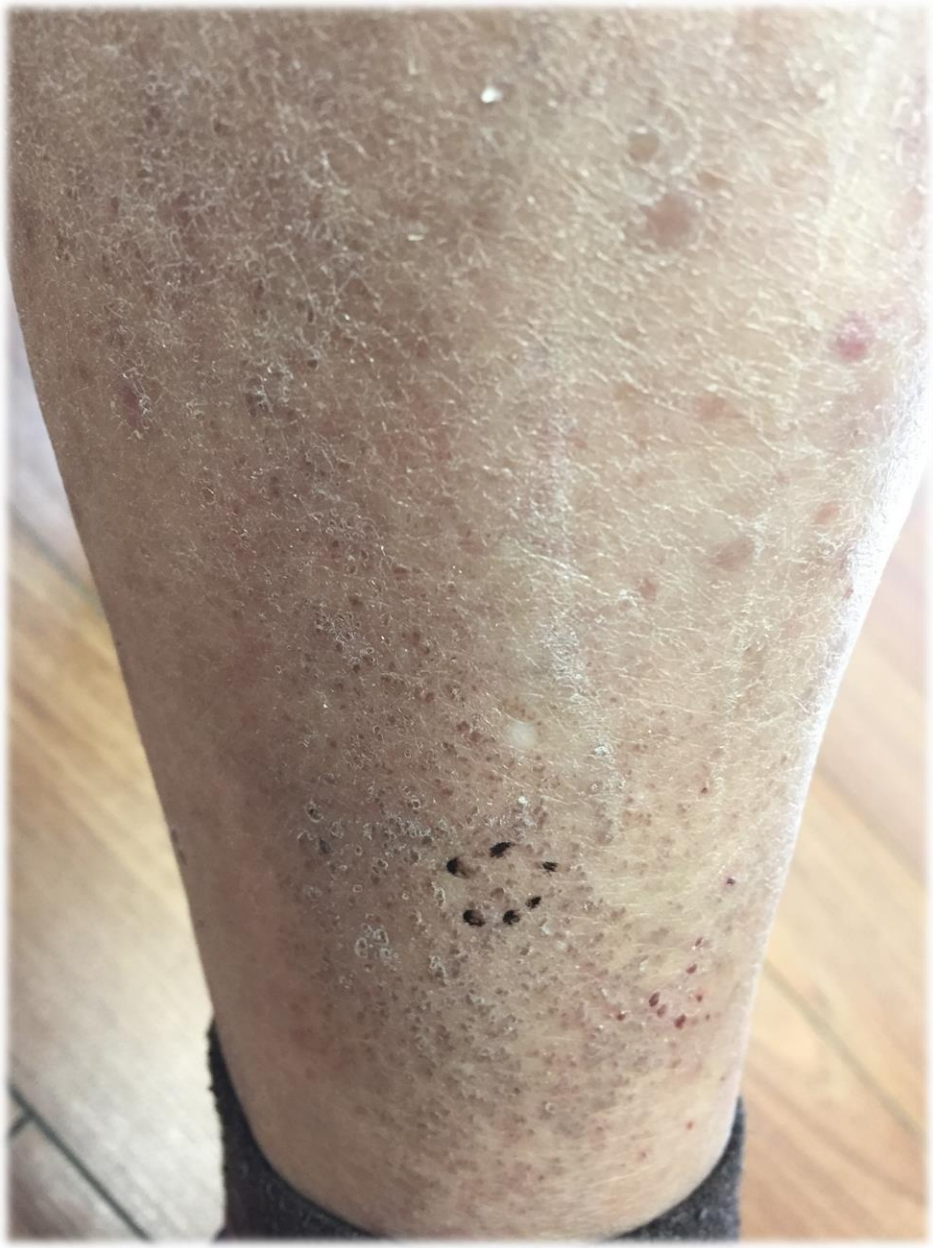


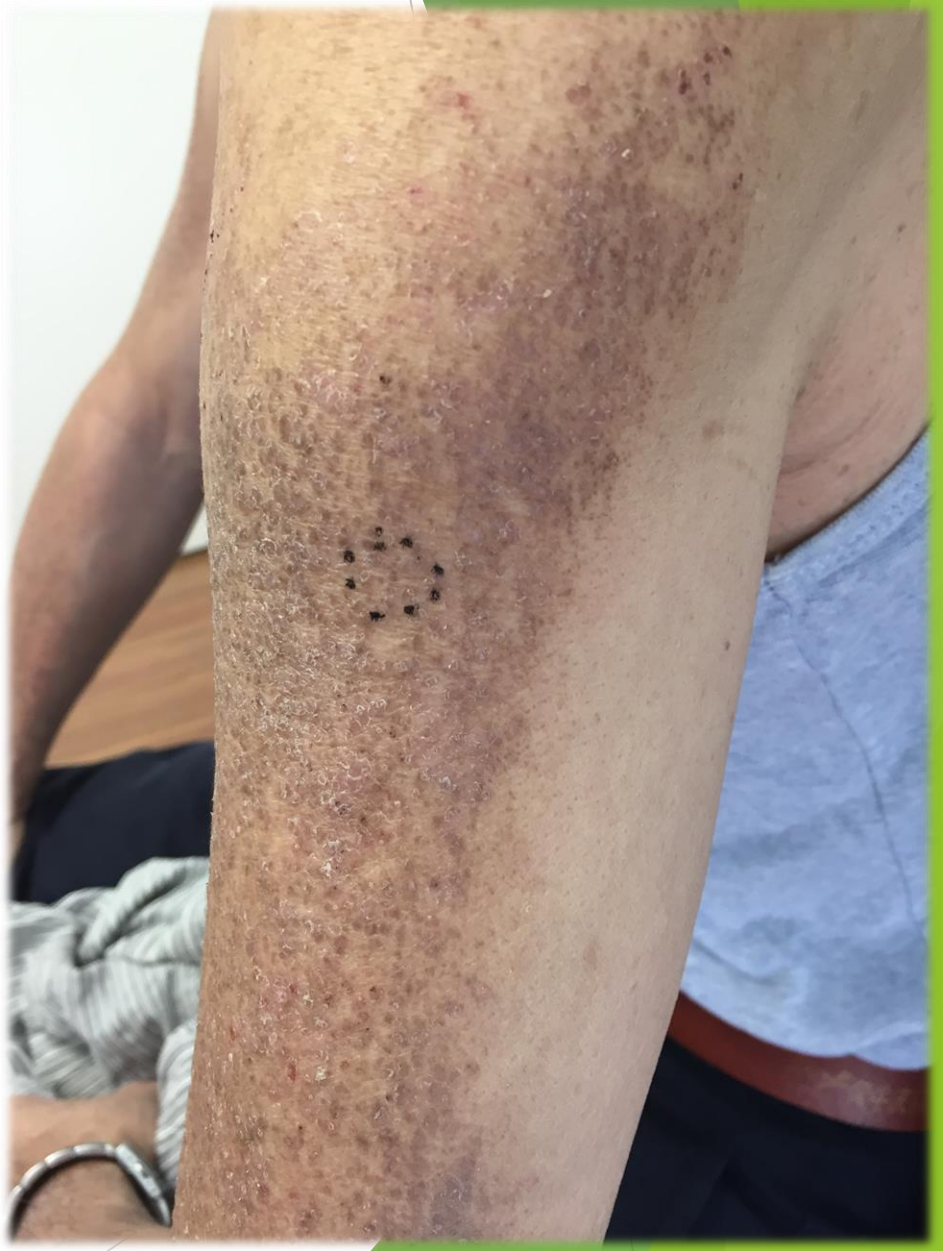
Blue Rubber Bleb Nevus syndrome rare genodermatoses – 200 reported cases worldwide

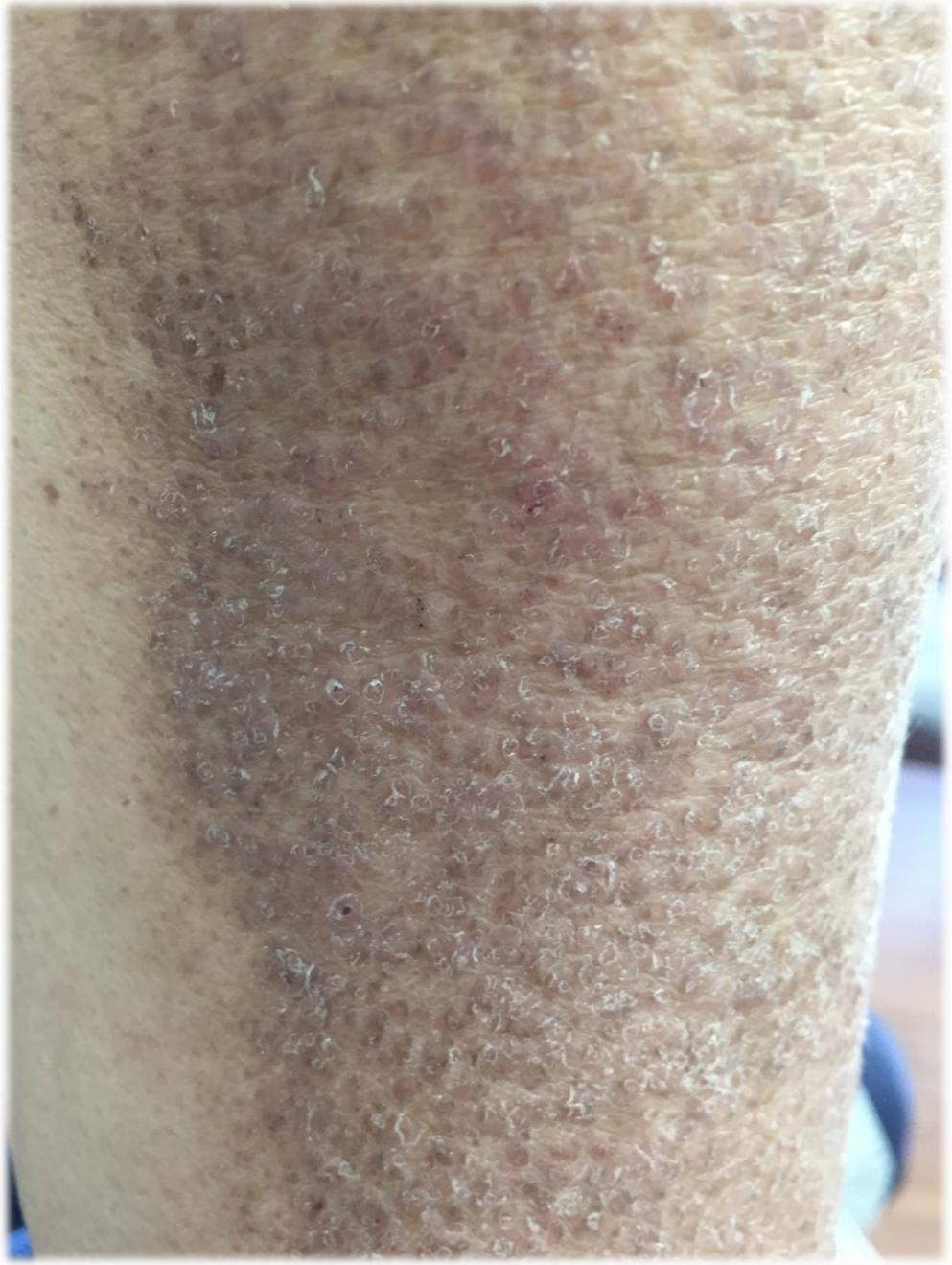
Patient case #6

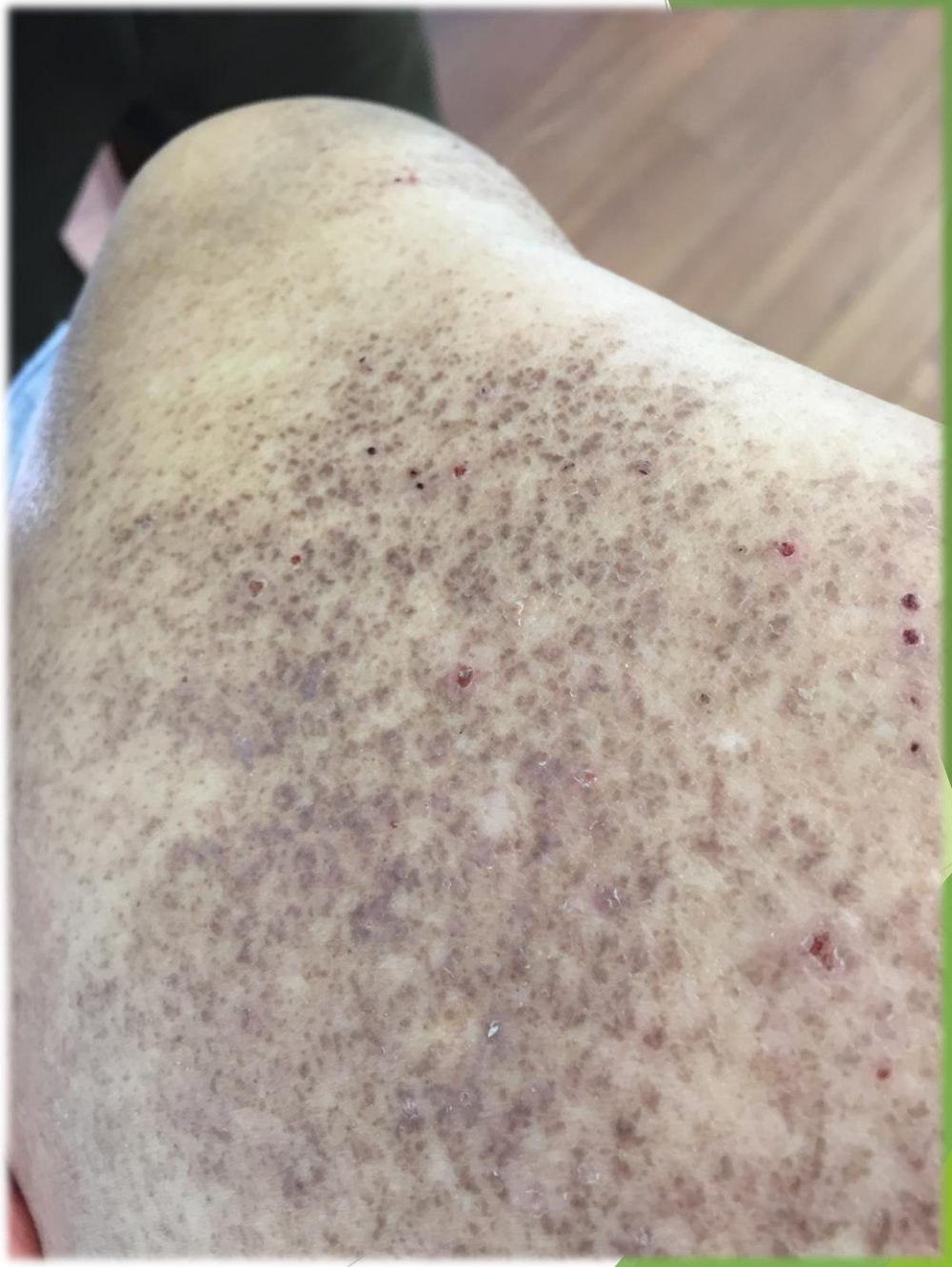
78yoM

- Very itchy upper arms and legs and shoulders
- Orginally from China
- Using 1% HC cr.









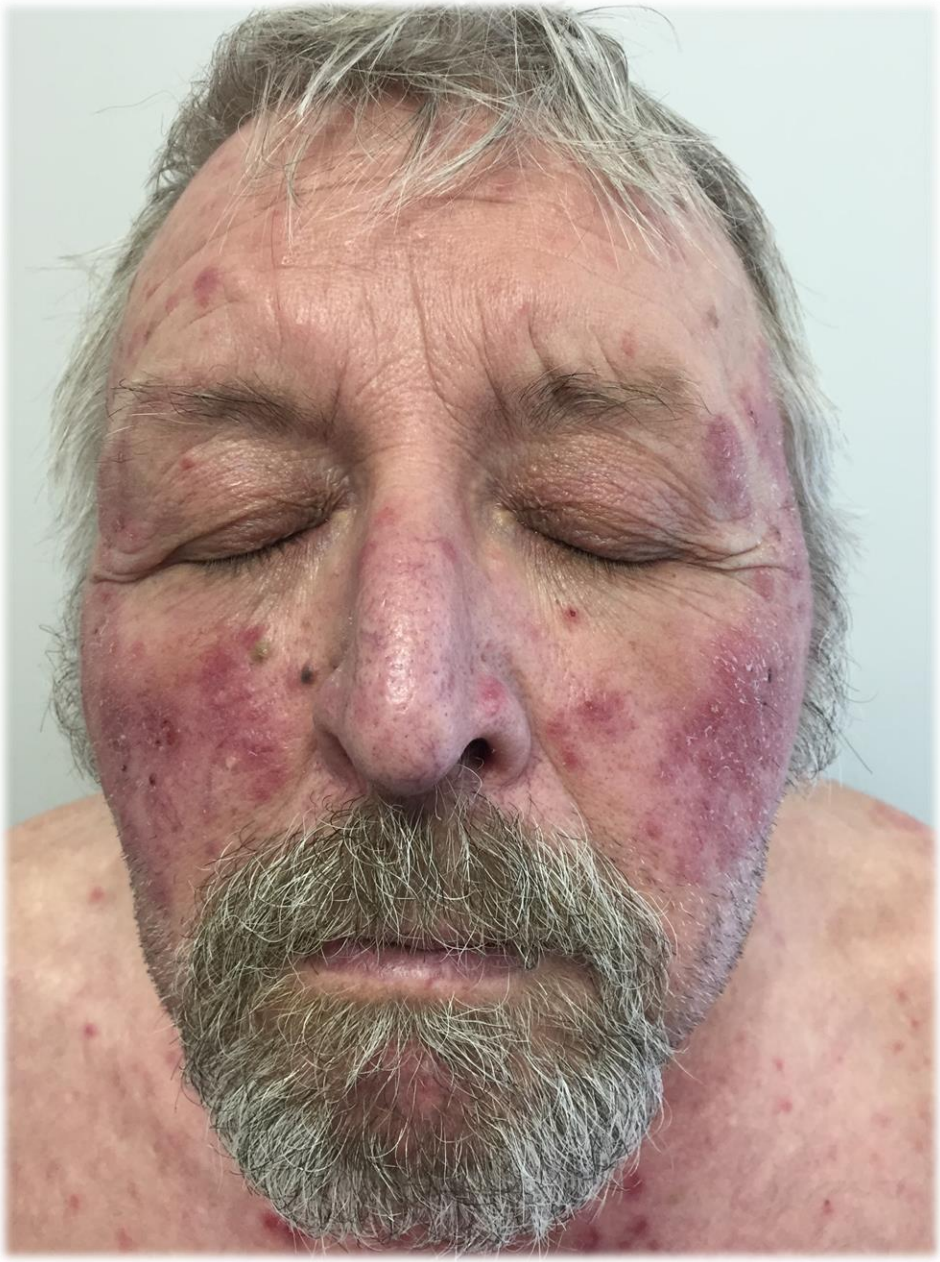
Question – What is the diagnosis?

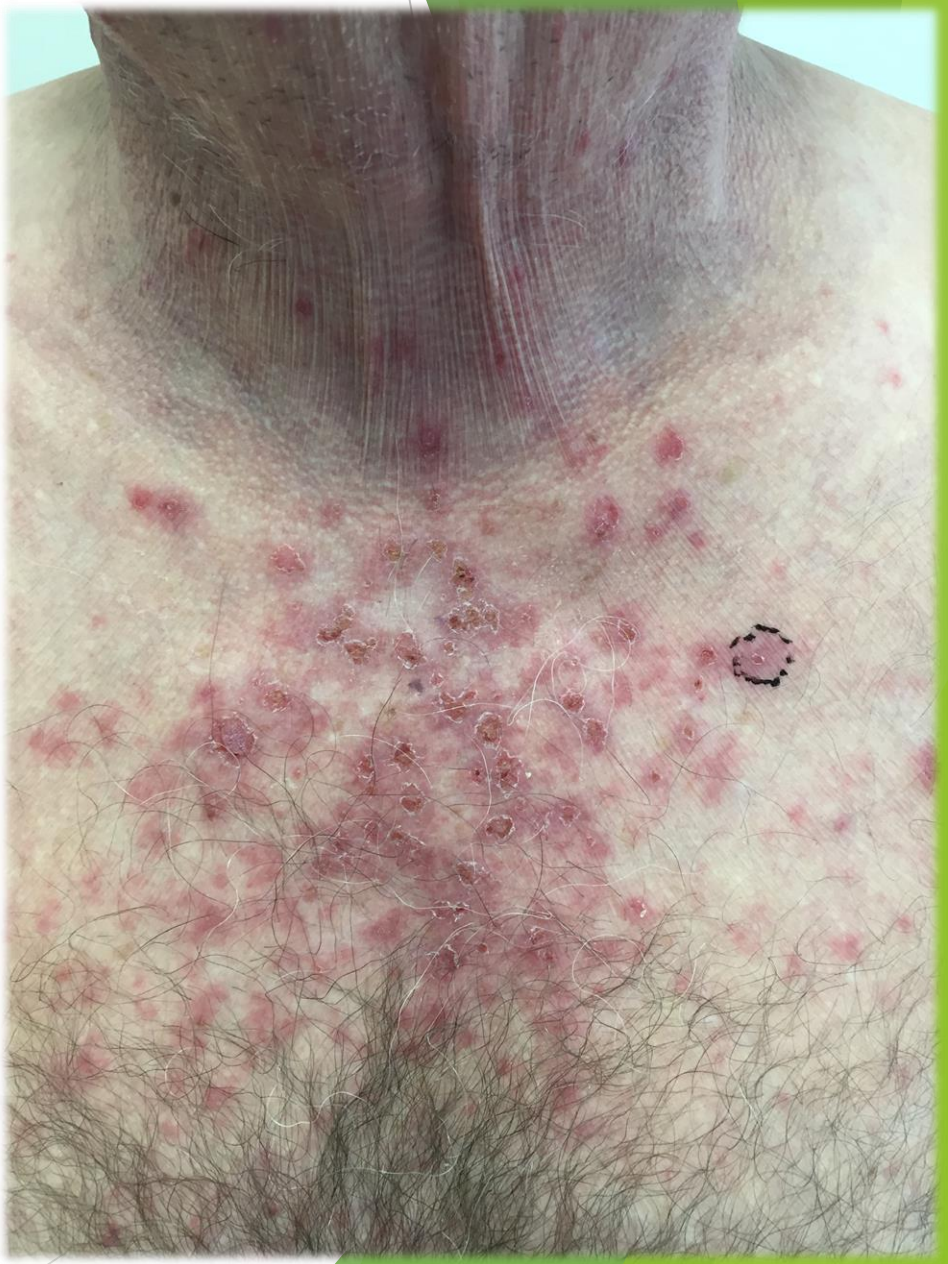
- A – Chronic Eczema (Spongiotic dermatitis)
- B – Chronic Idiopathic Urticaria
- C – Polymorphous Light Eruption
- D – Lichen Amyloidosis

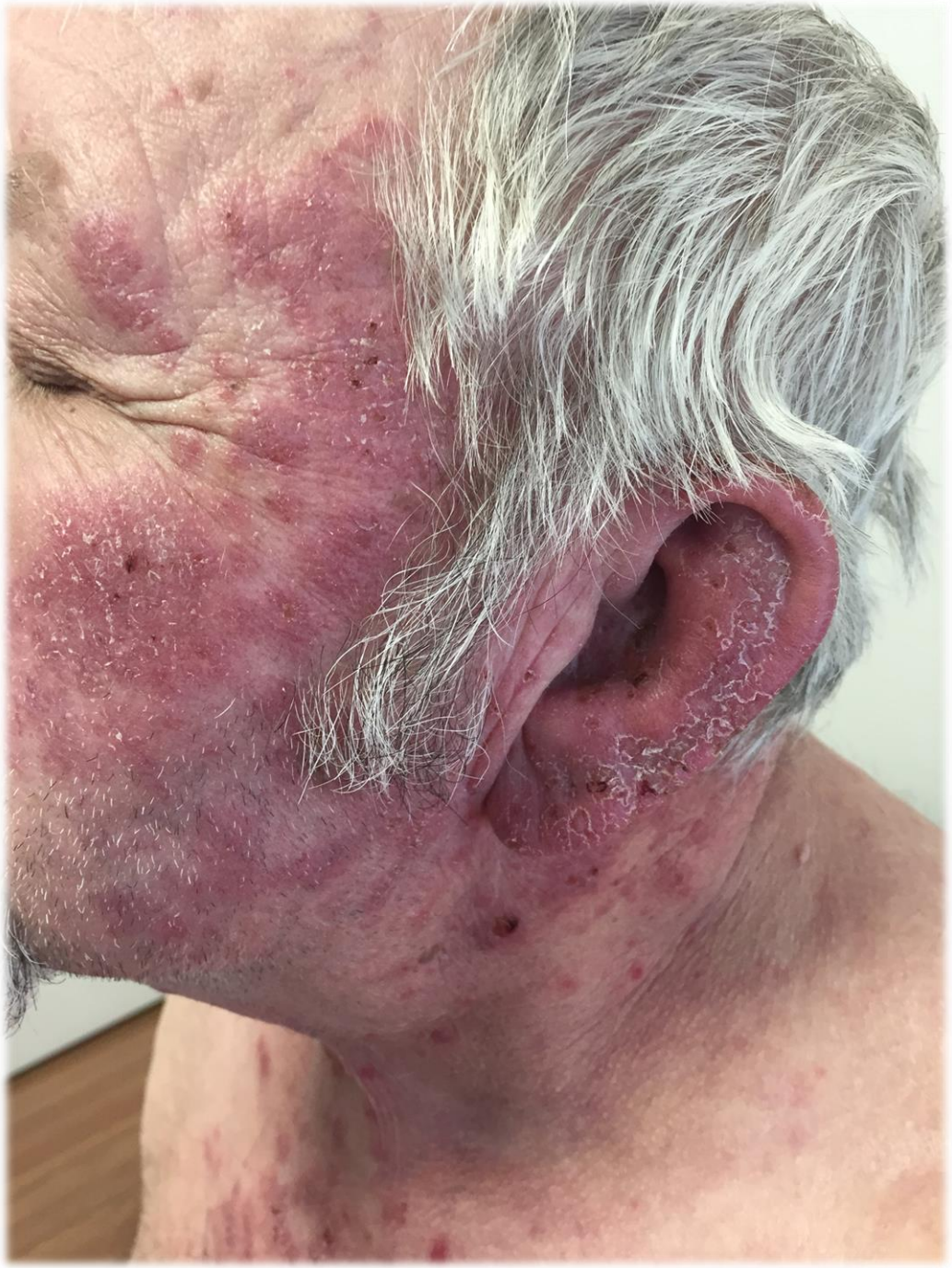
Patient case #7

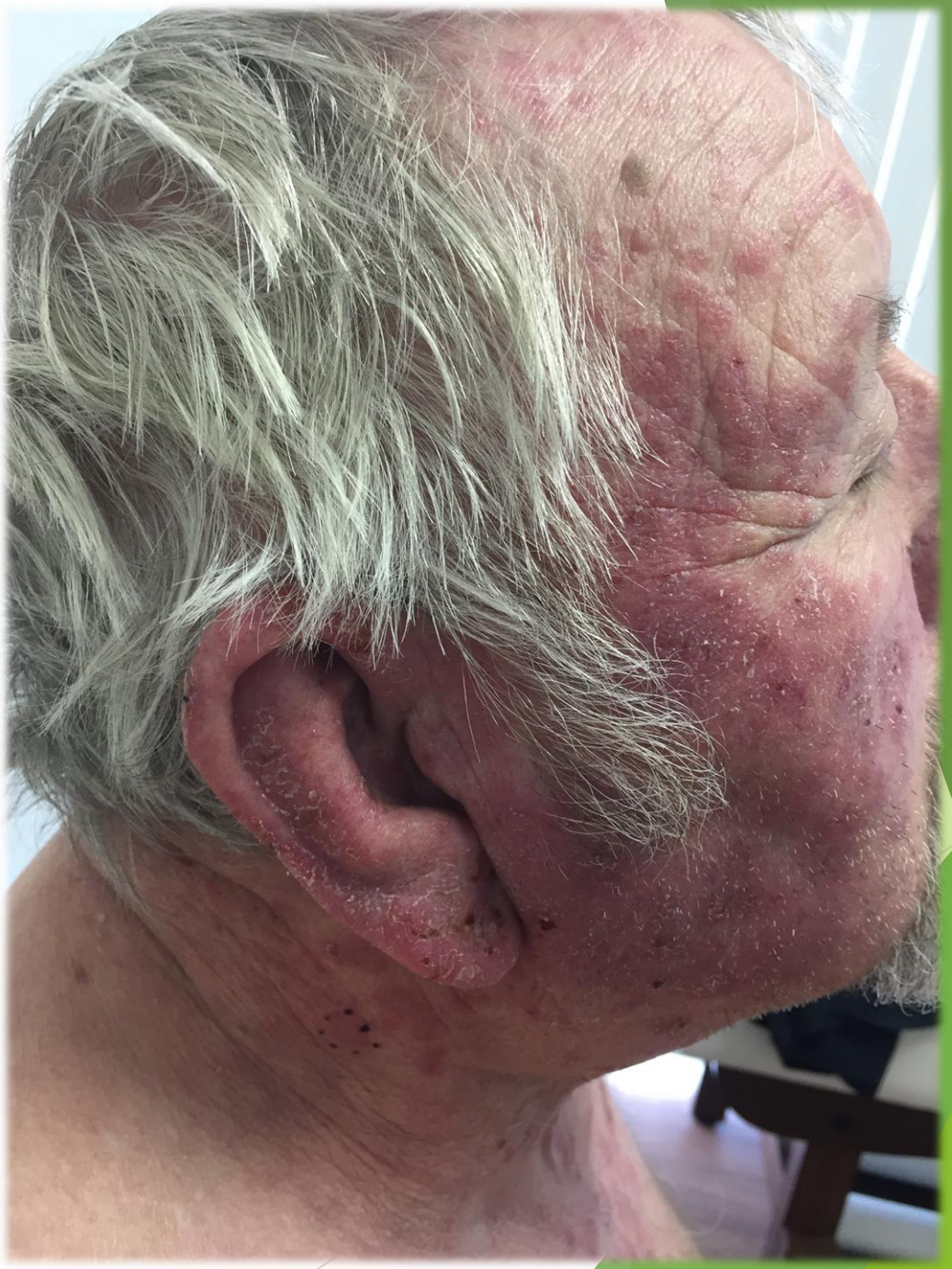
66yoM

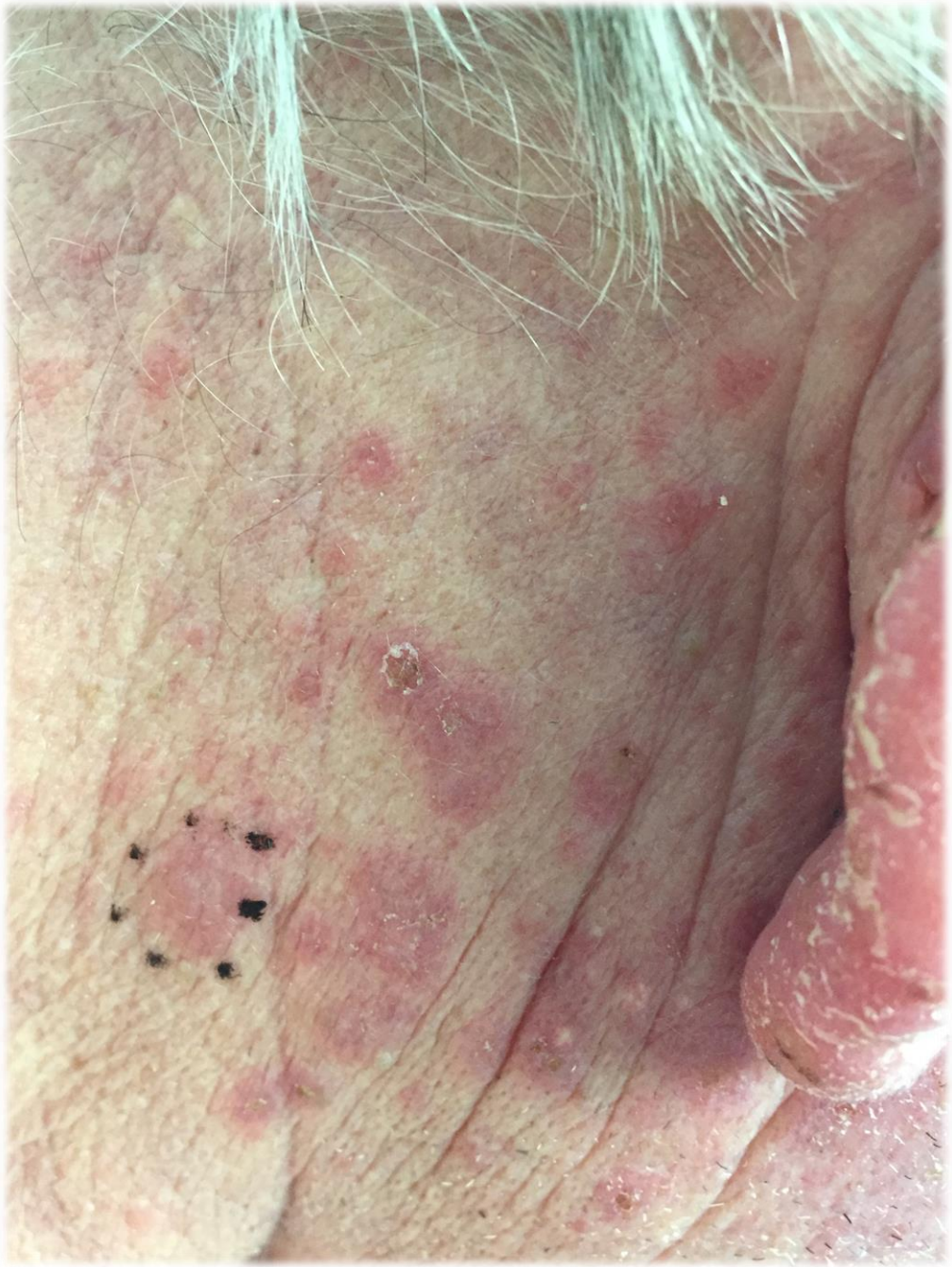
- 5 week hx of rash
- Pruritic – treated for folliculitis
- Started on prednisone - by day 4 developed SOB (hx of COPD) stopped.
- Biopsies and workup ordered.
- 1 week later called by GP – having suicidal ideation – started on citalopram and ativan

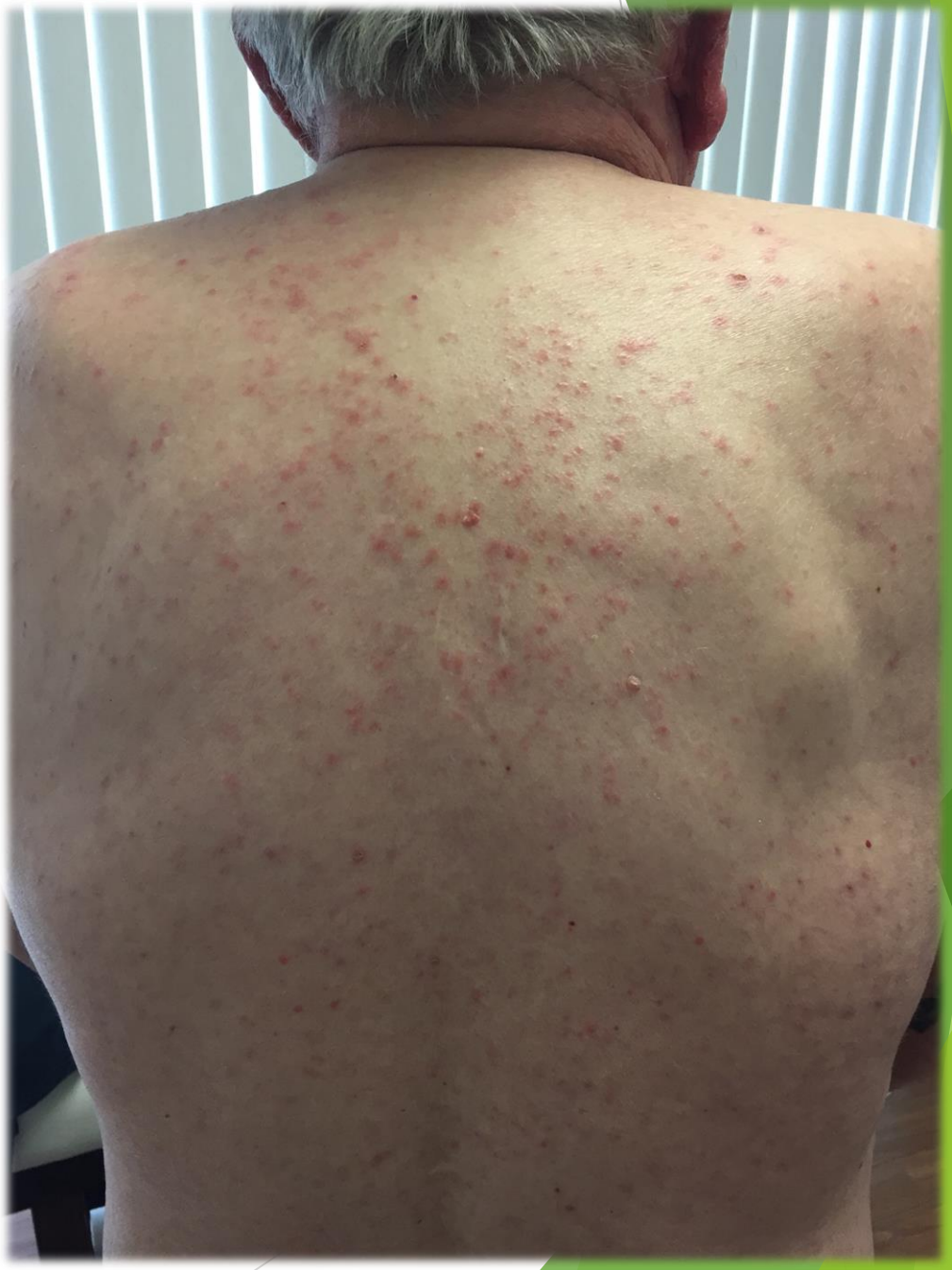












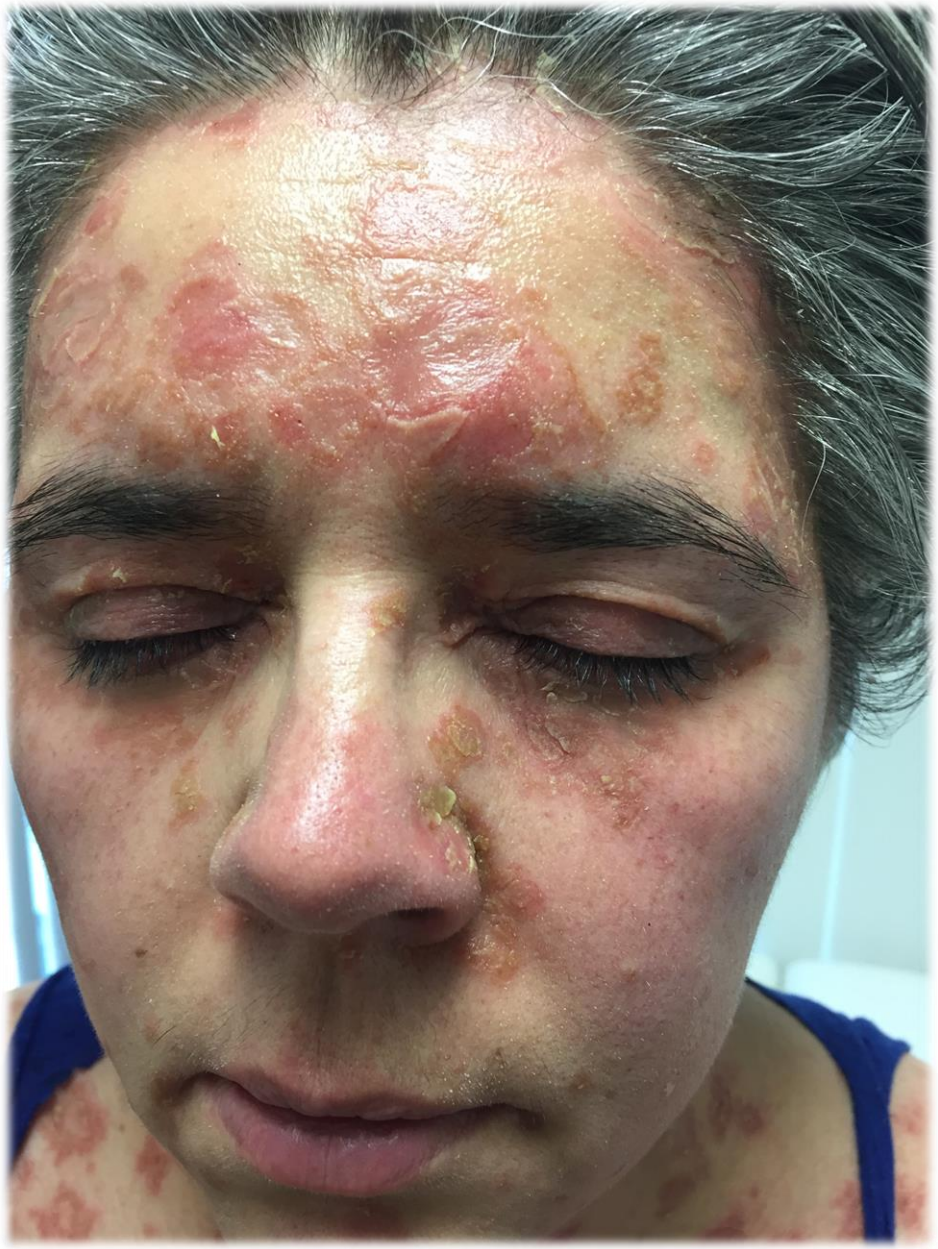
Question – What is the diagnosis?

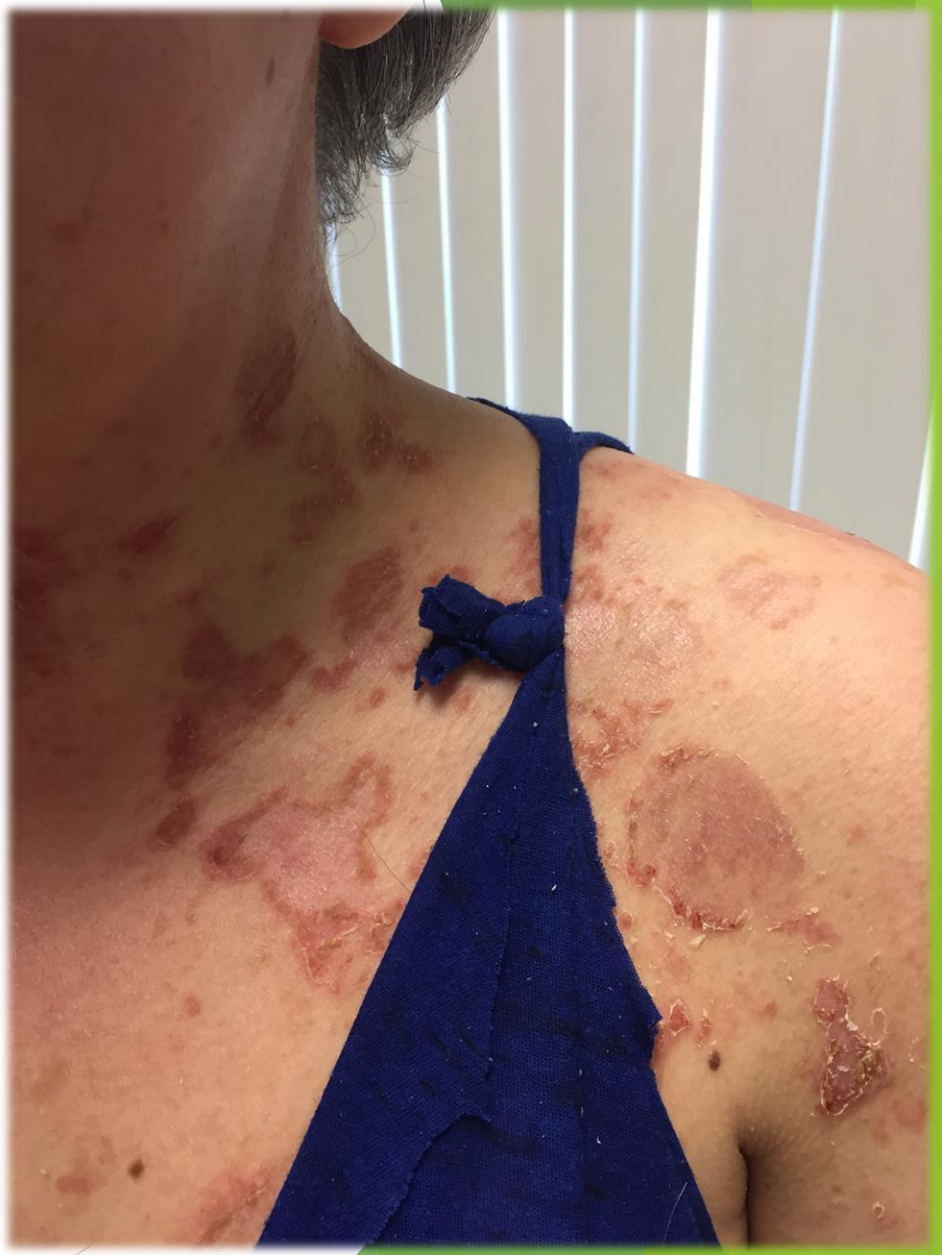
- A - Cutaneous lupus
- B - Relapsing polychondritis
- C - Sarcoidosis
- D - Eczema herpeticum
- E - Cutaneous lymphoma
- F - Grovers disease

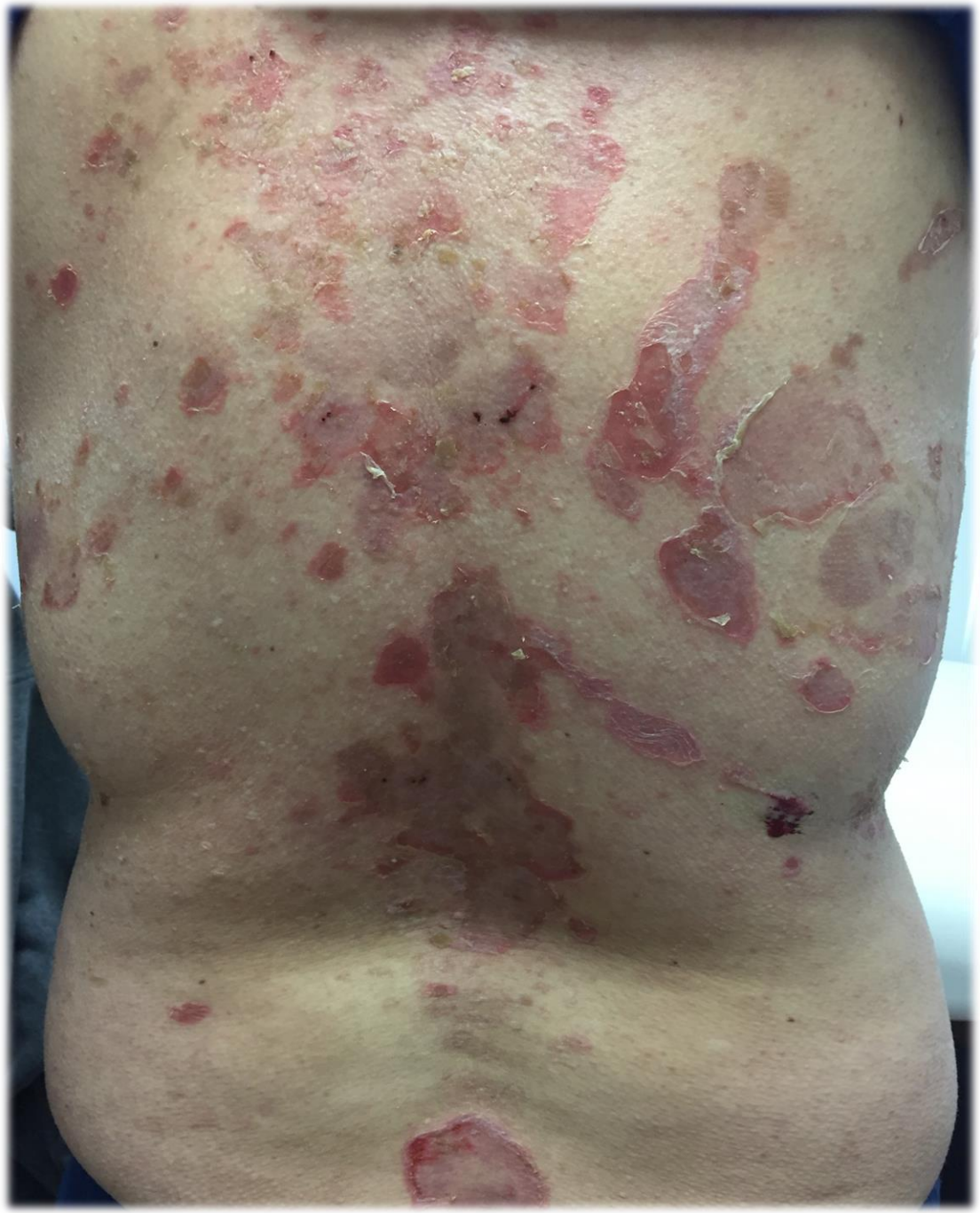
Patient case #8

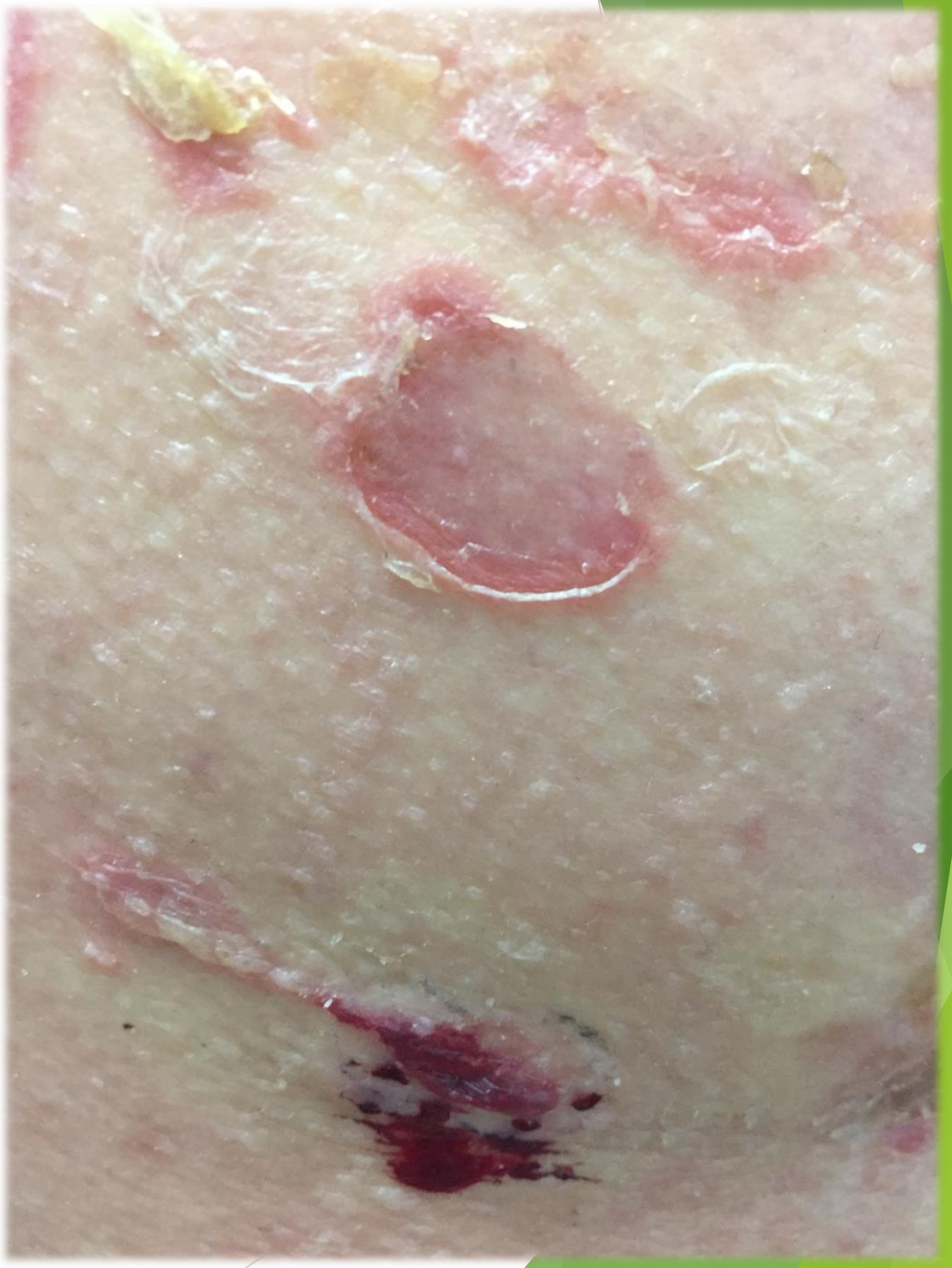
44yoF

- 2 month hx of full body rash
- Itchy and painful
- Occurred after amalgam filling removed
- Was put on keflex – no improvement
- Has also started prednisone, atarax
- Oral ulcers, but no photosensitivity
- Biopsy showed chronic spongiotic dermatitis









Question: Which further test will be most important to confirm the diagnosis?

- A – ANA and ENA
- B – Skin swab for bacterial C+S
- C – antibodies for Desmoglein 1 and 3
- D – Bullous pemphigoid antigens BP180/230