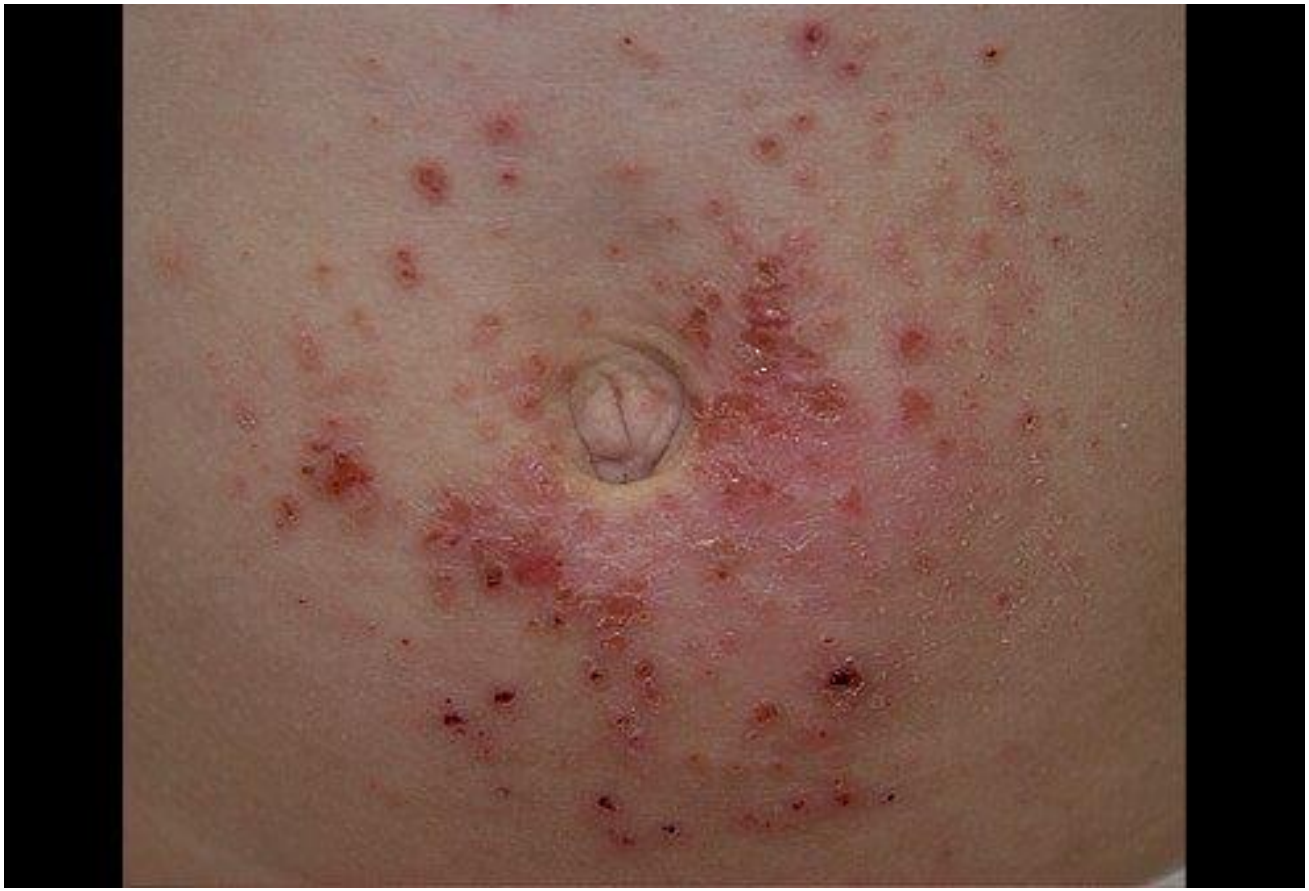
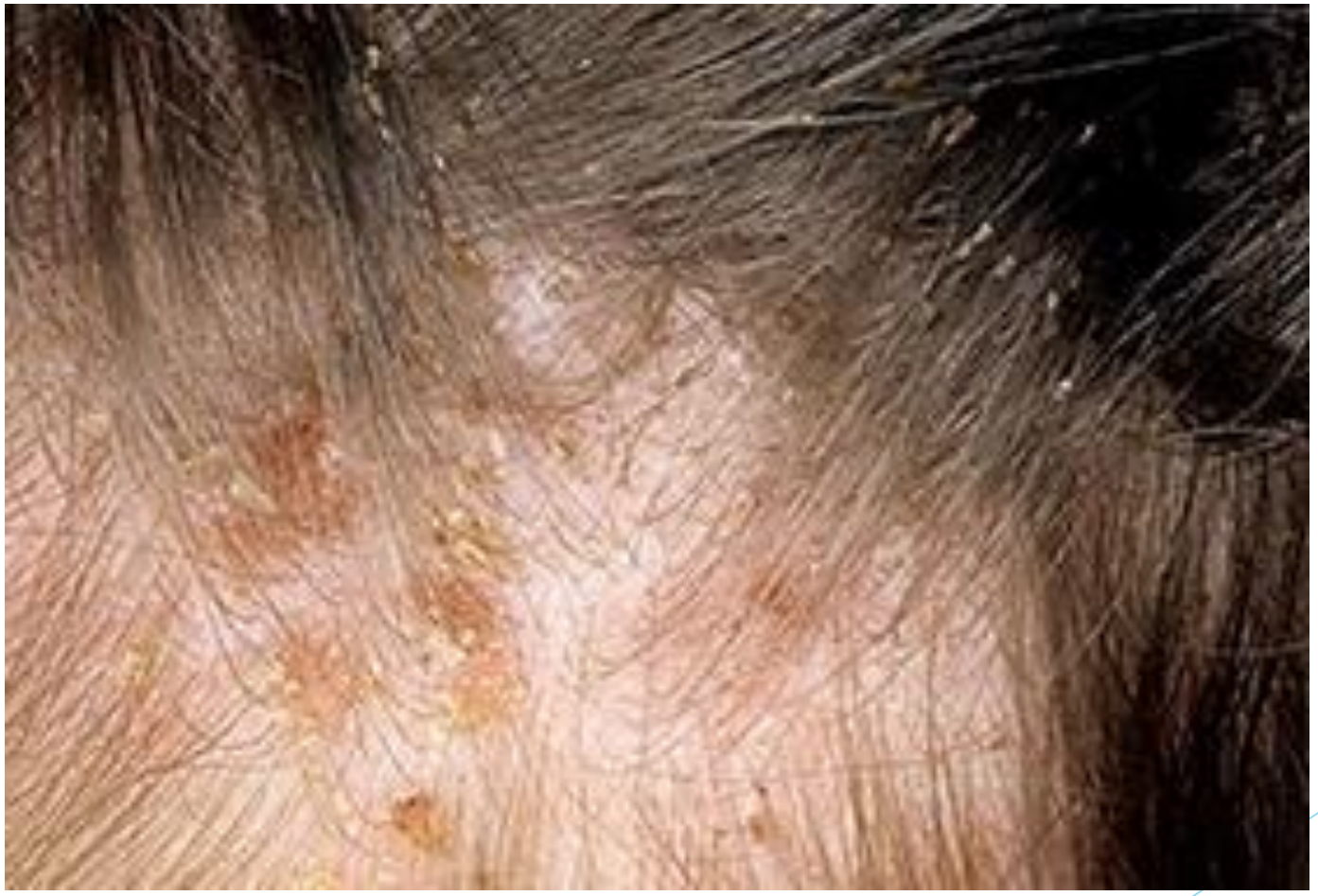
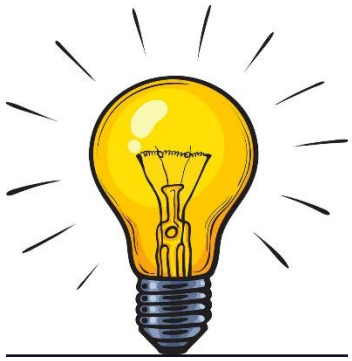

RHEUMATOLOGY





Diagnosis

ID reaction (eczematous type) due to pediculosis Capitus.



DERMATOLOGY for Family Doctors

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Consultant Dermatologist

Arab Board

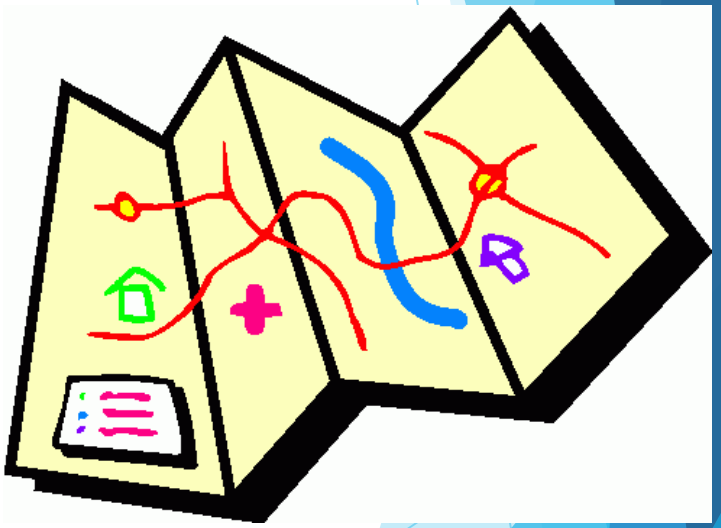
Fellow mount Siani, NYC

Founder and clinical Director of Nadhara Skin Center

Kingdom of Bahrain

2021

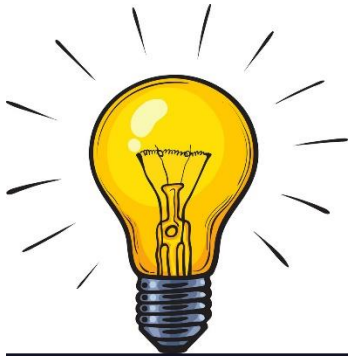
- Pearls and rules.
- Acne, rosacea and related disordes.
- Eczema.
- Papulosquamous disorders.
- Urticaria, angioedema.
- Pigmentary disorders.
- Infections.
- Skin and systemic disorders.



PERALS and RULES

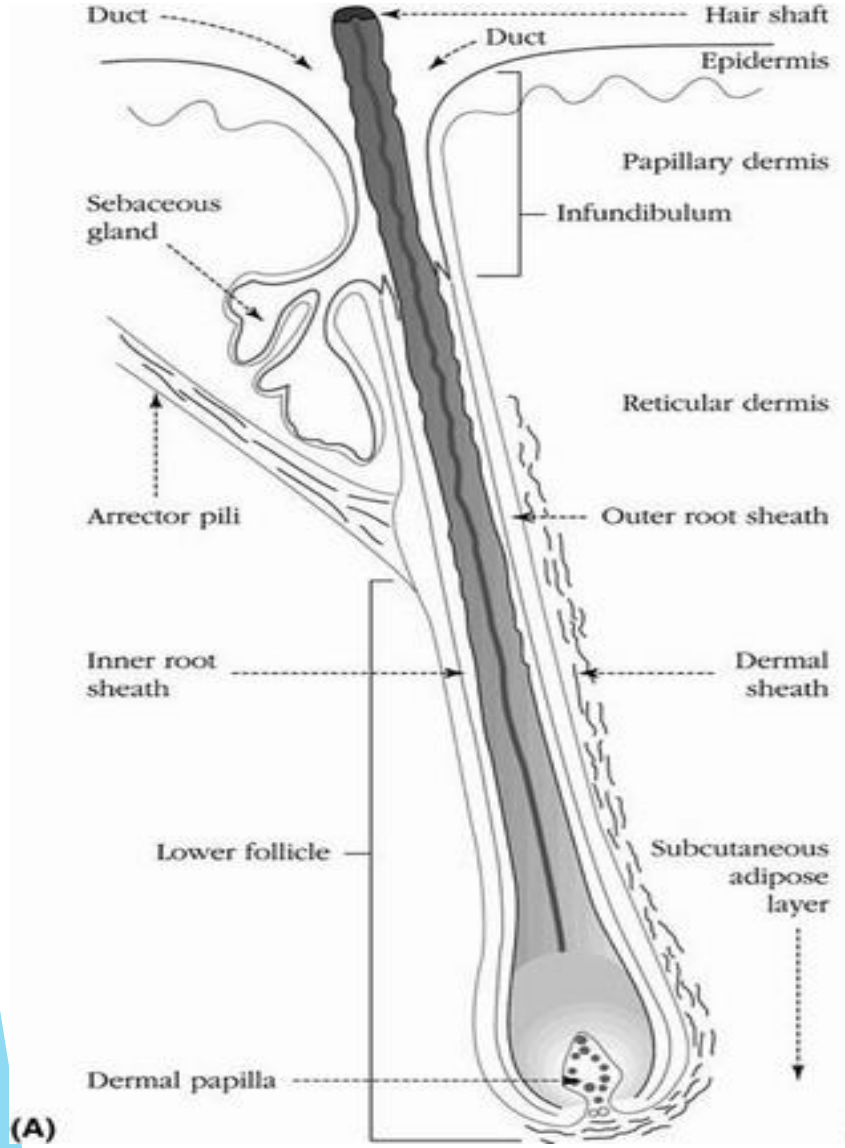
- Rash : painful? Burning? Itchy?
- Timing of rash.
- Family history.
- Drug history.
- Travel history.
- Fever and systemic symptoms.

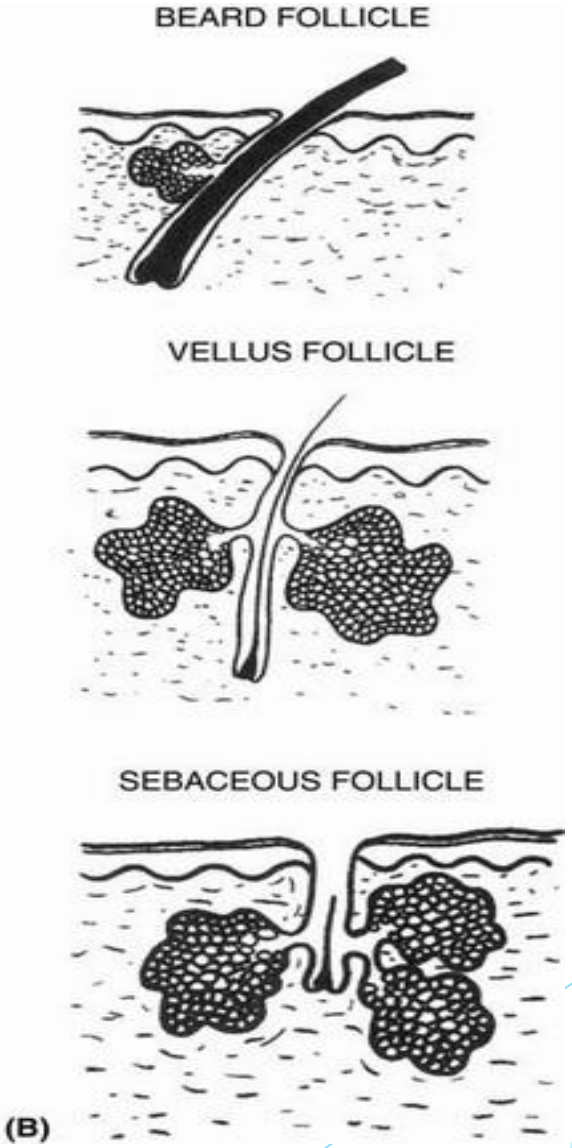
- Examine : scalp, nails, mouth, genitals.
- Any oozy lesion : SWAB for GS, CX , KOH.
- Any doubtful rash : BIOPSY.
- Any scaly lesion : SCRAP for cytology.
- Any nail lesion: CLIP for histology.
- Any chronic lesion that recently changed: BIOPSY.



ACNE and Related disorders

Acne


Duct
Hair shaft
Duct
Epidermis
Papillary dermis
Sebaceous gland
Infundibulum
Reticular dermis
Arrector pili
Outer root sheath
Inner root sheath
Dermal sheath
Lower follicle
Subcutaneous adipose layer
Dermal papilla
(A)


BEARD FOLLICLE
VELLUS FOLLICLE
SEBACEOUS FOLLICLE
(B)

Acne classification

-1 ***Acne related to intrinsic causes***:

Acne vulgaris

Acne conglobata

Acne fulminans

-2 Acne related to extrinisic causes:

Acne excorie'e

Acne tropica

Acne cosmetica

-3 Childhood acne:

Neonatal acne

Infantile acne

Acne classification

- ***4 -Acneform eruptions :***

Rosacea

Steroid Acne

Perioral dermatitis

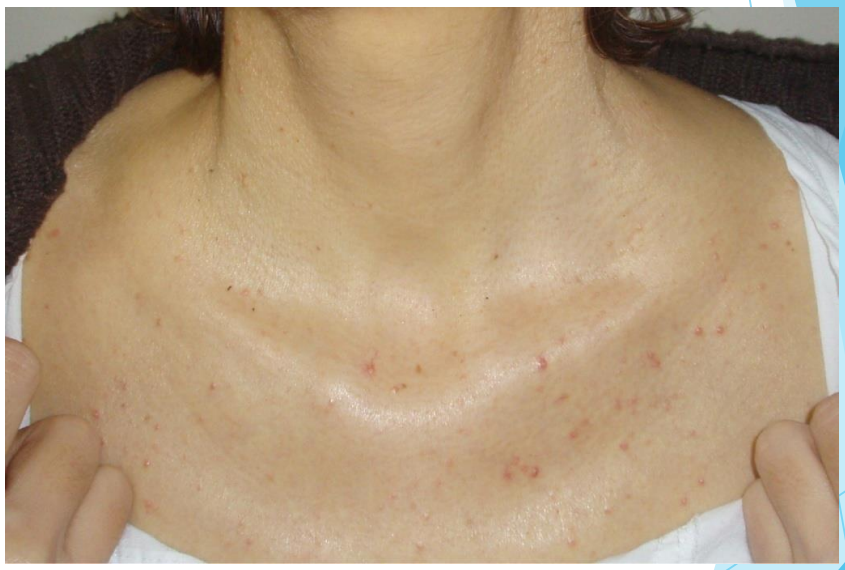
Pyoderma faciale

Acne mechanica

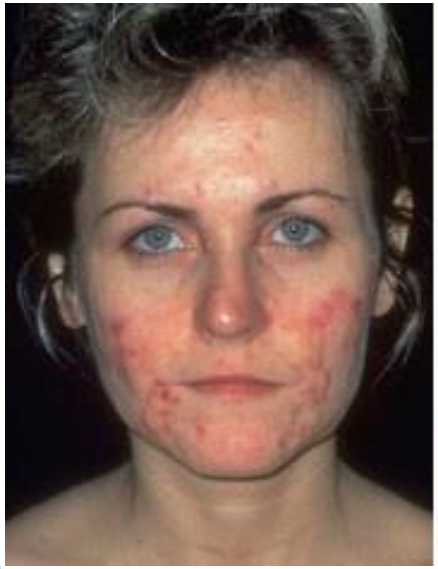
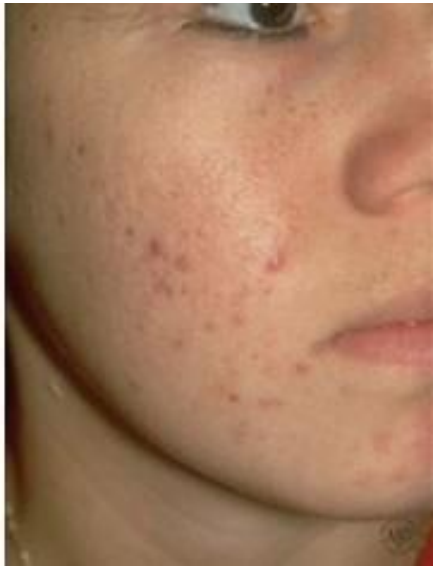
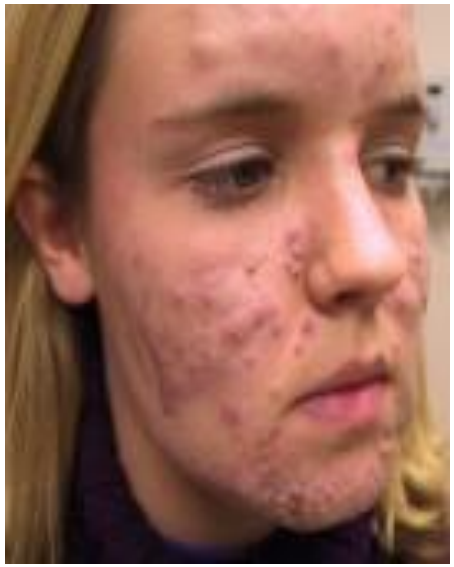
Occupational acne

Drug induced acne

Gram negative follicultis.

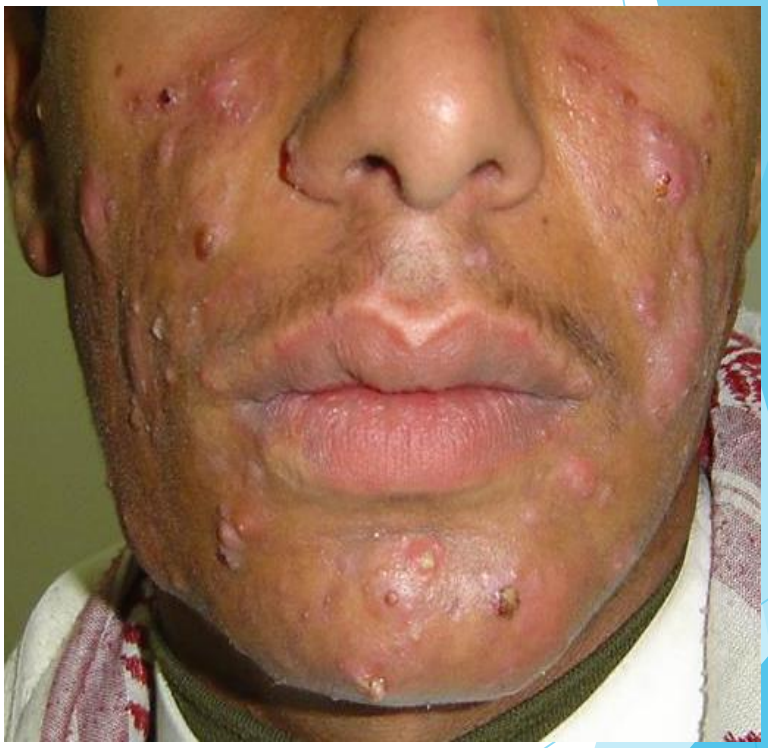


Acne Vulgaris

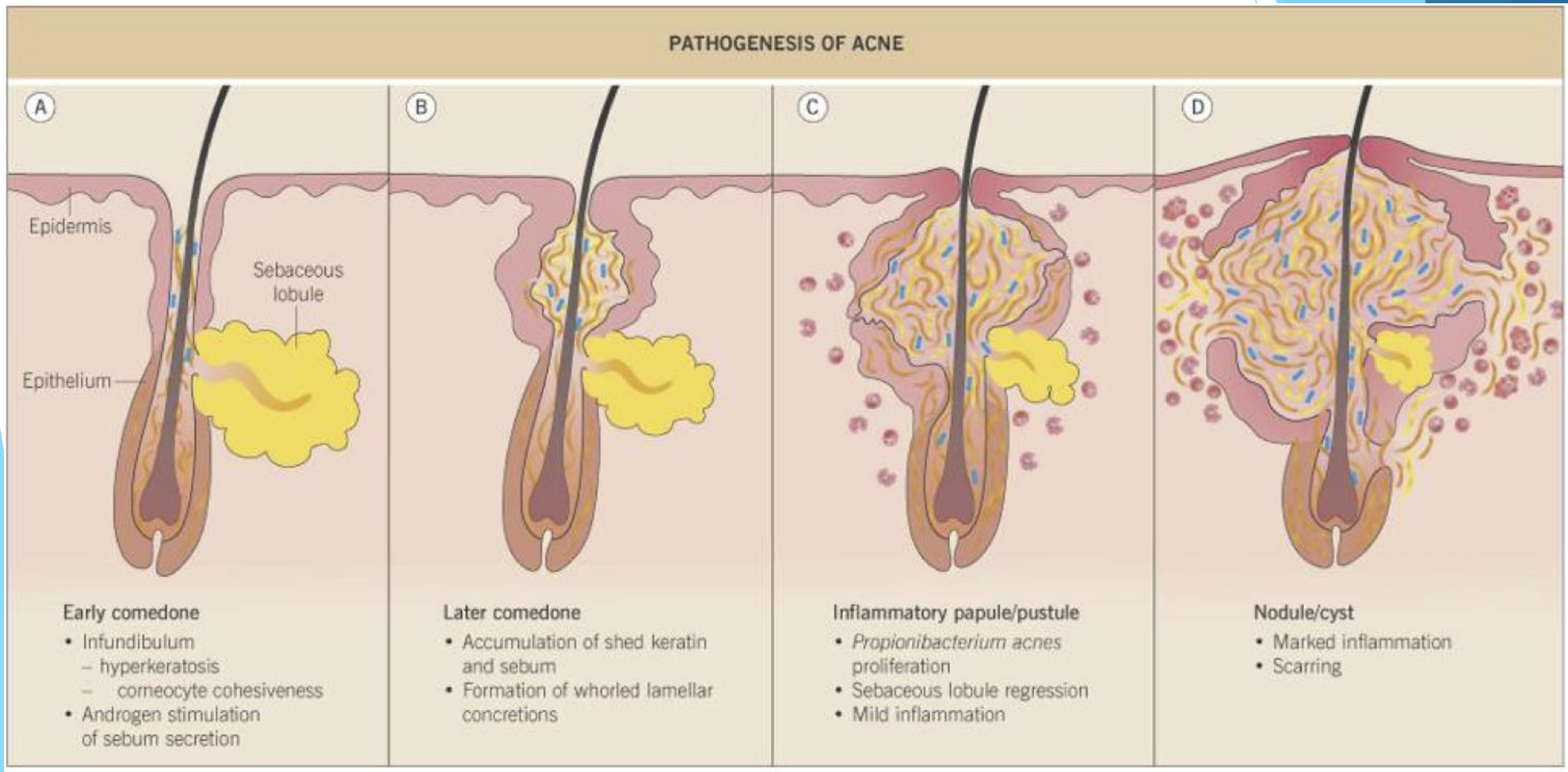





Acne Vulgaris

- Chronic inflammatory disease of the pilosebaceous units.
- Up to 75% - 80% of tennagers and yound adults.



Acne pathogenesis



Other etiologies

- Stress.
- Pressure.
- Drugs.
- Food???

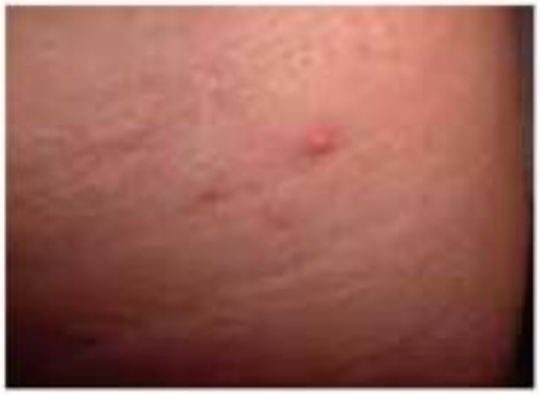
- Cosmetics with Lanolin or petroleum jelly.

- Oil based sunscreens.

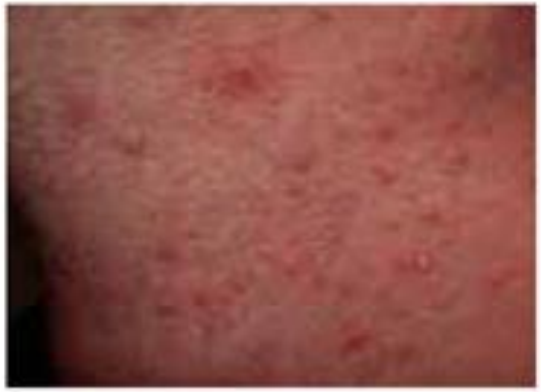
Drug inducing acne

1- chemo
2-INH
3-Steroids
4-hormones (OCP, ACTH..)
5-Antimalarials.
6-Phenytoin.
7-chloral hydrate.
8-penicillins.
9-brmides and iodides.

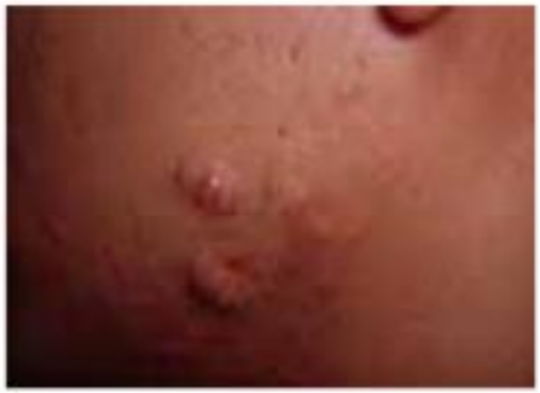
Morphology



Comedonal (non-inflammatory)
Whitehead (closed): a dilated hair follicle filled with keratin, sebum, and bacteria, with an obstructed opening to the skin. *Blackhead (open):* a dilated hair follicle filled with keratin, sebum, and bacteria, with a wide opening to the skin capped with a blackened mass of skin debris.



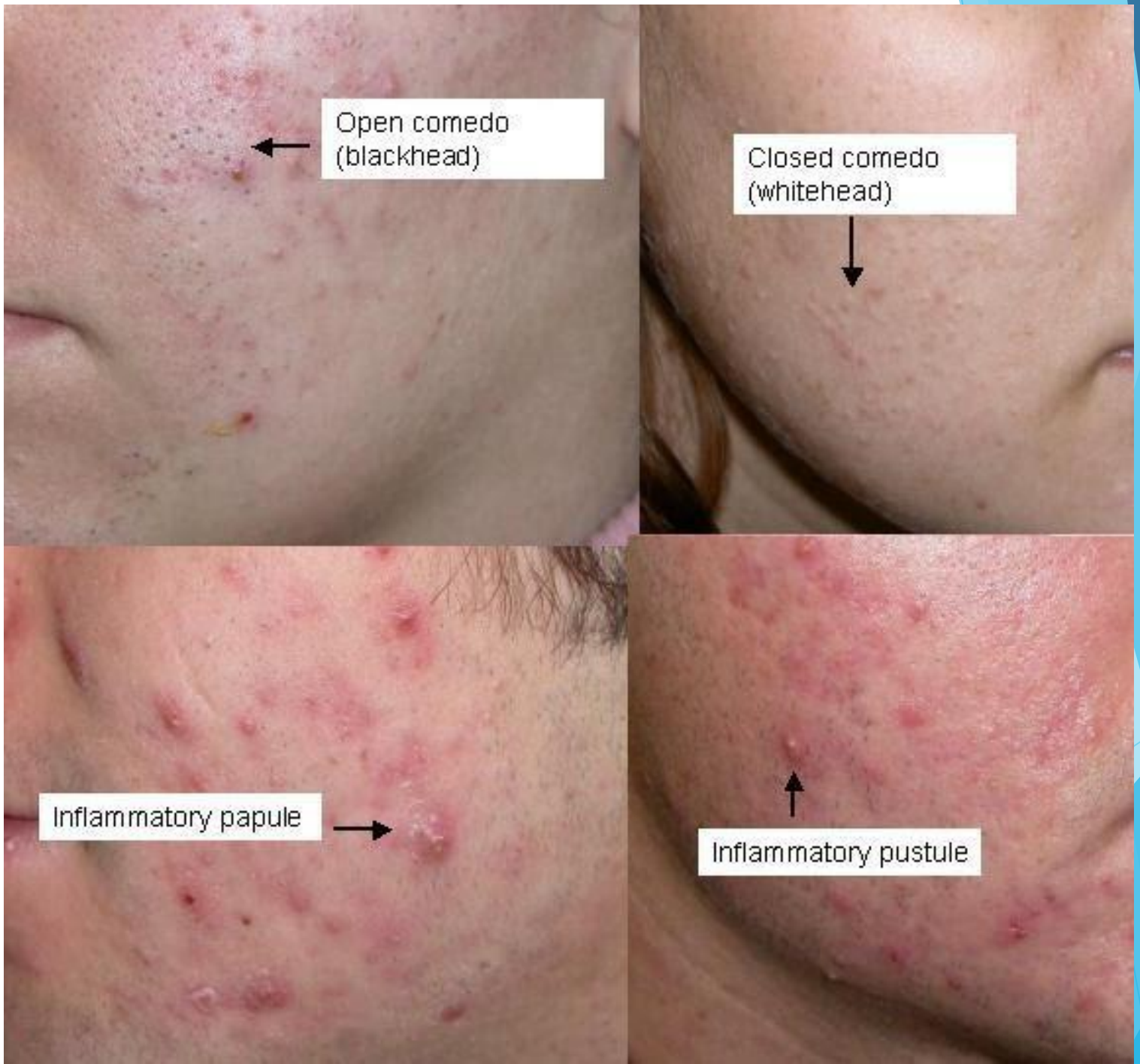
Papulo-pustular (inflammatory)
Papule: small bump less than 5mm in diameter. *Pustule:* smaller bump with a visible central core of purulent material.



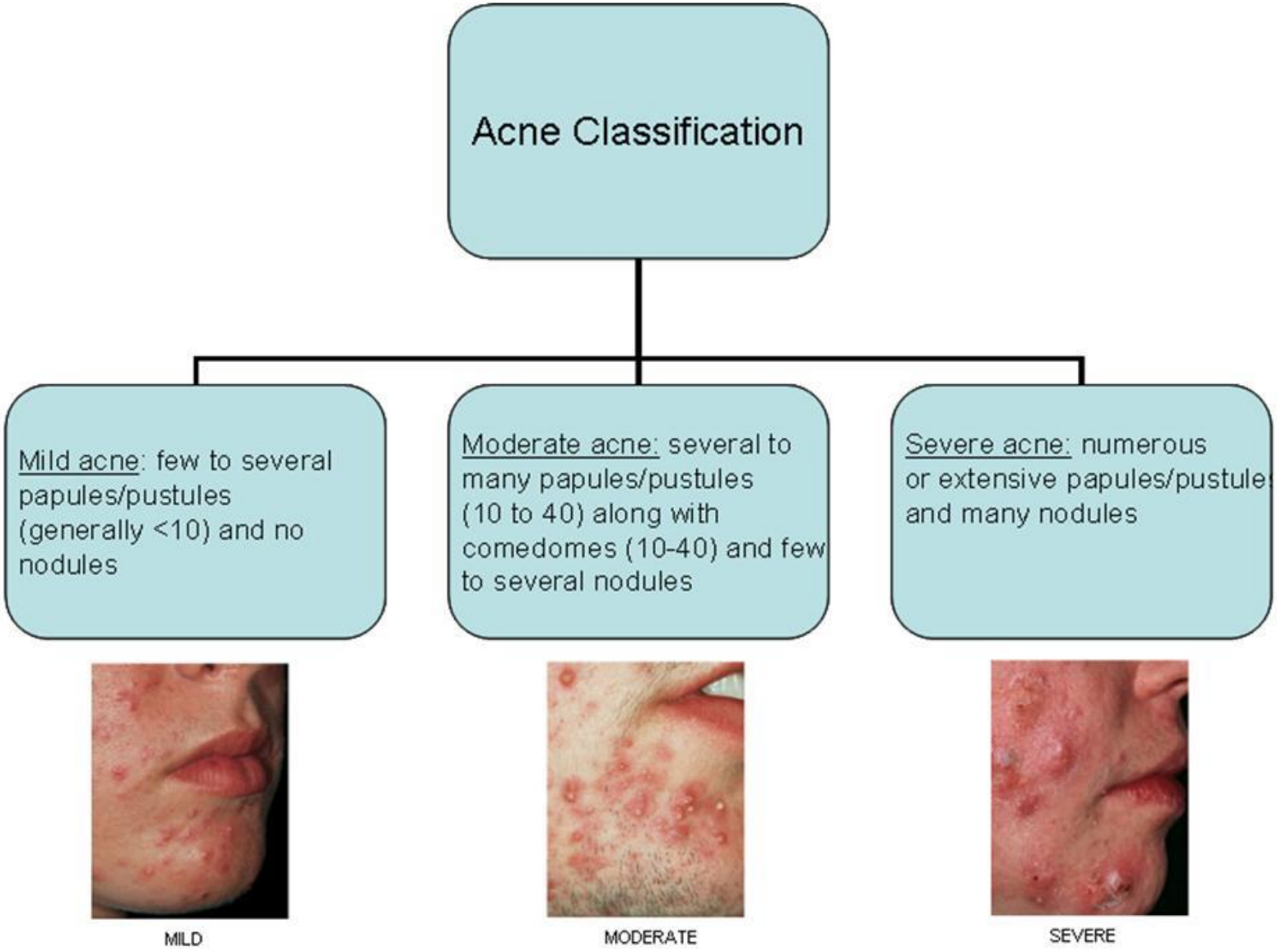
Nodular (inflammatory)
Nodule: bump greater than 5mm in diameter.

Morphology based classification

- Obstructive Acne
  - Open Comedones (Black heads)
  - Closed Comedones (White heads)
- Inflammatory Acne (in order of lesion formation)
  - papules
  - pustules
  - nodules
  - cysts
  - Scars

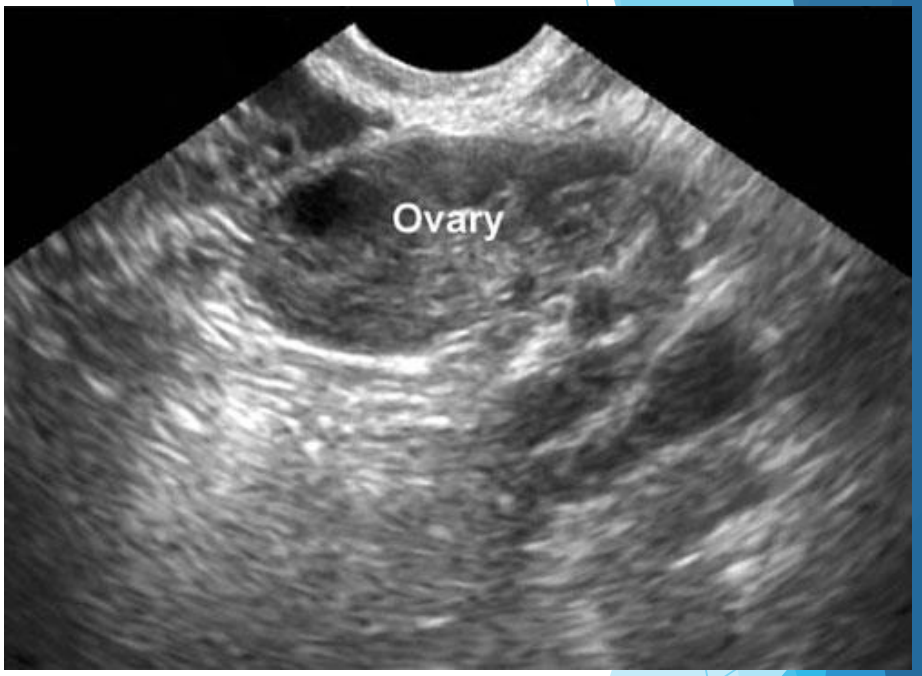

Open comedo
(blackhead)
Closed comedo
(whitehead)
Inflammatory papule
Inflammatory pustule

Classification according to severity



Investigations

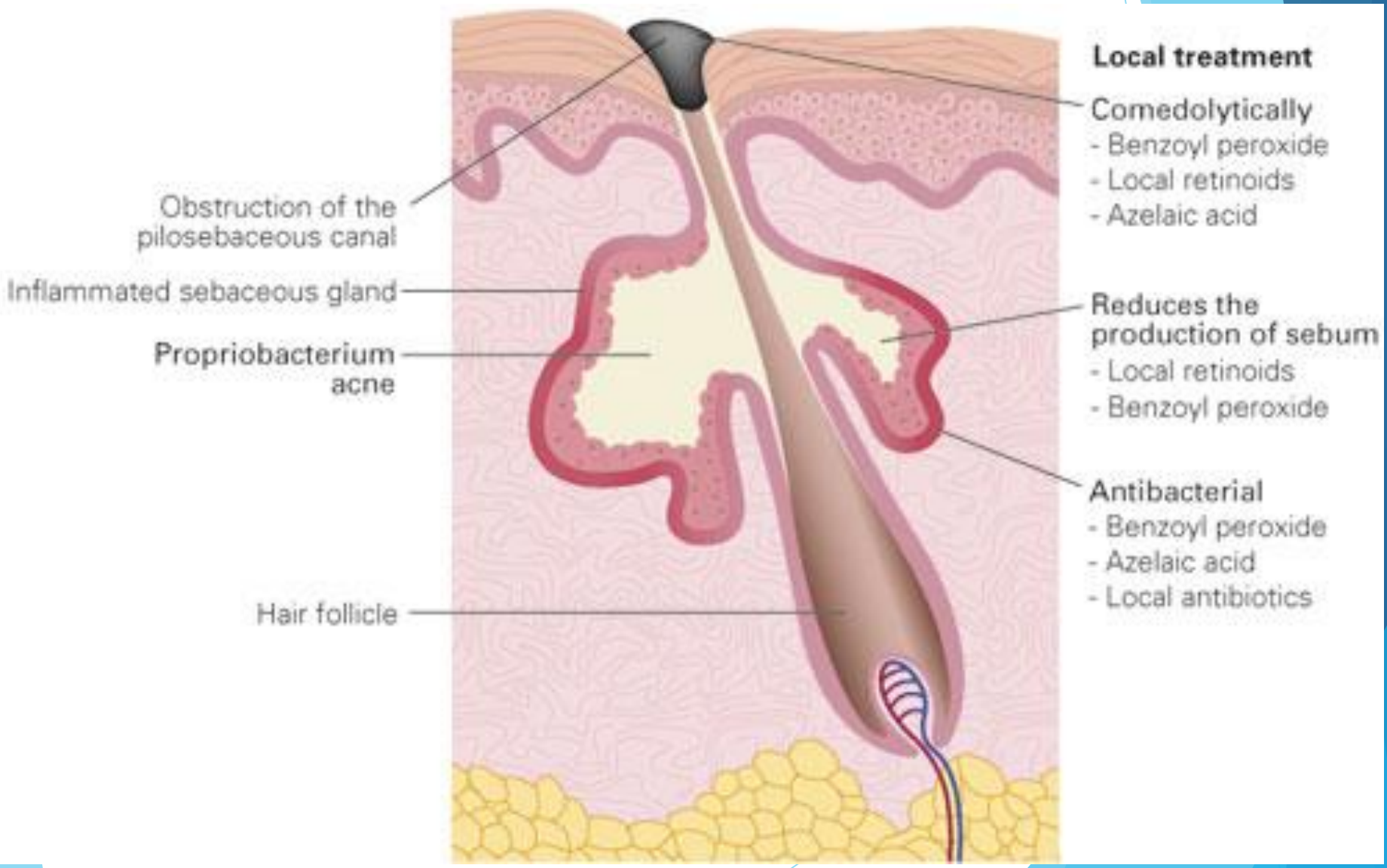
- CBC.
- Lipid profile.
- FBS?
- Hormonal assay?
- Plevic Ultrasound??



Management

- **General recommendations:**
  - *Do not squeeze lesions*
    - Forces pus into Dermis.
    - Causes inflammation and scarring
  - *Limit washing face to 2-3 times per day*
  - *Change cosmetics to water based products*
  - *Change OCP*
    - Increase Estrogen.
    - Decrease androgenic effects of Progestin.

Drug Therapy




STIEFEL
SULFUR
soap
for acne care
STIEFEL'S MEDICINAL SOAP
S
U.S.A.


VICHY
NORMADERM
GEL PURIFIANT INTENSE
A RINCER
INTENSIVE PURIFYING GEL
RINSE OFF


Oil-Free
Acne Wash
MICROCLEAR
#1 DERMATOLOGIST RECOMMENDED
Neutrogena
salicylic acid acne treatment
6 FL OZ (177 mL)

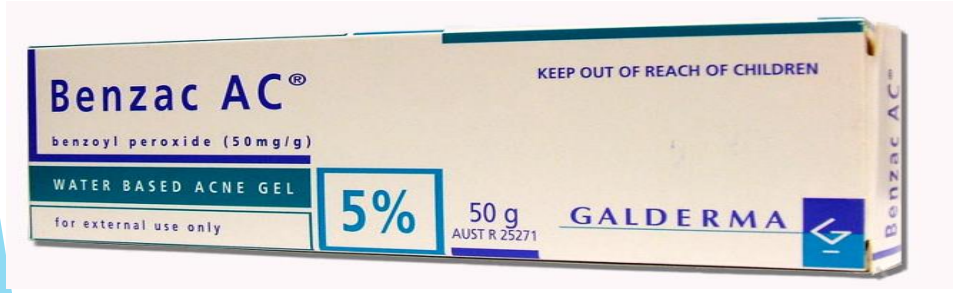

AZCLEAR ACTION
foaming
wash
Cleansing solution
for the control of
pimples and acne.
Anti-bacterial
solution
150mL


Eucerin
Dermo PURIFYER
CLEANSER
Cleanses gently
and effectively
6% Ampho-Tenside
Soap & Fragrance Free
MEDICAL SKINCARE


Dalacin T
Dalacin T


SKINOREN
Cream
20 %
30 g
SCHERING
SKINOREN
Cream
SCHERING
SKINOREN


Retin-A Cream
Cream 0.1%
Tretinoin, 1.0 mg, Conserv.


Benzac AC®
benzoyl peroxide (50mg/g)
WATER BASED ACNE GEL
for external use only
5%
50 g
AUST R 25271
KEEP OUT OF REACH OF CHILDREN
GALDERMA
Benzac AC®


جمجوم فارما
Jamjoom Pharma
Acretin™ 0.025%
Tretinoin 0.025% w/w
For ACNE Treatment
Cream
30 g


CLINDACIN GEL
30 gram
Clindamycin
United
Pharmaceuticals
Batch No.:
Mfg. Date:
Exp. Date:


011599-03
Fucidin®
Fusidic acid
Antibiotic 15 g cream 2%
Each g contains:
L E O
Batch No./Mfd./วันผลิตฯ

Drug therapy mild acne

Step 1: OTC topical medications for 6 weeks

- Acne wash.
- Topical Benzyl peroxide 2.5% gel in morning.

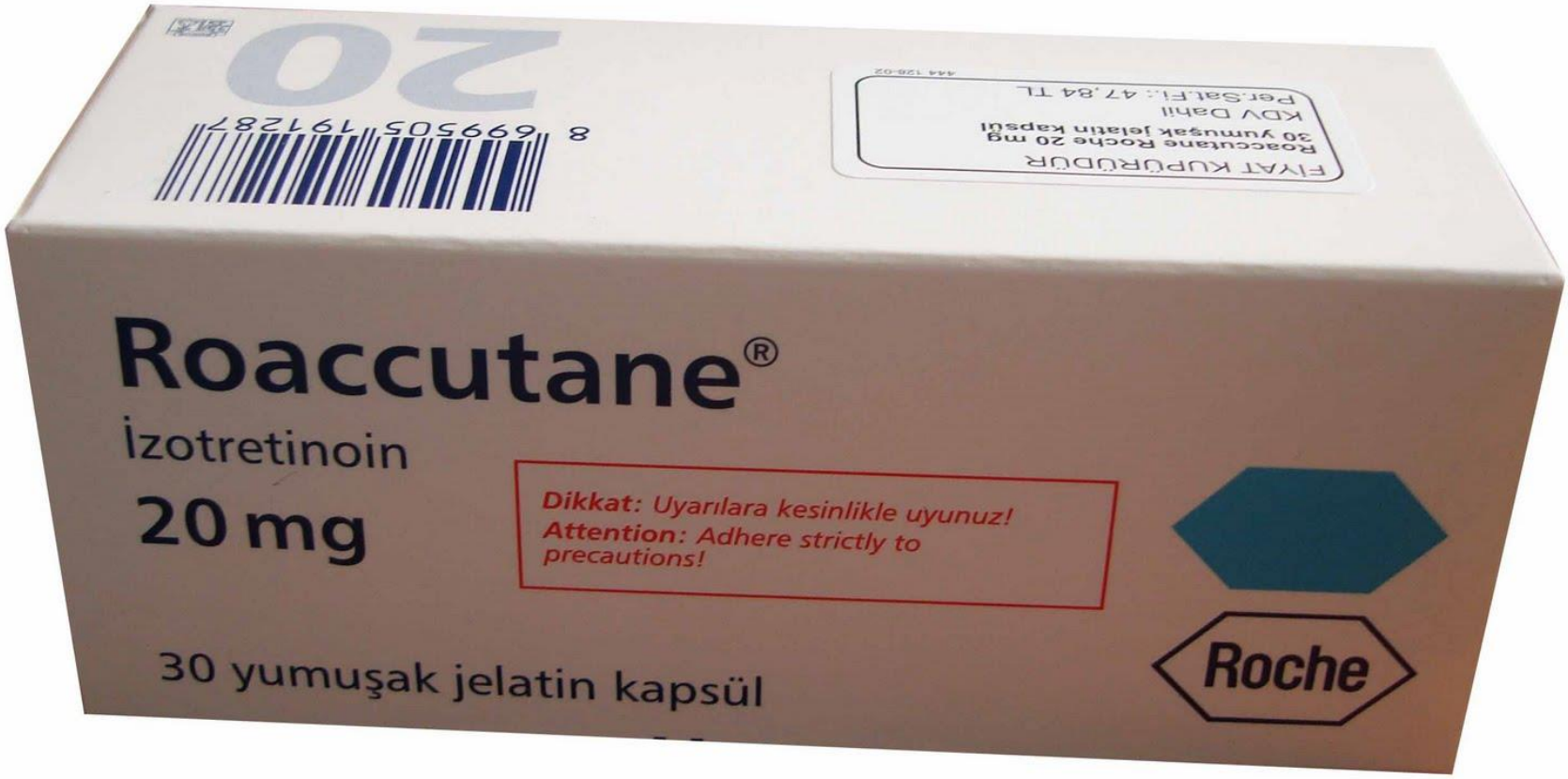
Step 2: Comedolytics and Topicals for 6 weeks

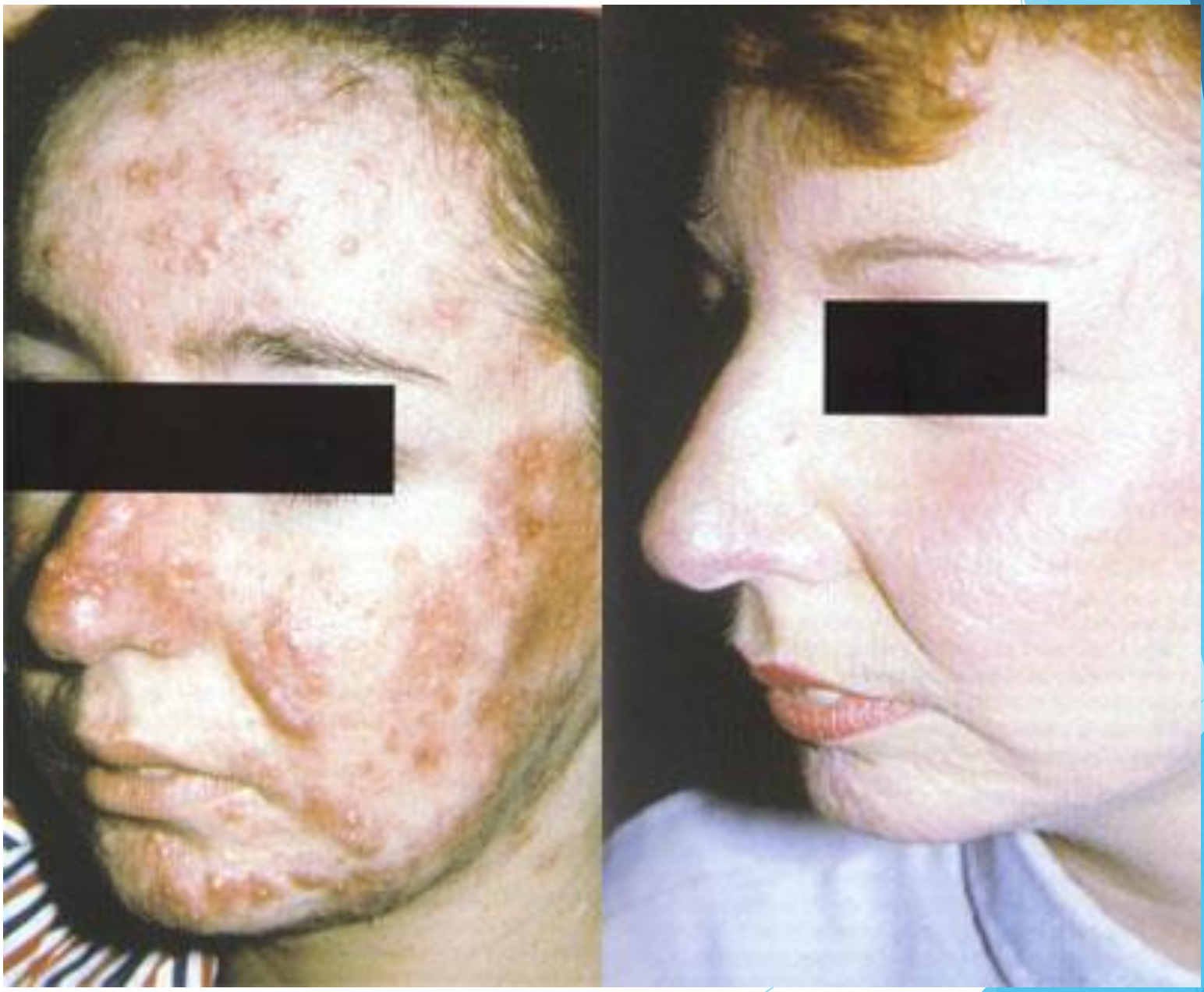
- Continue topical Benzyl peroxide in morning
- Add comedolytic at night
  - First-line options
    - Topical Tretenoin (Retin A) 0.025% cream
    - Adapelene (Differen) 0.1% gel
  - Warn regarding redness and irritation
    - Use only pea size amount per triangle of face
    - Use only at night-time

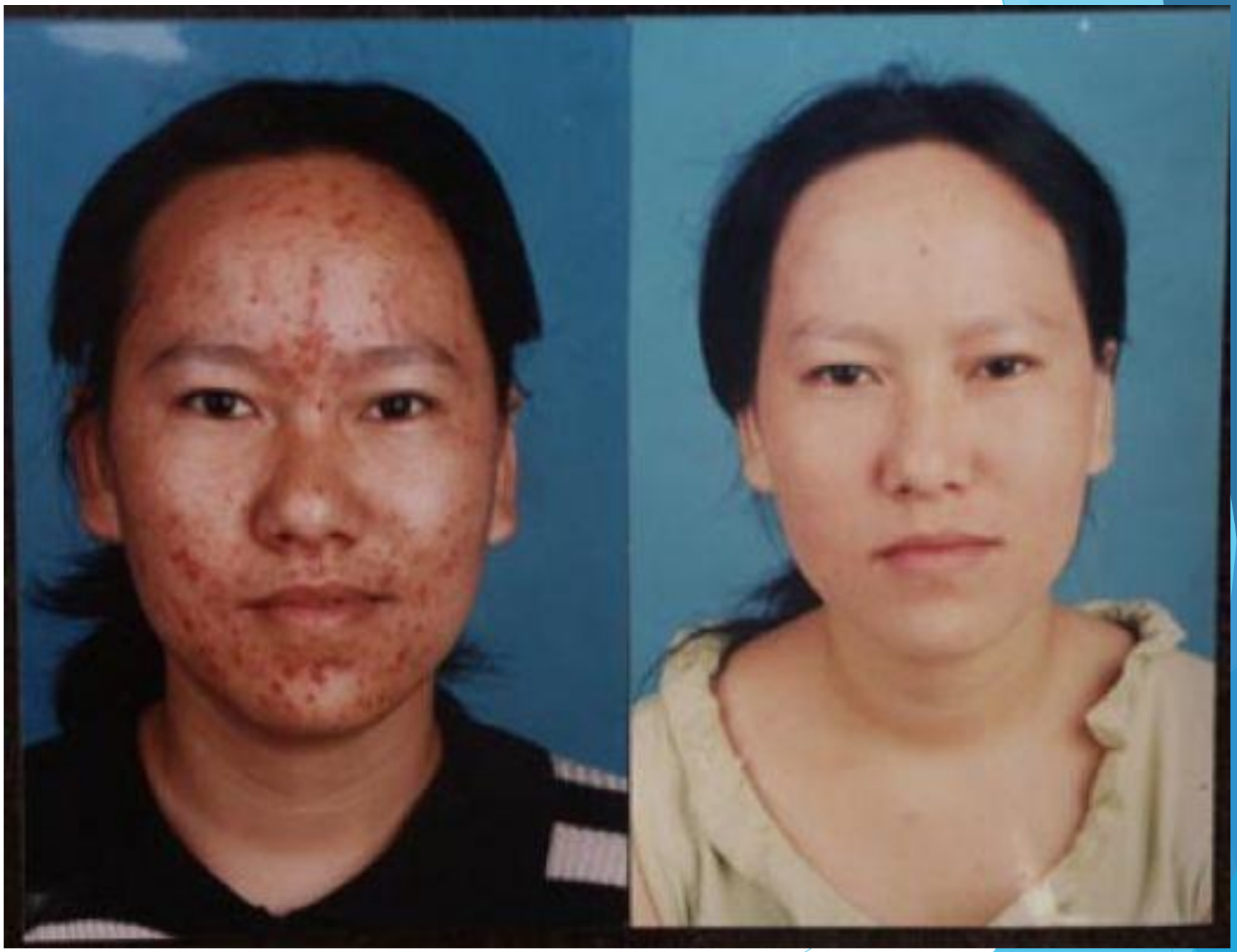
Step 3: Consider adding topical antibiotic

- falling out of favor due to growing resistance
  - Use topical Abx with Benzyl peroxide to prevent resistance.

Isotretenoin





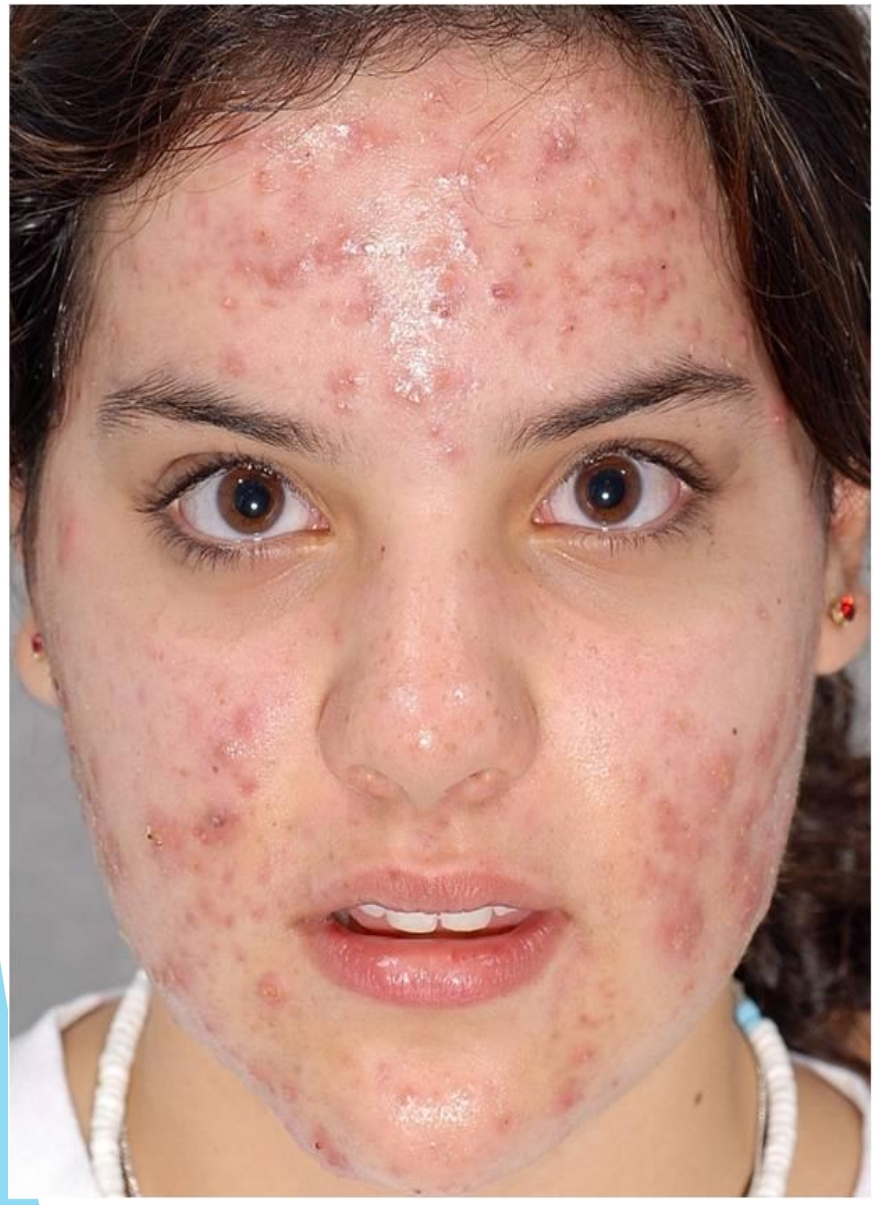


Mechanism of action

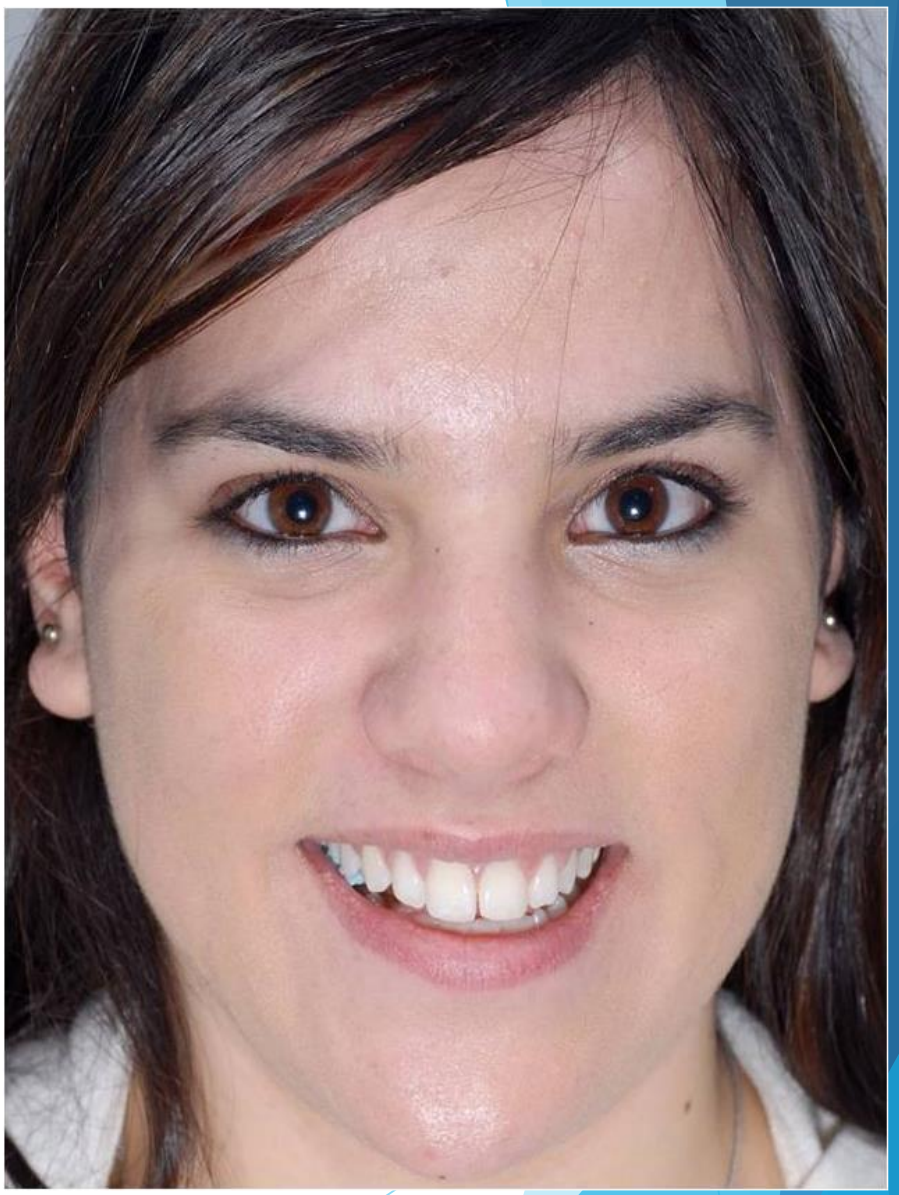
- Unknown
- Isotretinoin markedly reduces sebum production and shrinks the sebaceous glands.
- It gets rid of comedones and prevents new ones forming.
- Treated skin is dry, inhibiting the growth of *P.acnes*.
- It has anti-inflammatory properties

indications

- Nodular or nodulocystic.
- Acne fulminans or acne conglobata.
- Scarring acne .
- Moderate acne which has failed to respond to topicals combined with oral abx.
- Acne which relapses rapidly on discontinuing treatment.
- Acne which has persisted for several years, or older sage groups.
- When the acne has a significant adverse occupational, social or psychological effect on the patient's life .



Before



After

Dosage

Depends on:

- The patient's body weight (0.5 mg/Kg).
- Cumulative dose : 120 and 150-mg/kg-body weight.
- The specific condition being treated
- The severity of skin condition
- The response to treatment
- Other treatment used at the same time
- The severity of side effects

Side Effects

1-Skin:

-Dryness (reach until eczema).

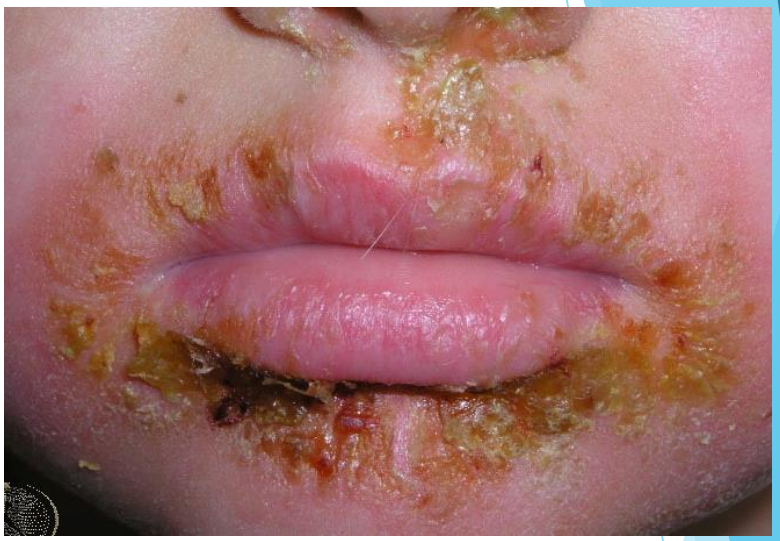
-Staph infections.

-Pyogenic granulomas.

-Paronychias.

-Hypertrophic scar formation.

-photosensitivity.

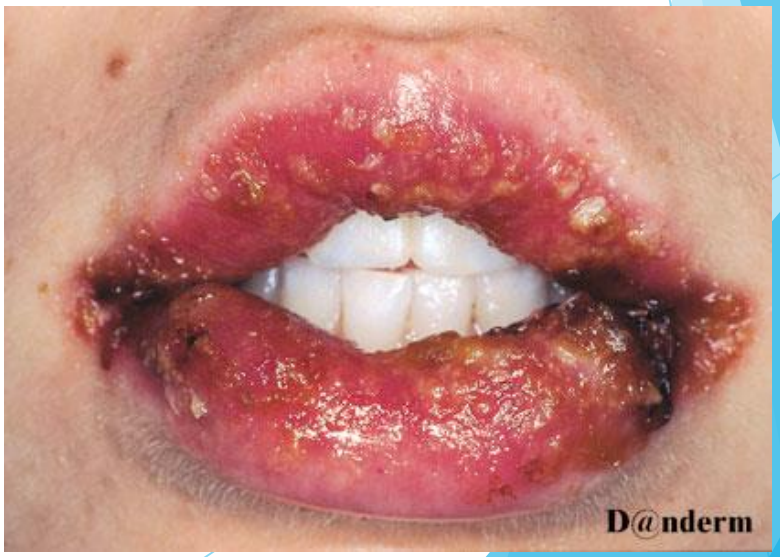


2-Ocular:

-reduced night vision

-dry eyes

-Staph. Infection.



3-Bones:

-Diffuse Idiopathic skeletal hyperstosis.

-Premature epiphysal closure.

4-Lipids derangement.

5-Gastrointestinal:

-IBD flare up.

-Pancereatitis.

6-Hepatic:

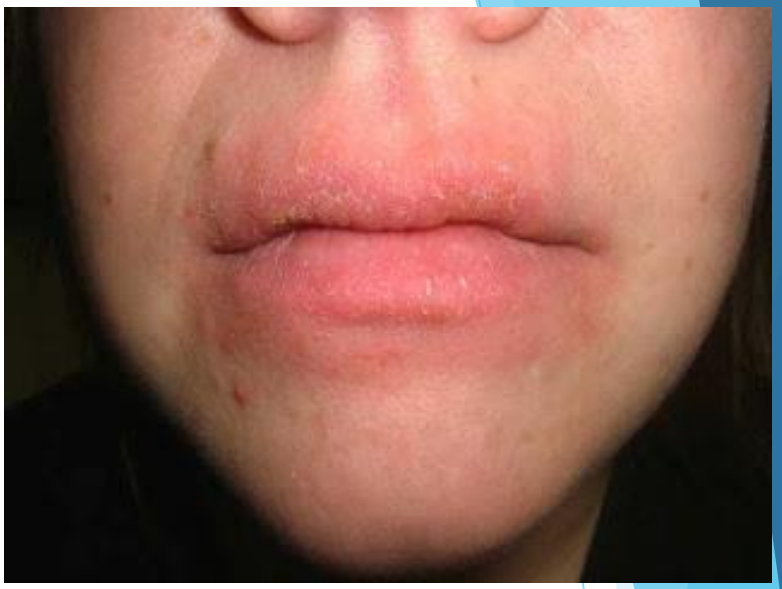
-Enzyme derangement.

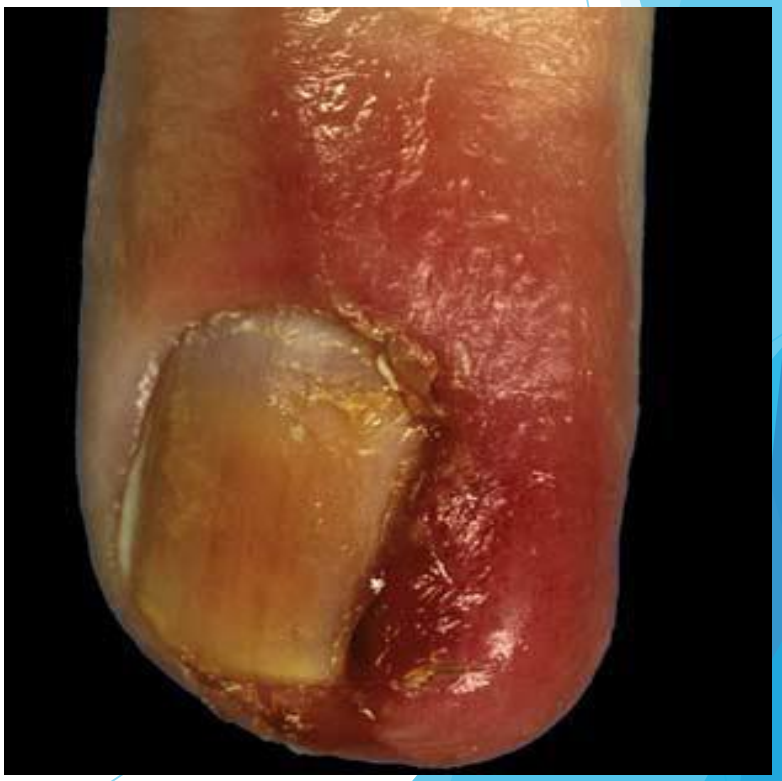
-Hepatitis.

7-Endocrine:

-Hypothyroidism.

-DM ?





8-hematological:

-Leucopenia.

-Agranulocytosis.

9-Neurological:

-Pseudotumor cerebri.

-Mood swings.

10-Others:

-Myopathy.

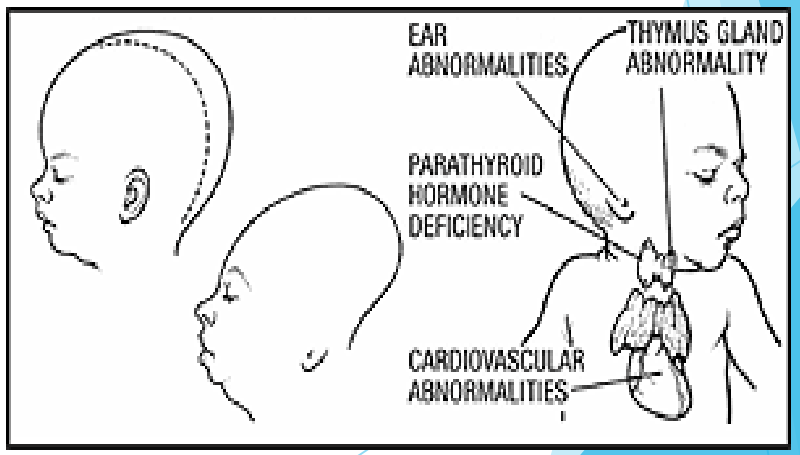
-Bodyaches.

-hair falling.

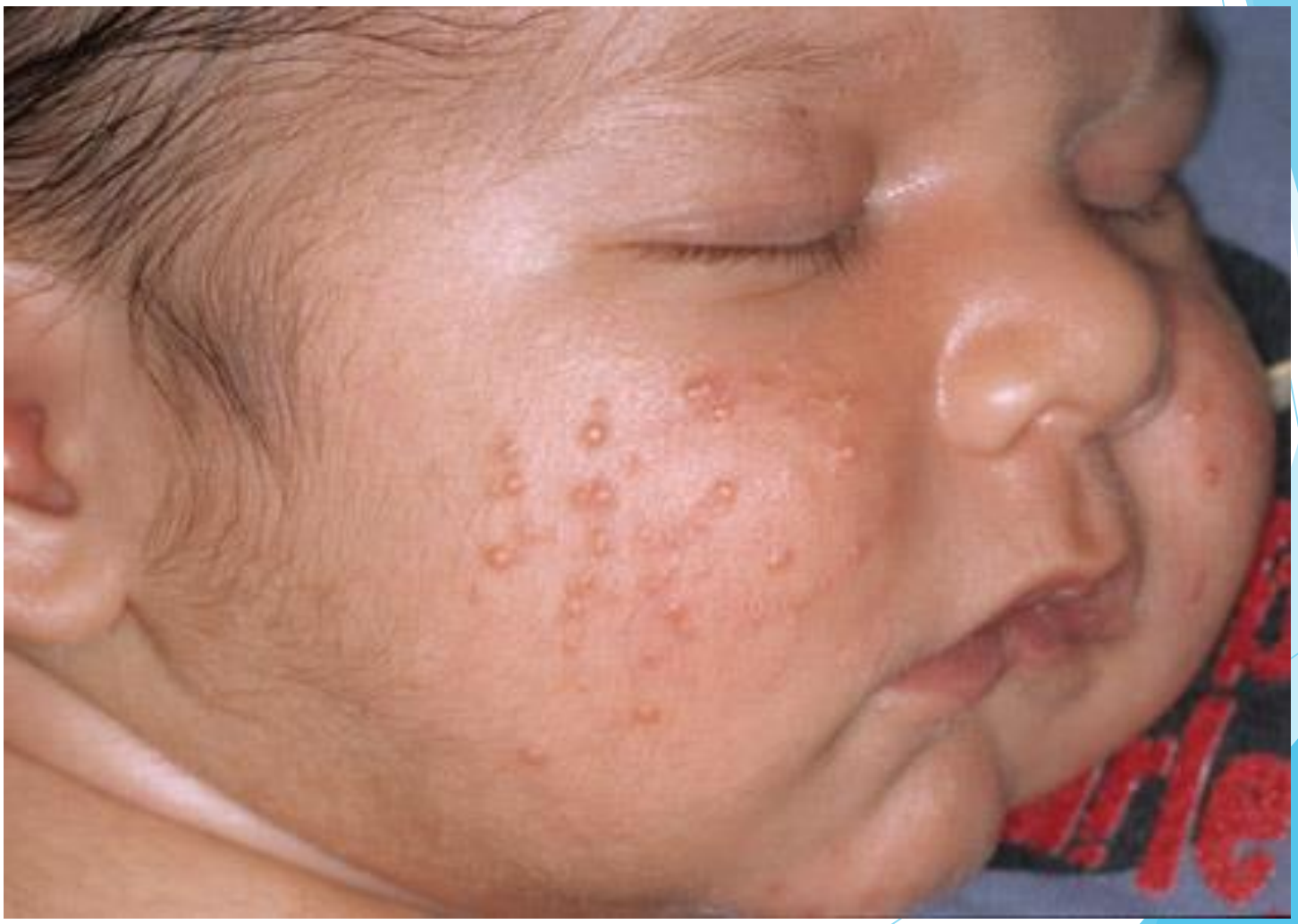
- *Severe Internal Defects:* defects that you cannot see involving the brain (including lower IQ scores), heart, glands and nervous system.

- *Severe External Defects:*

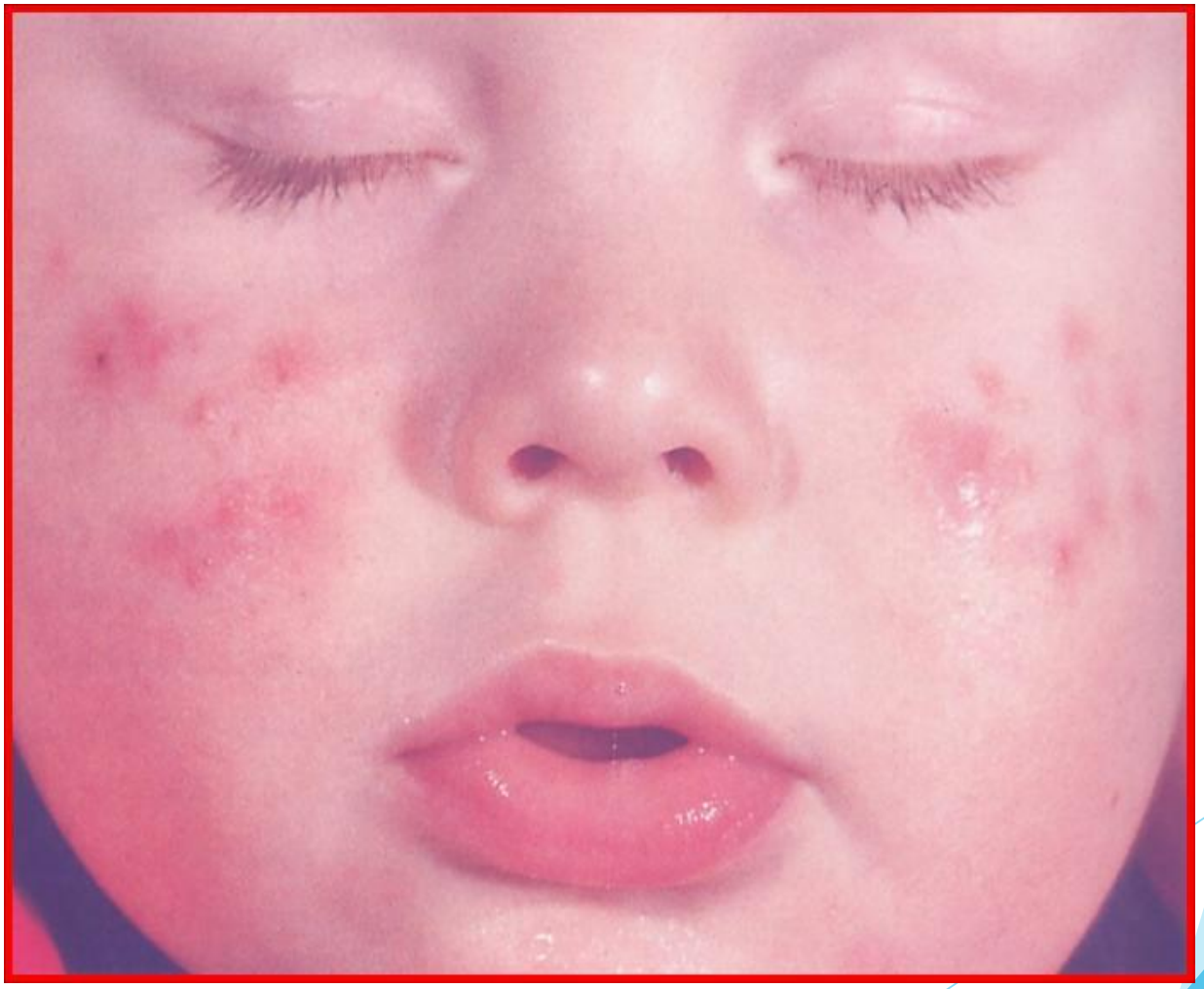
  as low-set, deformed or absent ears, wideset eyes, depressed bridge of nose, enlarged head and small chin.



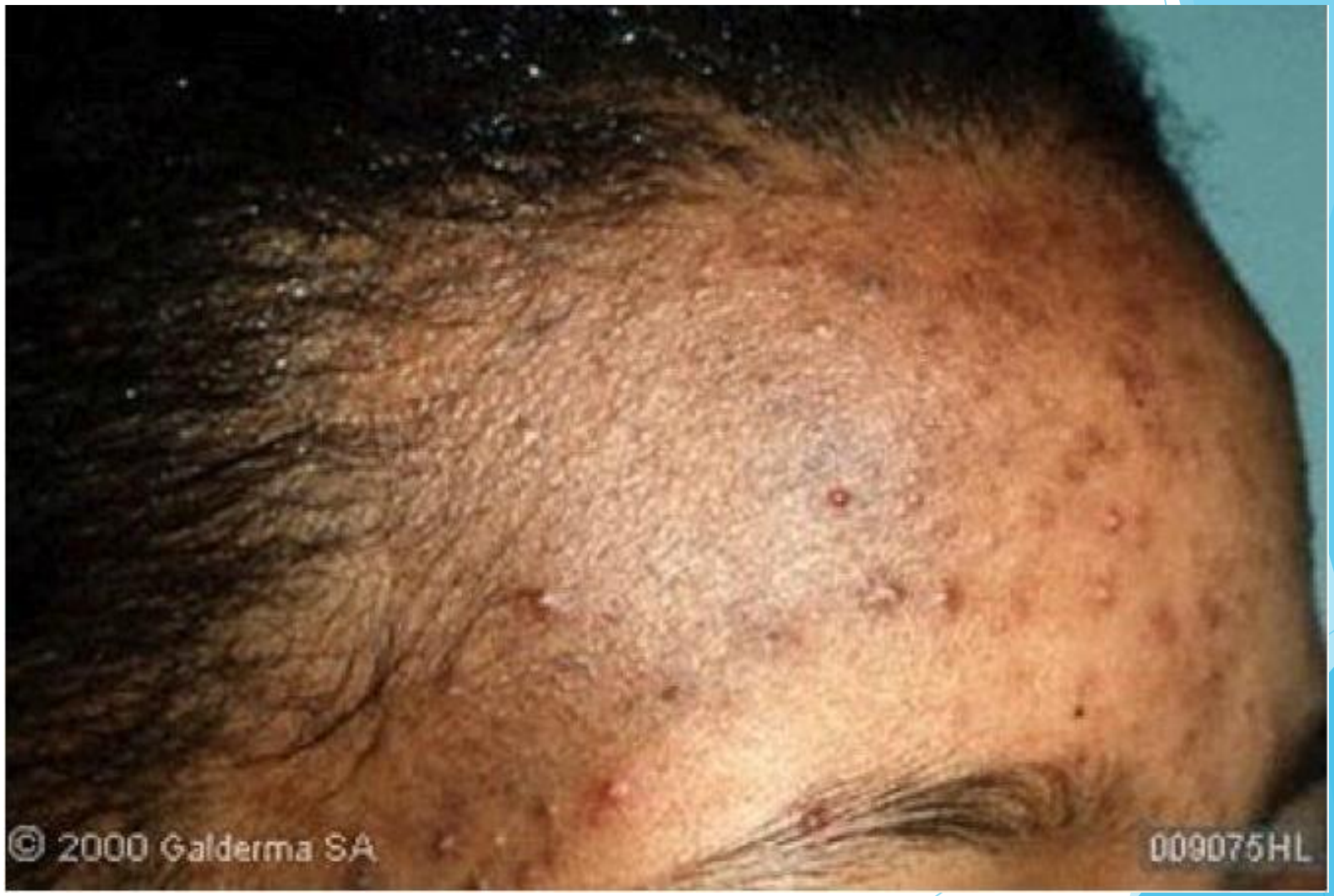
Neonala acne



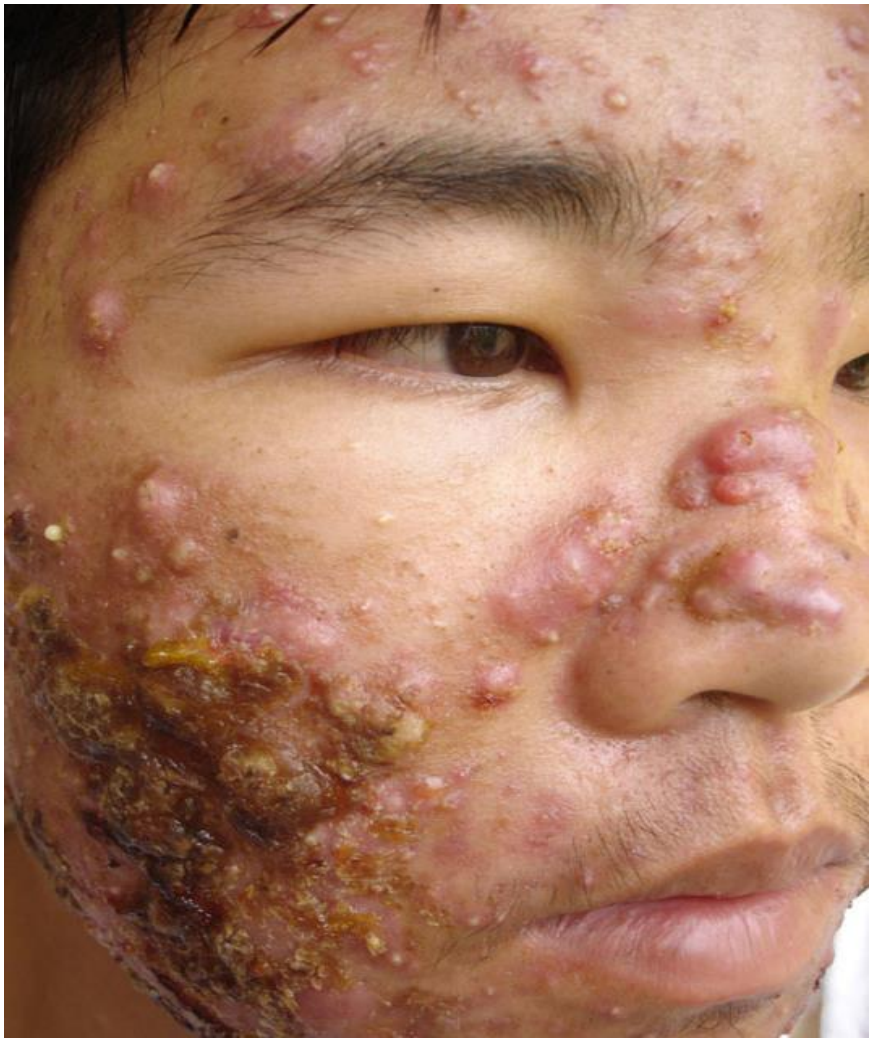
Infantile acne



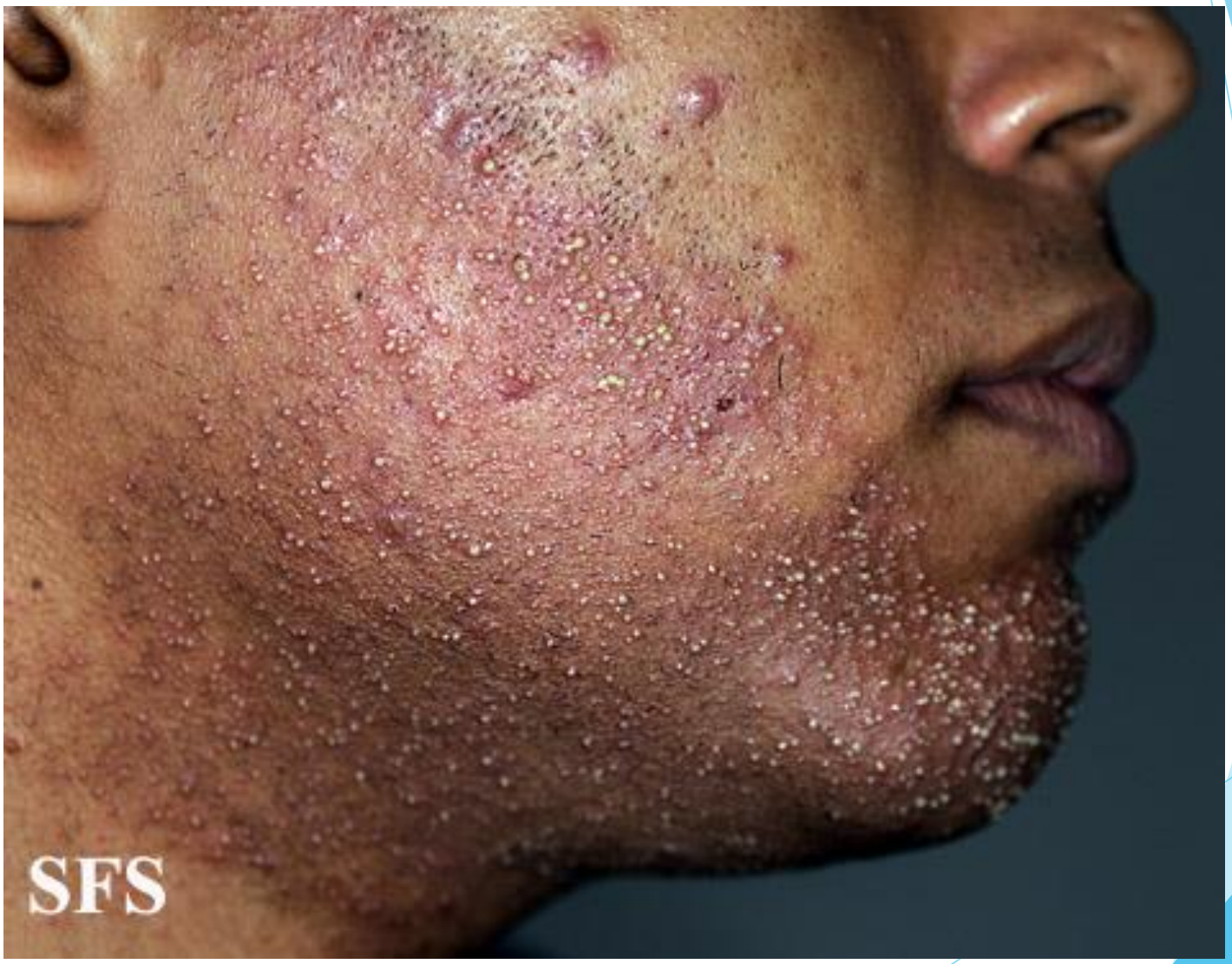
Acne pomade



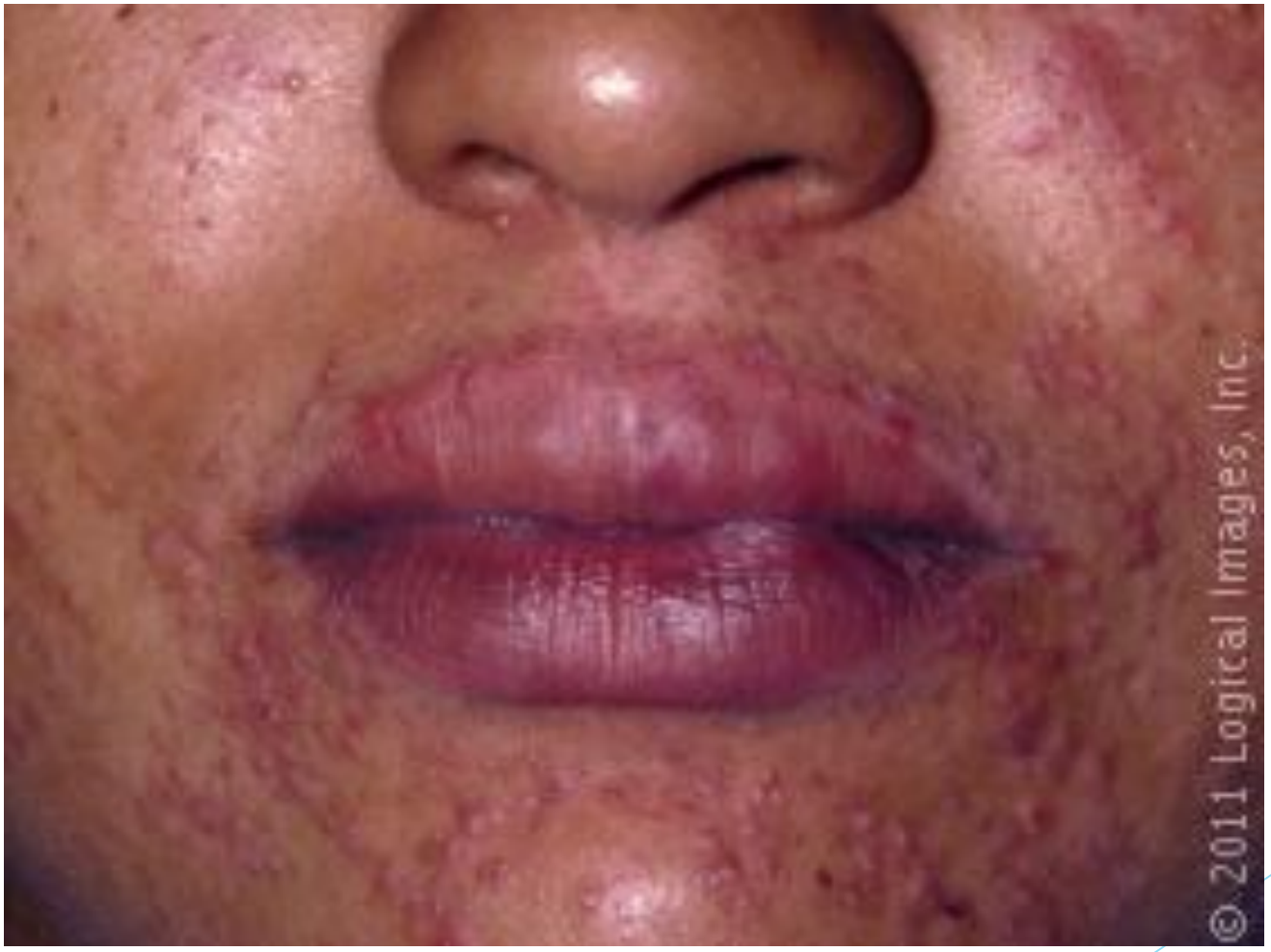
Acne conglobata



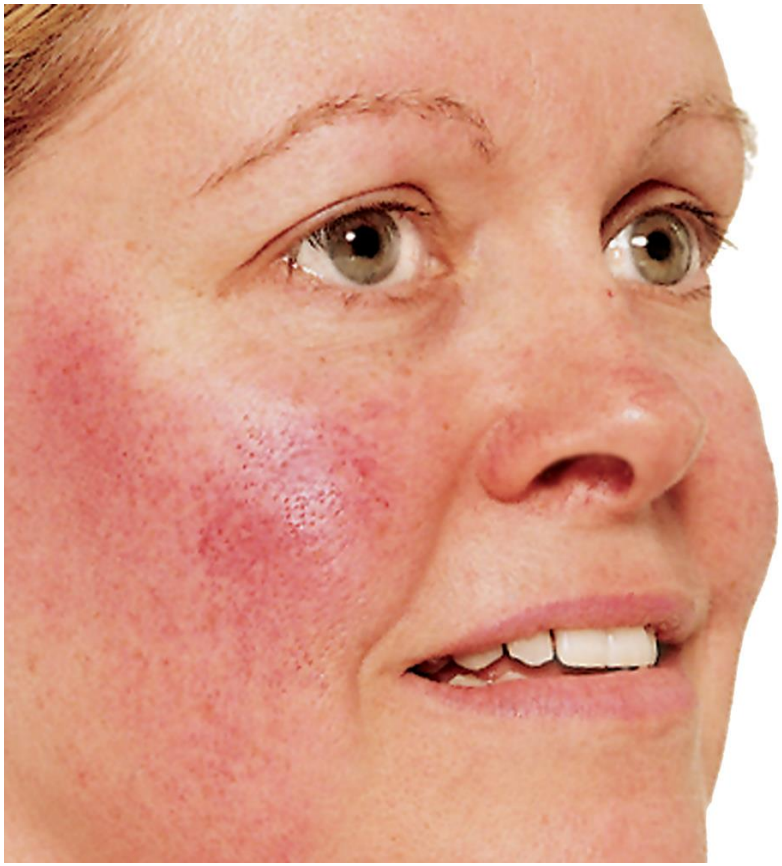
Gram Negative Folliculitis



Perioral Dermatitis



ROSACEA



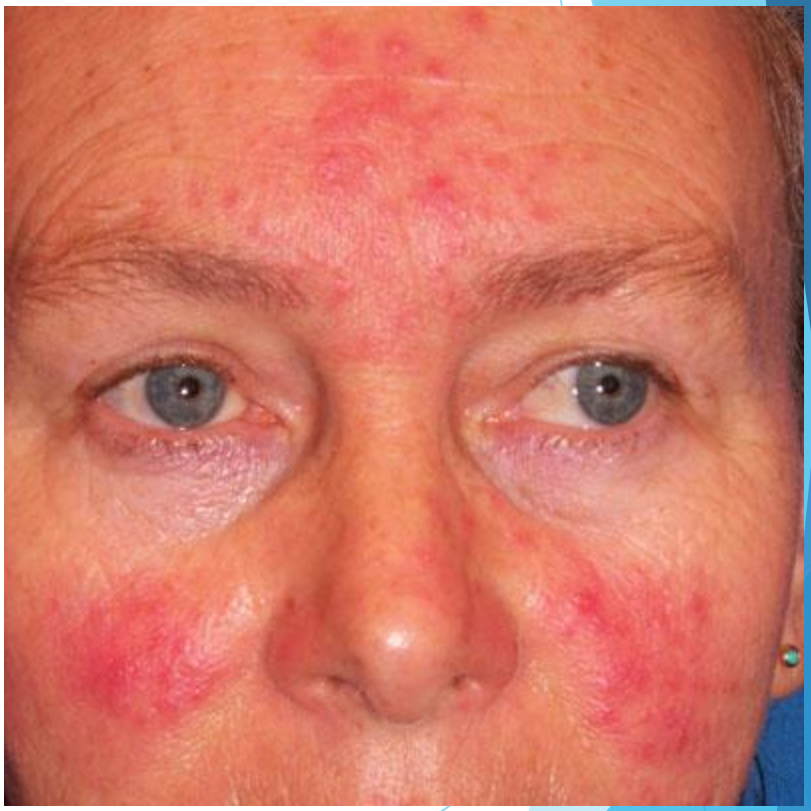
Rosacea

- Rosacea (Latin “like rose”).

- Chronic inflammatory acneform inflammation with periodoc exacerbation and remission of the pilosebaceous unit of the face.

Epidemeology

- common.
- Females.
- 30-50 Yr old.



Etiology

1- GIT indigestion : ? H.Pylori.

2- Reaction to mite *Demodex follicularum*.

3- Sun exposure.

4- Psycological.

5- Food :hot food, caffiene, alcohol, histamine containig food (diaries, beers,bacon …),bananas, chocolates.

6- drugs: chronic potent topical steroids, topical peelinga gents.

7-harsh facial routine.

A survey by the National Rosacea Society of 1,066 rosacea patients showed which factors affect the most people:

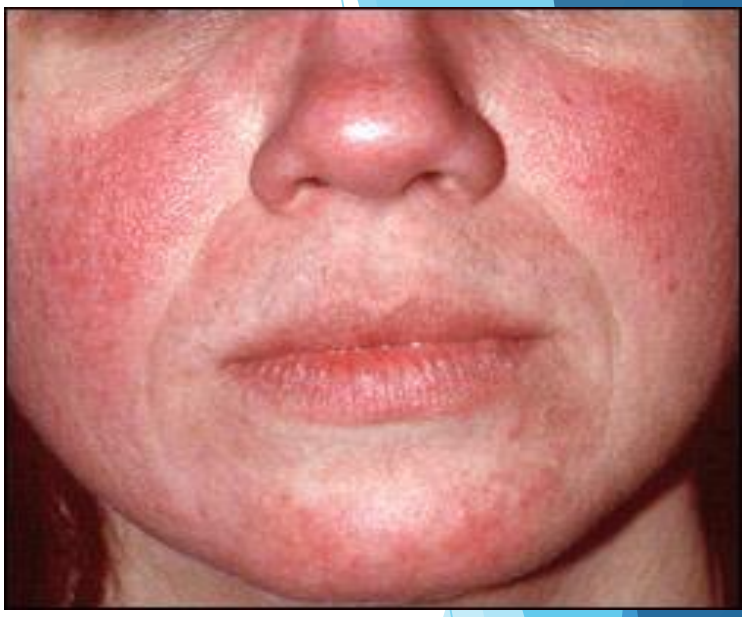
- Sun exposure 81%
- Emotional stress 79%
- Hot weather 75%
- Wind 57%
- Heavy exercise 56%
- Alcohol consumption 52%
- Hot baths 51%
- Cold weather 46%
- Spicy foods 45%
- Indoor heat 41%
- Heated beverages 36%
- Certain cosmetics 27%
- Medications (specifically stimulants) 15%
- Certain fruits 13%

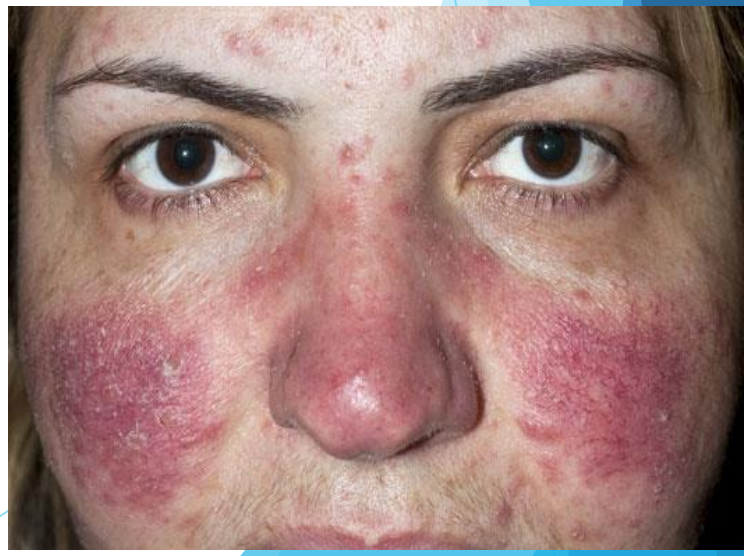
Manifestations

Clinically 2 components:

1- vascular changes of intermittent then constant flushing, talengiectasia.

2-Acneform eruption: papule, pustule, cysts and sebaceous hperplasia.





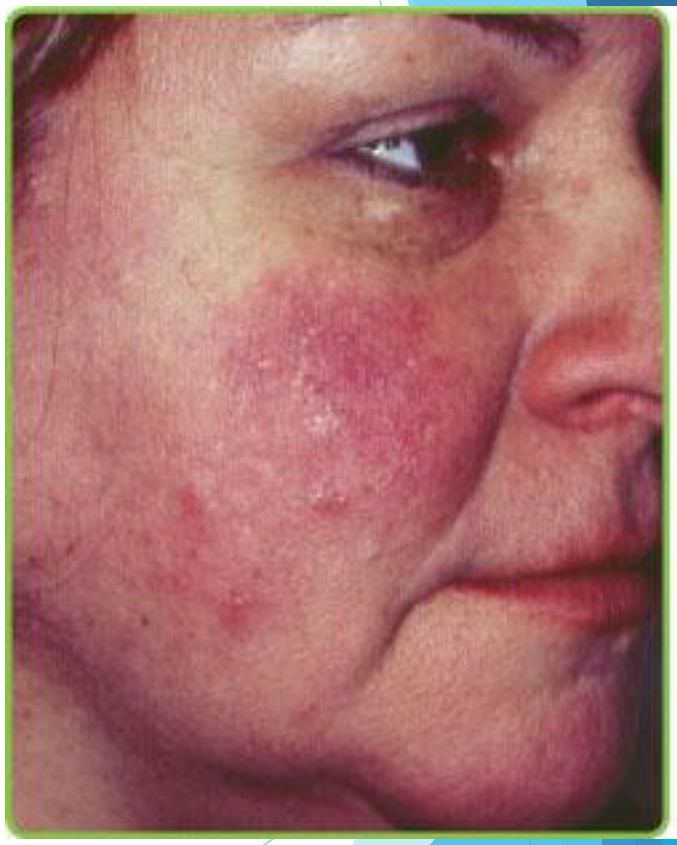
classification

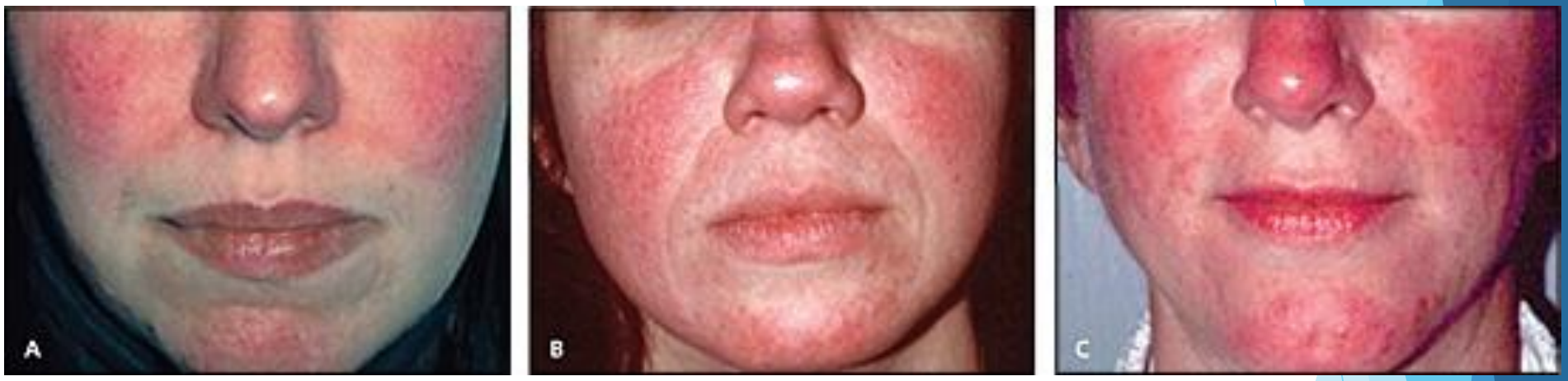
1- Erythematotelangiectatic :

_Permanent erythema, talengiectasia and possibly intense burning, stinging, and/or itching sensations.

– Skin can also become very dry and flaky.

_In addition to the face, symptoms can also appear on the ears neck, chest, upper back, and scalp.

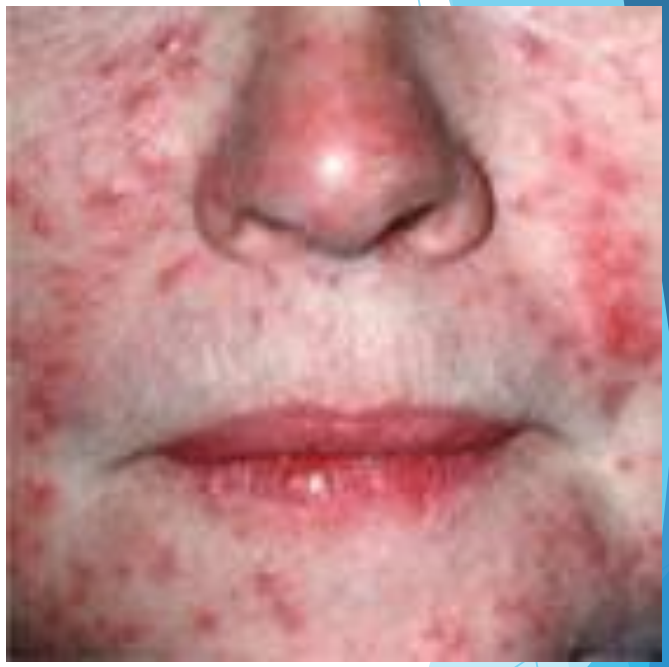


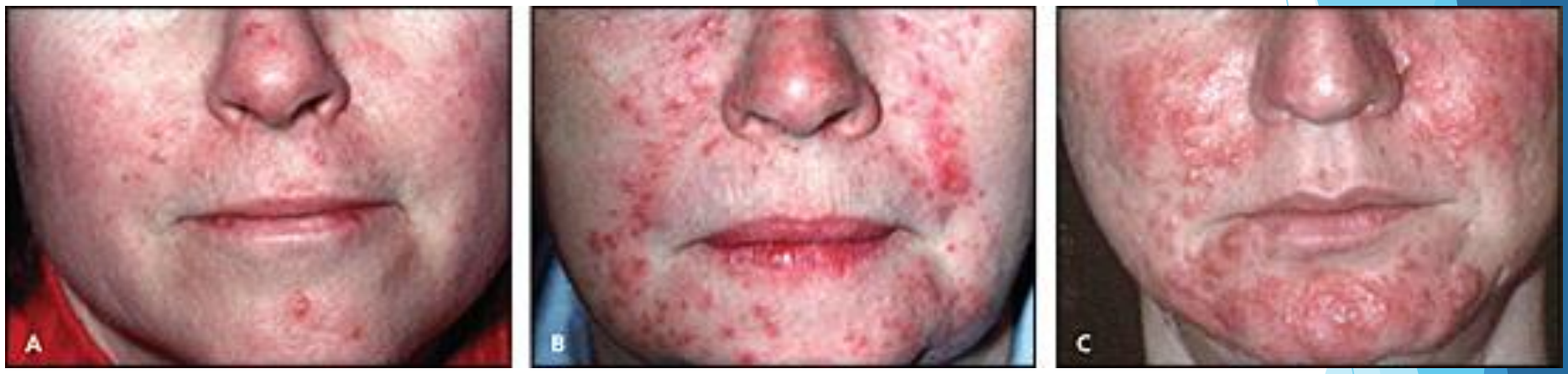

A
B
C

classification

2- Papulopustular rosacea:

Some permanent redness with papules with some pustules.can be easily confused with acne.




A
B
C

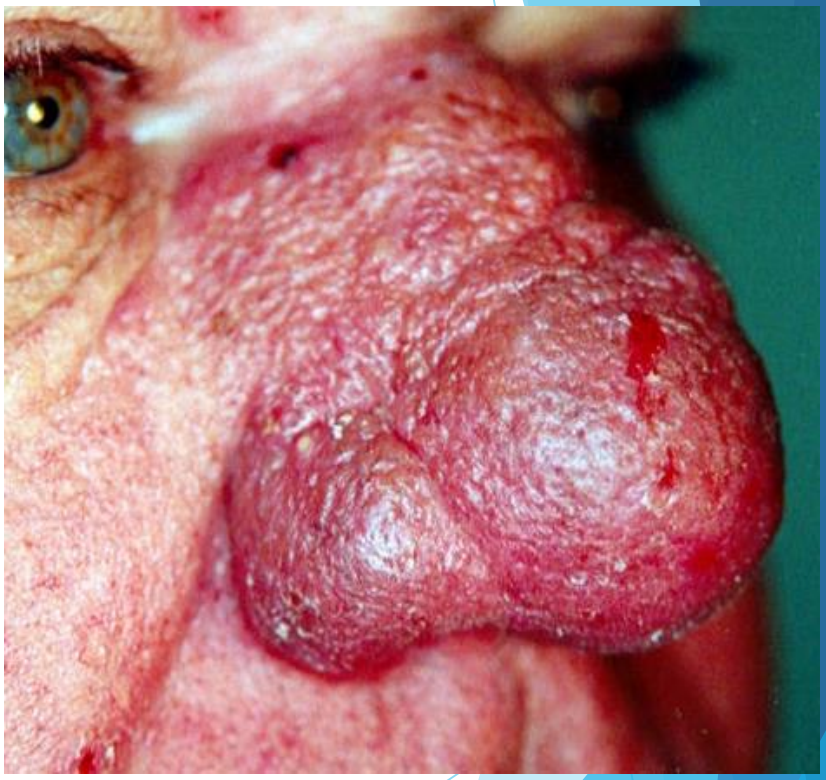
classification

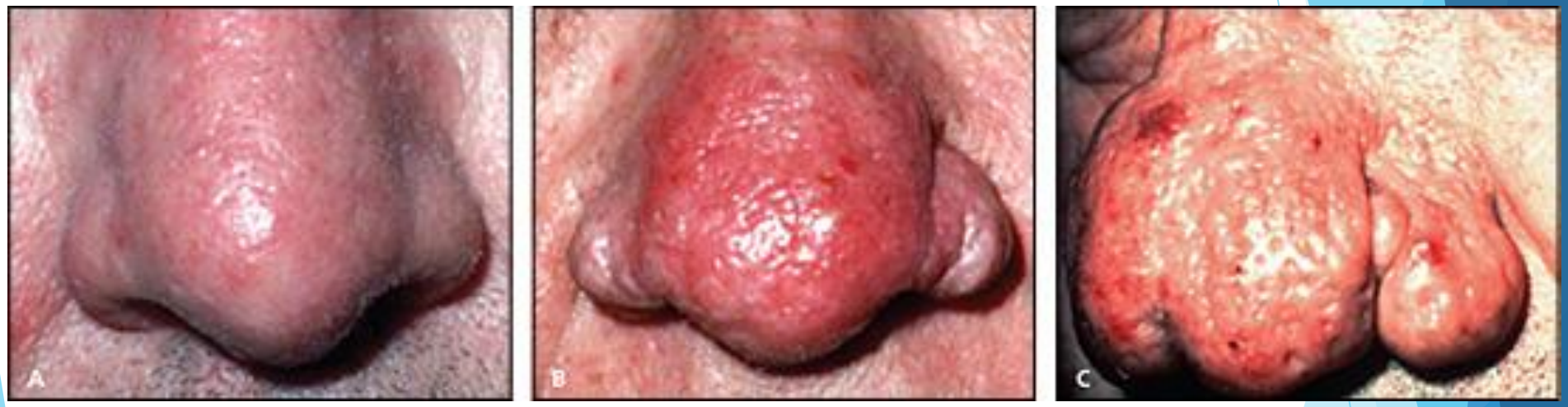
3-Phymatous rosacea:

-Thickening skin, irregular surface nodularities, and enlargement.

-Commonly rhinophyma, but can also affect the chin (gnathophyma), forehead (metophyma), cheeks, eyelids (blepharophyma), and ears (otophyma).

- Telangiectasis may be present.




A
B
C

classification

4- Ocular rosacea:

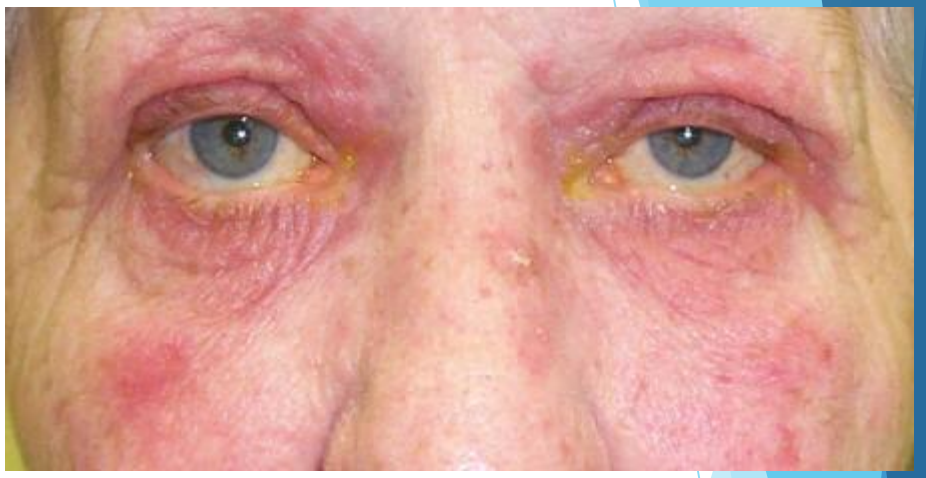
- Red dry eyes and lids.

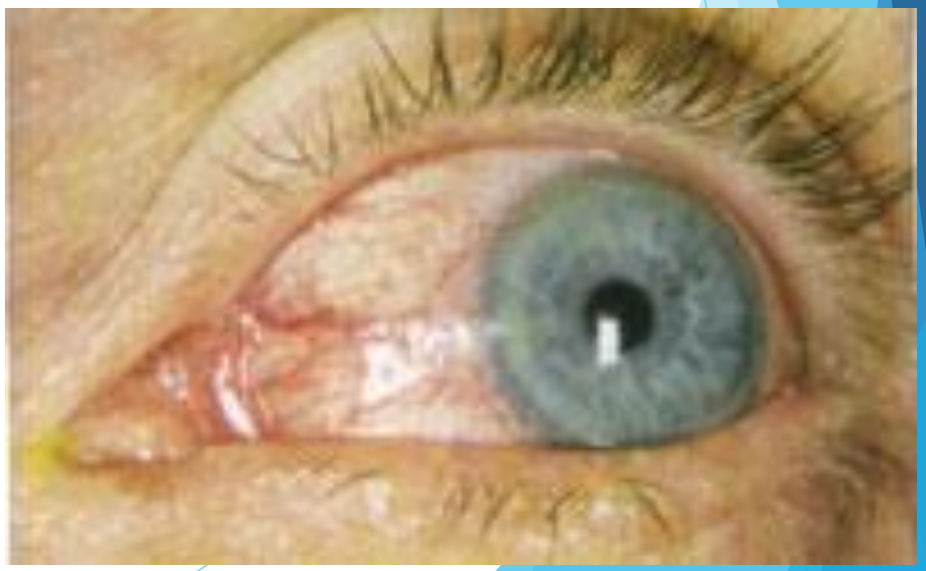
-Watery eyes.

-Eyelids cysts.

-itching, burning, stinging, and sensitivity to light.

-Blurry vision and loss of vision can occur.

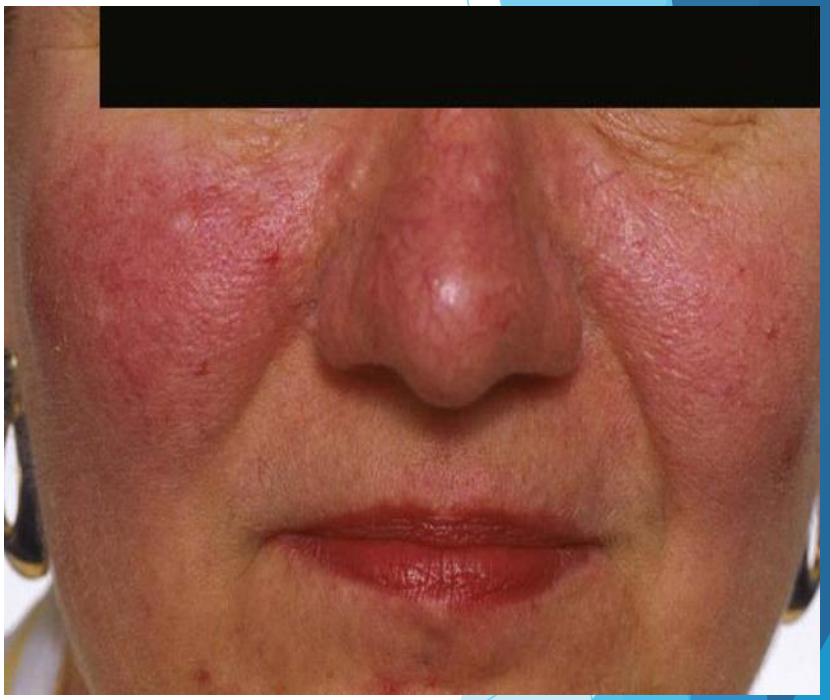





A
B
C

Treatment

- Hard and difficult.
- Avoidance of precipitants.
- Drug therapy:
  1- Topicals
  2 - Systemic.



Topical treatment

-Twice daily to help reduce inflammation and redness.

-Along with oral medications or as part of a maintenance program.

-Common topical medications:

1-Metronidazole 1% gell/cream.

2-Azelaic acid gell.

3-Topical Abx (clindacin, Dalacin, clindamycin).

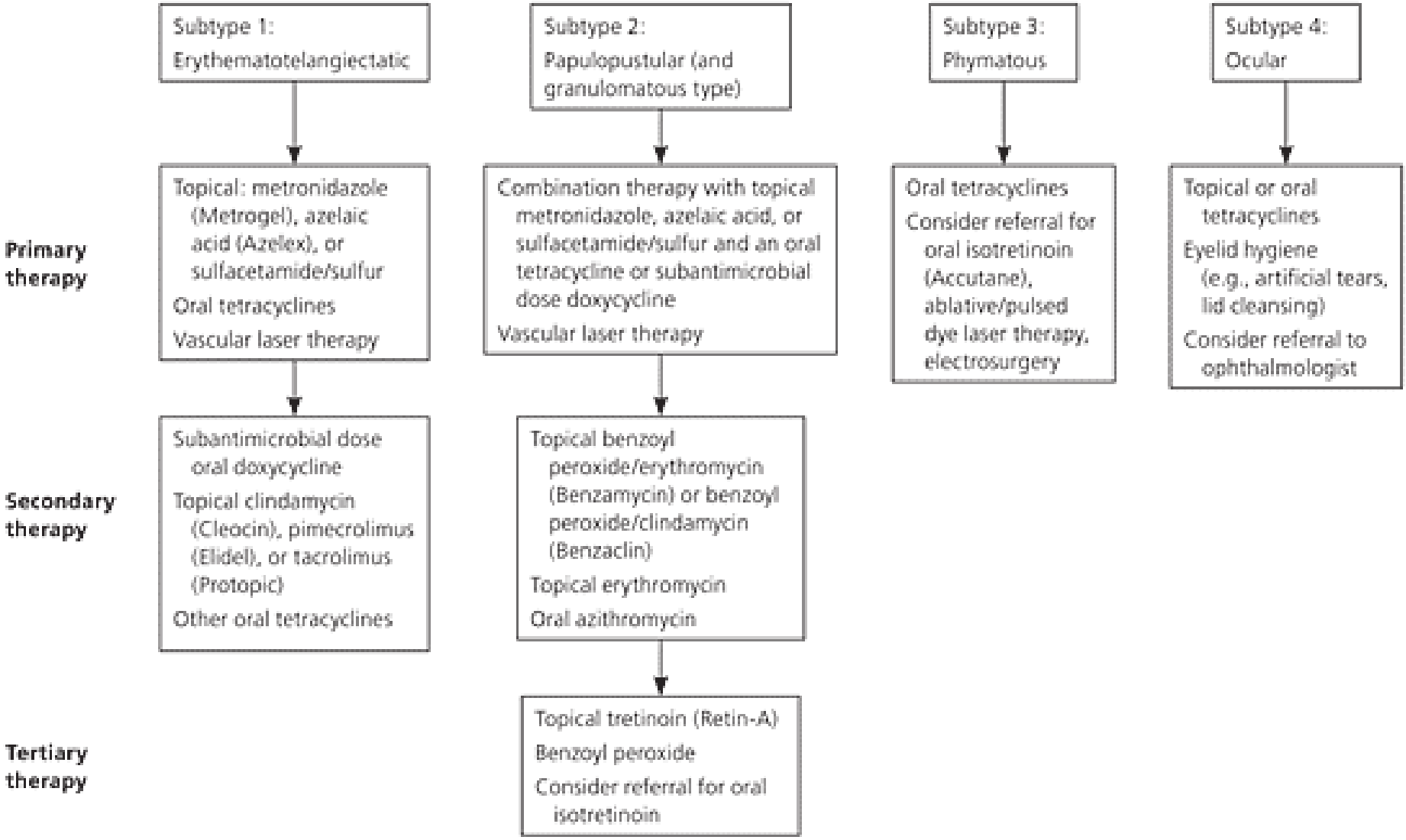
4-Immunmodulators (*Elidel* cream1% and *protopic oint* 0.03% and 0.1%).


fougera
METRONIDAZOLE
TOPICAL GEL
USP 0.75%
NET WT 45 grams
NDC 0168-0275-45
fougera
METRONIDAZOLE
TOPICAL GEL USP 0.75%
NET WT 45 grams

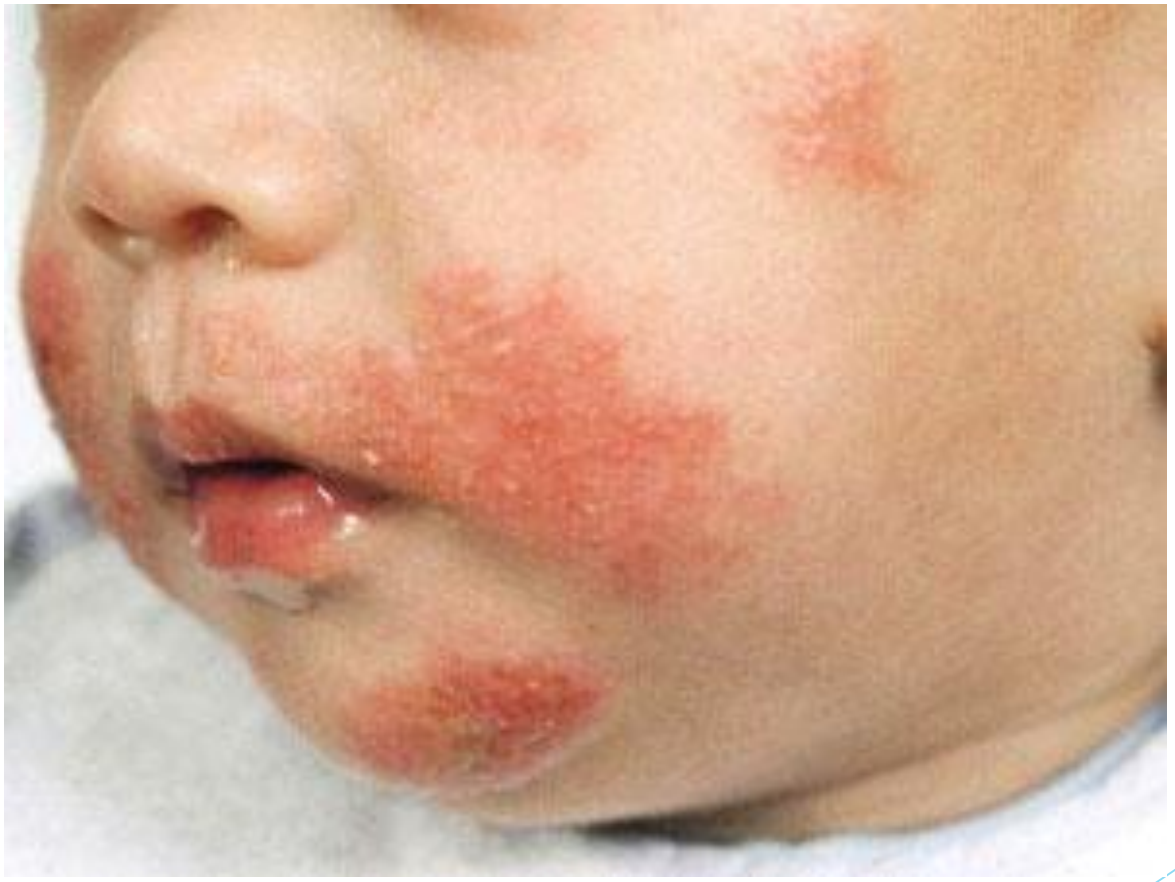

ISISPHARMA
METRORUBORIL


Rozex
metronidazole
0.75%
CREAM
CREAM


CLINDACIN GEL
30 gram
Clindamycin
United
Pharmaceuticals
Batch No.:
Mfg. Date:
Exp. Date:

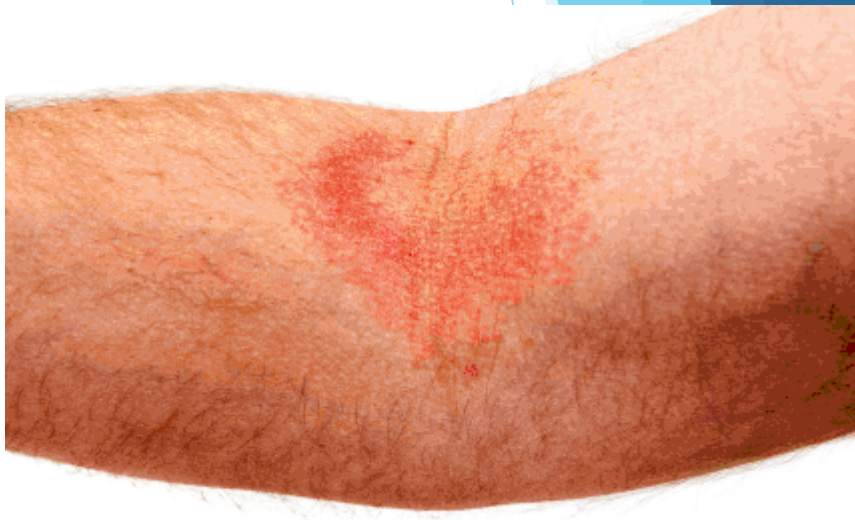

Subtype 1:
Erythematotelangiectatic
Subtype 2:
Papulopustular (and granulomatous type)
Subtype 3:
Phymatous
Subtype 4:
Ocular
Primary therapy
Topical: metronidazole (Metrogel), azelaic acid (Azelex), or sulfacetamide/sulfur
Oral tetracyclines
Vascular laser therapy
Combination therapy with topical metronidazole, azelaic acid, or sulfacetamide/sulfur and an oral tetracycline or subantimicrobial dose doxycycline
Vascular laser therapy
Oral tetracyclines
Consider referral for oral isotretinoin (Accutane), ablative/pulsed dye laser therapy, electrosurgery
Topical or oral tetracyclines
Eyelid hygiene (e.g., artificial tears, lid cleansing)
Consider referral to ophthalmologist
Secondary therapy
Subantimicrobial dose oral doxycycline
Topical clindamycin (Cleocin), pimecrolimus (Elidel), or tacrolimus (Protopic)
Other oral tetracyclines
Topical benzoyl peroxide/erythromycin (Benzamycin) or benzoyl peroxide/clindamycin (Benzaclin)
Topical erythromycin
Oral azithromycin
Tertiary therapy
Topical tretinoin (Retin-A)
Benzoyl peroxide
Consider referral for oral isotretinoin

ECZEMA



Eczema

- Non infective inflammatory condition of the skin.
- Greek = “to boil over”.
- Reaction pattern to a variety of stimuli.
- Eczema = Dermatitis.

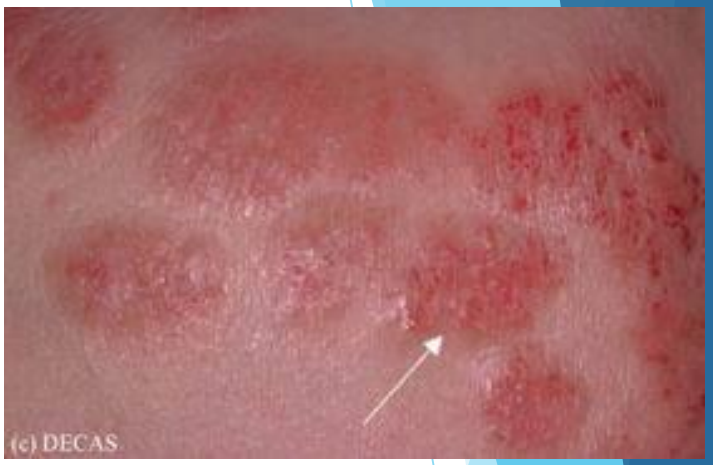


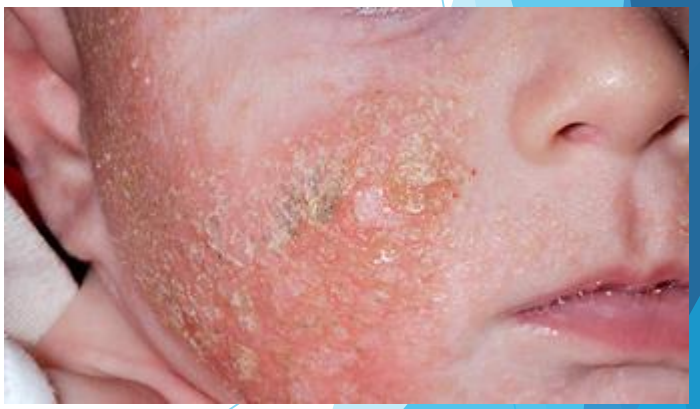
Eczema classification

Type	*Endogenous*	*Exogenous*	*Unclassified*
Clinical varieties	-Atopic -seberrhoic -Discoid (nummular) -Venous (stasis) -Pompholyx	-Irritant. -Photorection -Napkin dermatitis	-Astatotic eczema -Lichen simplex chronicus -Juvenile Plantar Dermatosis

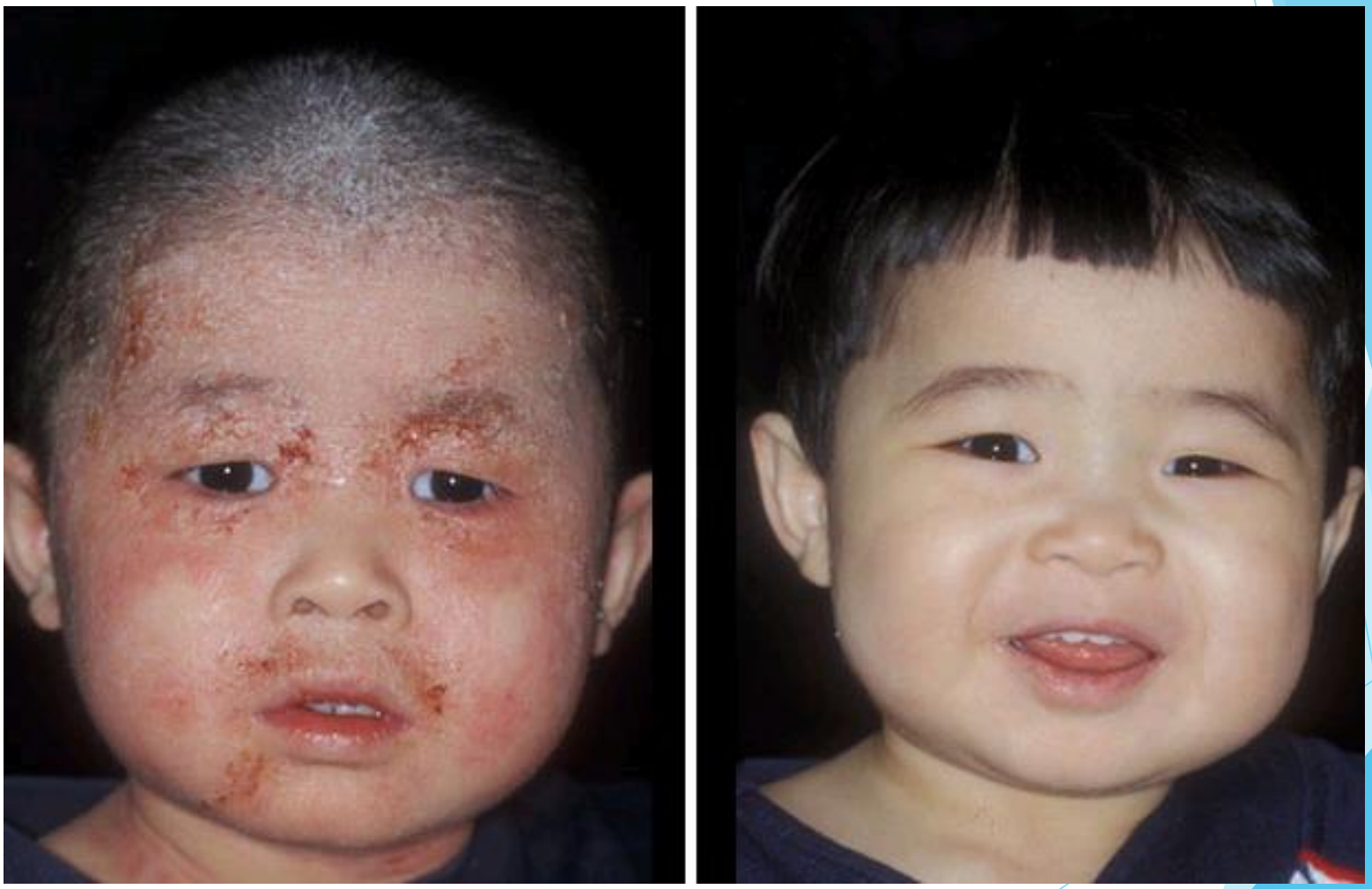
Clinical presentation of Eczema

- Itching is a cardinal feautre.
- Acute stage vs chronic stage.
- Characheterized by polymorphous eruption: macule, papule, vesicle, crust, scales, lichenification and fissuring.
- Lesions not sharply marginated.



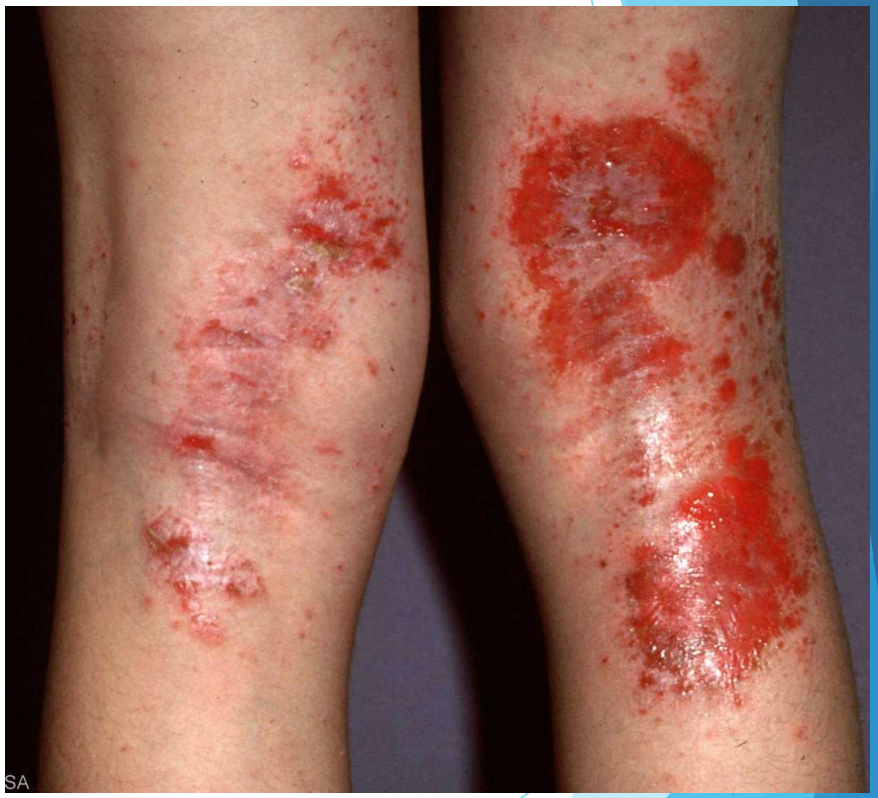


Atopic Dertamtitis



Atopic Dermatitis

- Chronic relapsing pruritic inflammation.
- Unknown exact etiology.
- Inheritted tendency.
- 15-40 % of polulation.



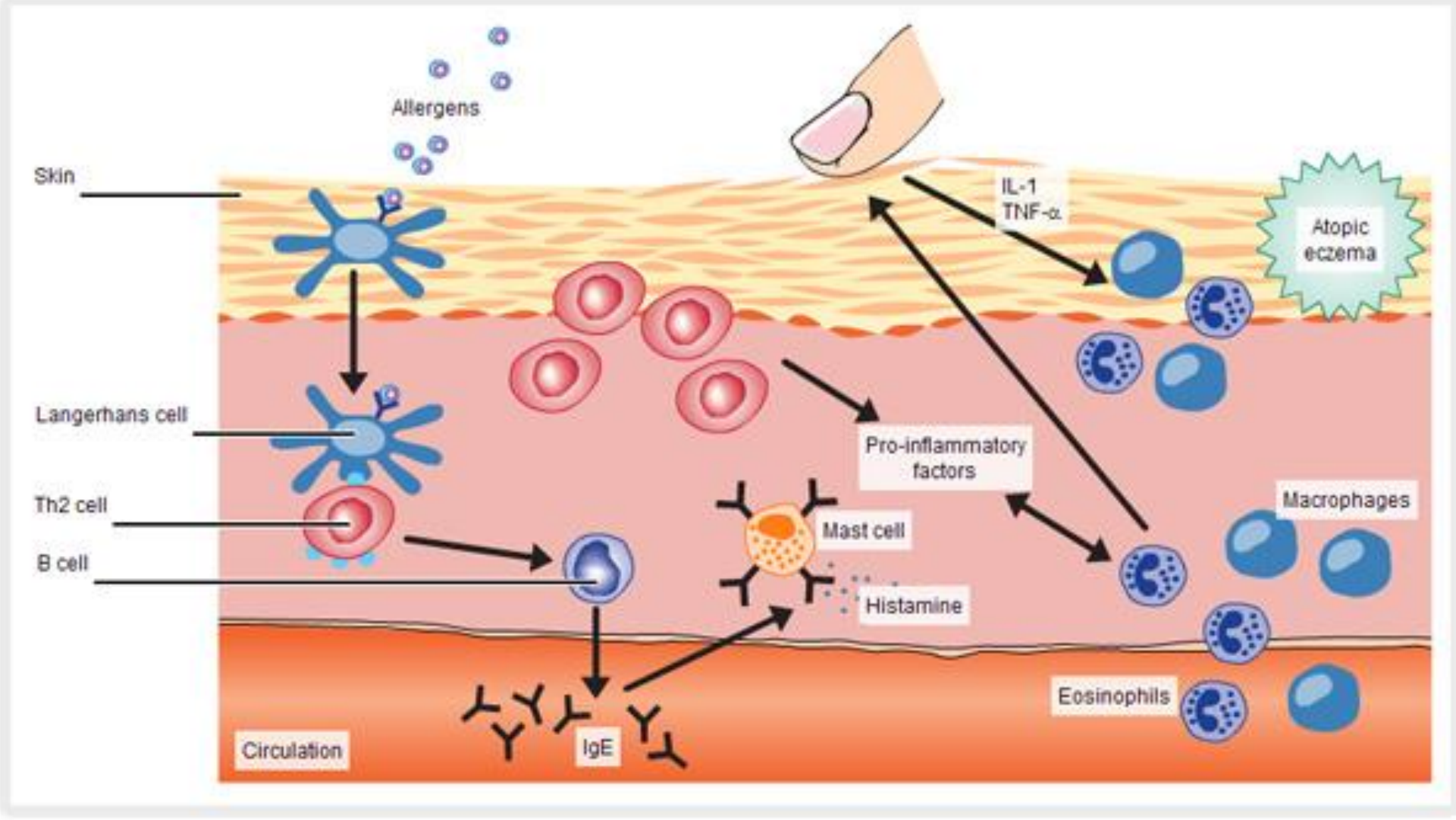
Etiology of AD

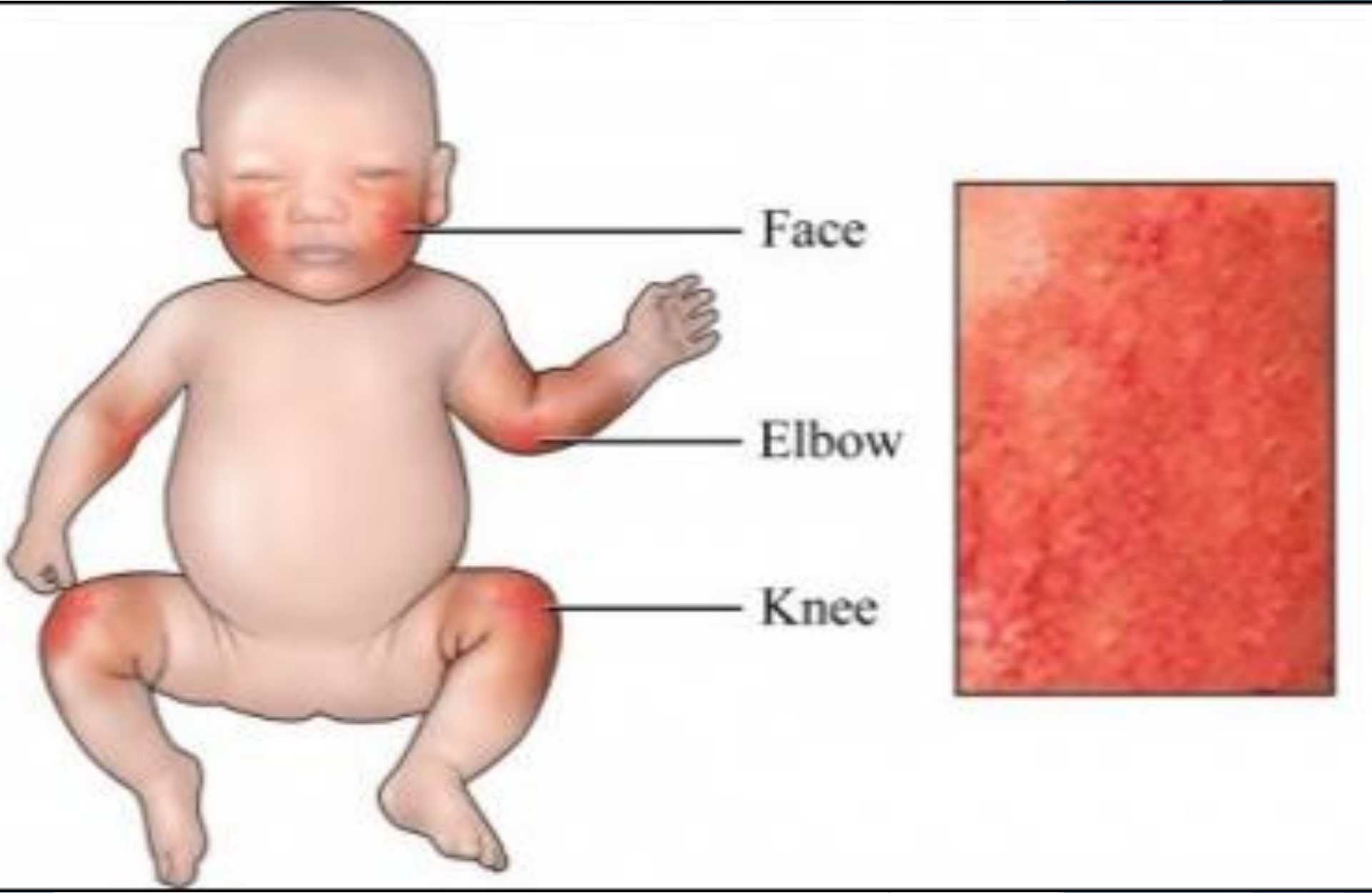
- *Multifactorial:*

1-Hereditary

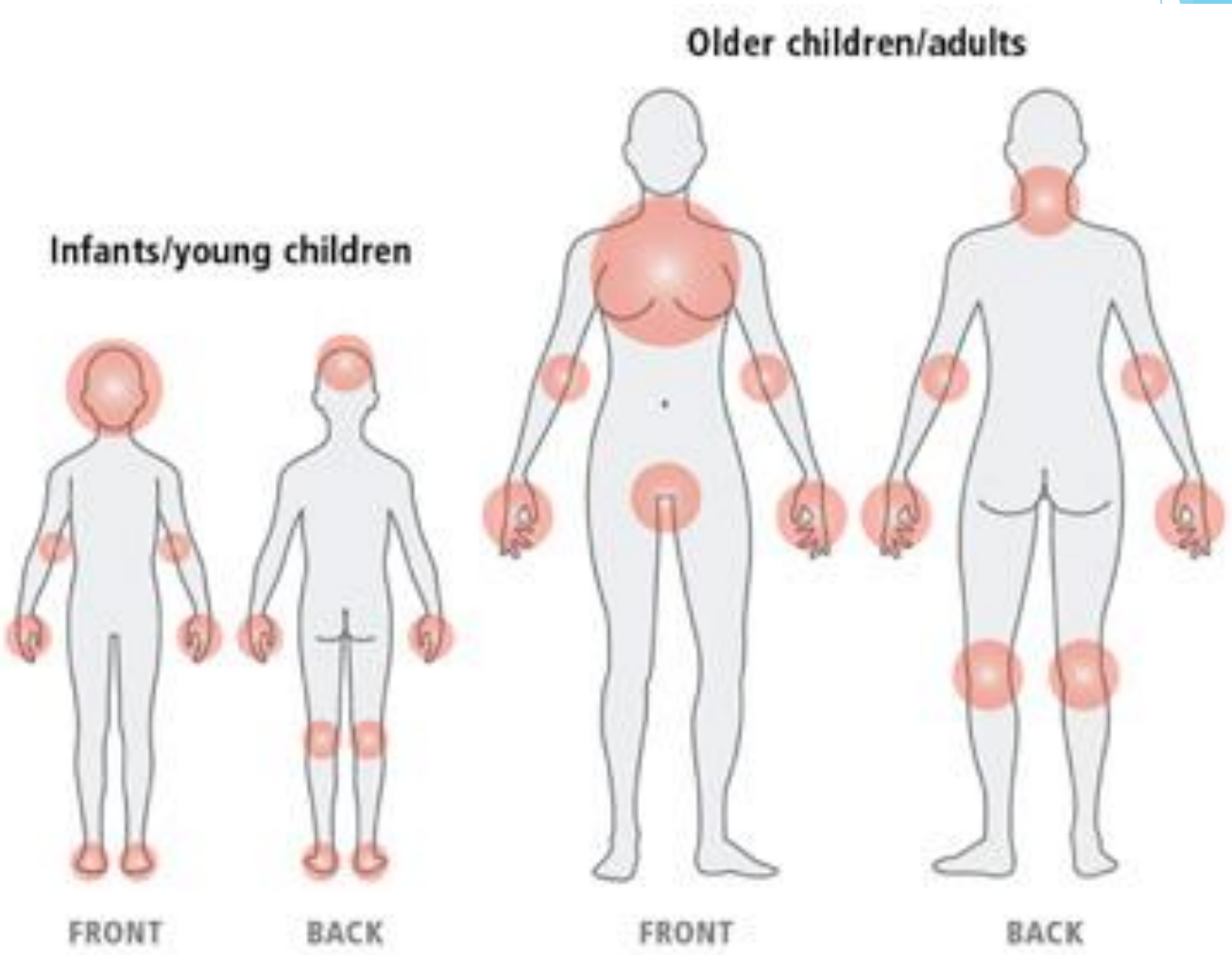
2-Immunological

3-Environmental


Allergens
Skin
Langerhans cell
Th2 cell
B cell
IL-1
TNF-α
Atopic eczema
Pro-inflammatory factors
Mast cell
Histamine
Macrophages
Eosinophils
IgE
Circulation


Face
Elbow
Knee

Clinical symptoms



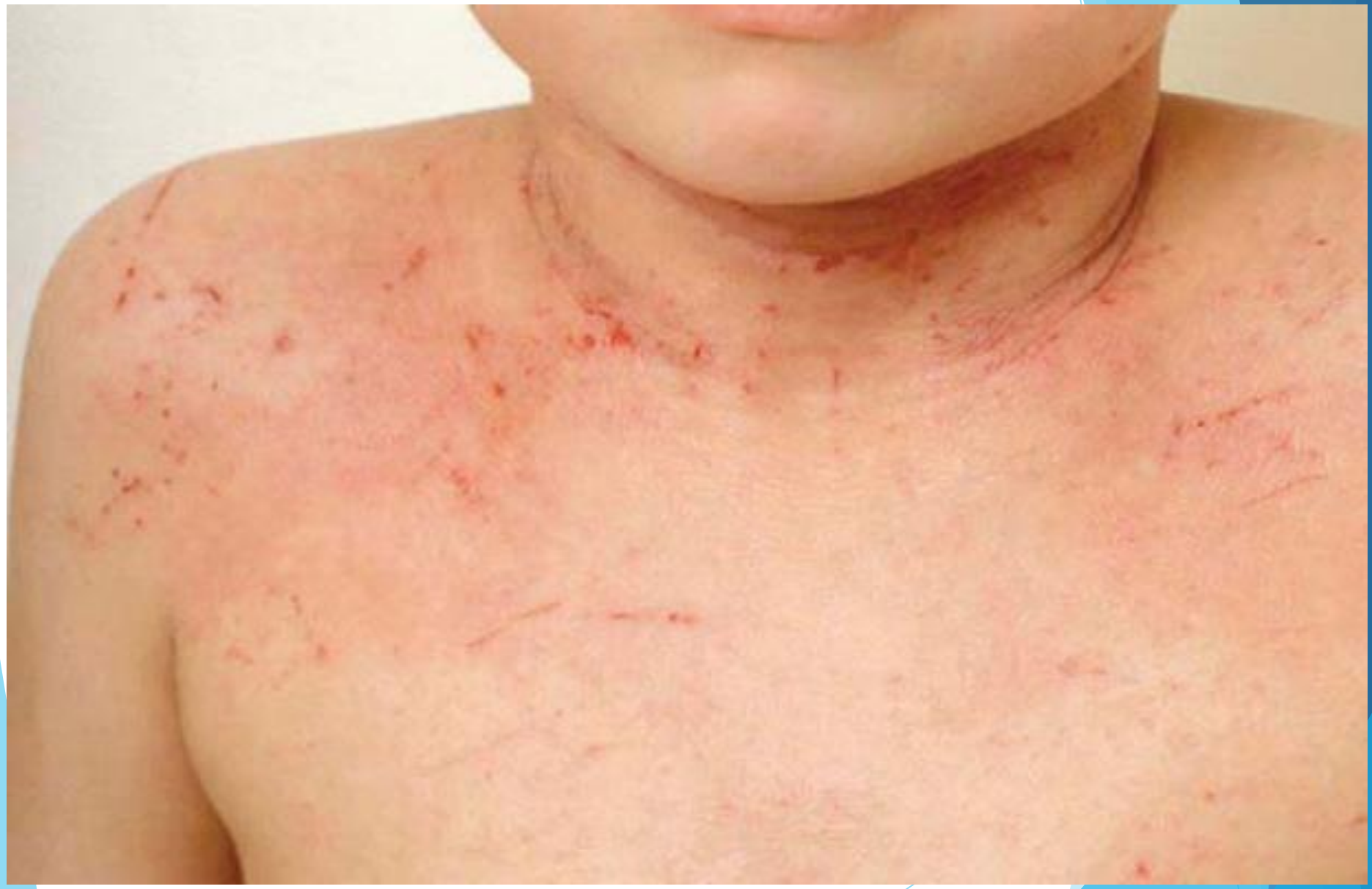
Dias

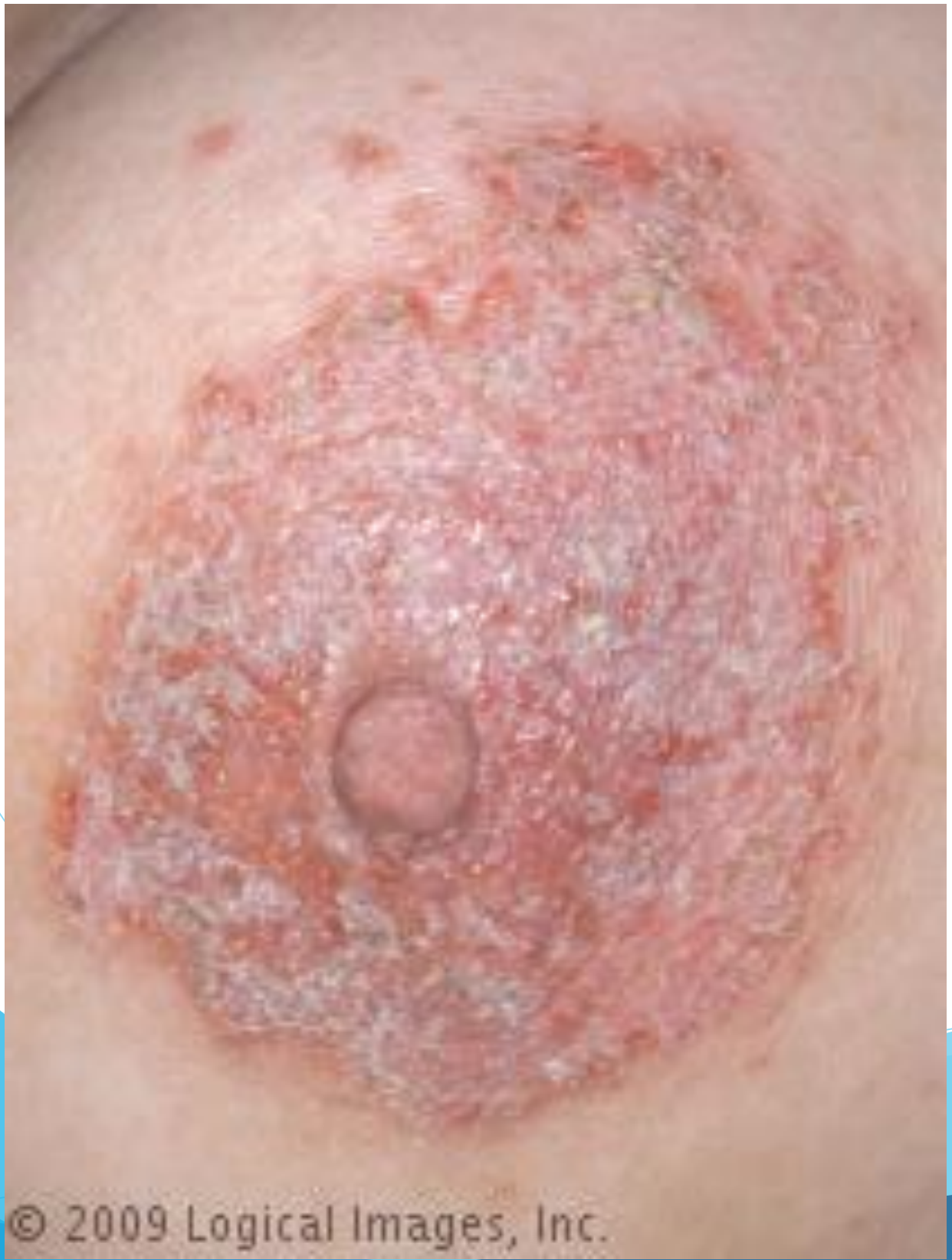
Major Criteria *(need three or more of the following):*

Pruritus
Typical morphology and distribution
    Facial and extensor involvement in infants and children
    Flexural lichenification or linearity in adults
Chronic or chronically relapsing dermatitis
Personal or family history of atopy (allergic rhinitis, asthma, atopic dermatitis)

Minor Criteria *(need three or more of the following):*

Anterior neck folds
Anterior subcapsular cataracts
Cheilitis
Course influenced by environmental or emotional factors
Dennie-Morgan infraorbital fold
Early age of onset
Facial pallor or facial erythema
Food intolerance
Keratoconus
Ichthyosis, palmar hyperlinearity, or keratosis pilaris
Immediate skin test reactivity
Intolerance to wool and lipid solvents
Itch when sweating
Nipple eczema
Orbital darkening
Perifollicular accentuation
Pityriasis alba
Raised serum IgE
Recurrent conjunctivitis
Tendency toward cutaneous infections (especially S. aureus and herpes simplex) or impaired-cell immunity
Tendency toward nonspecific hand or foot dermatitis
White dermatographism or delayed blanch
Xerosis

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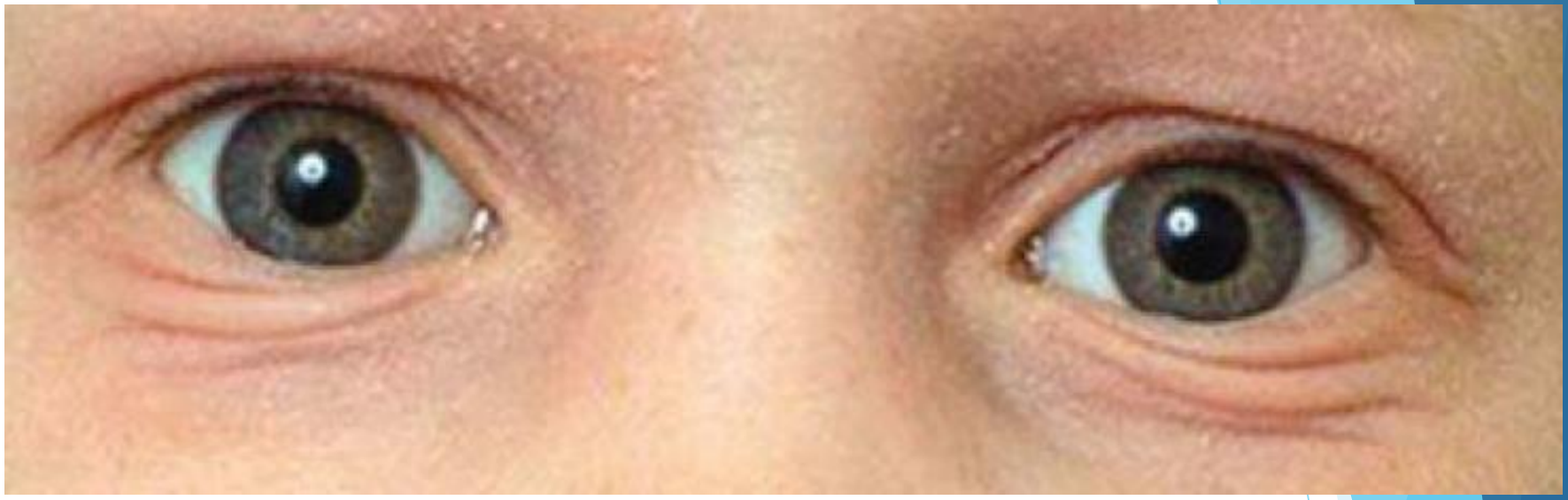

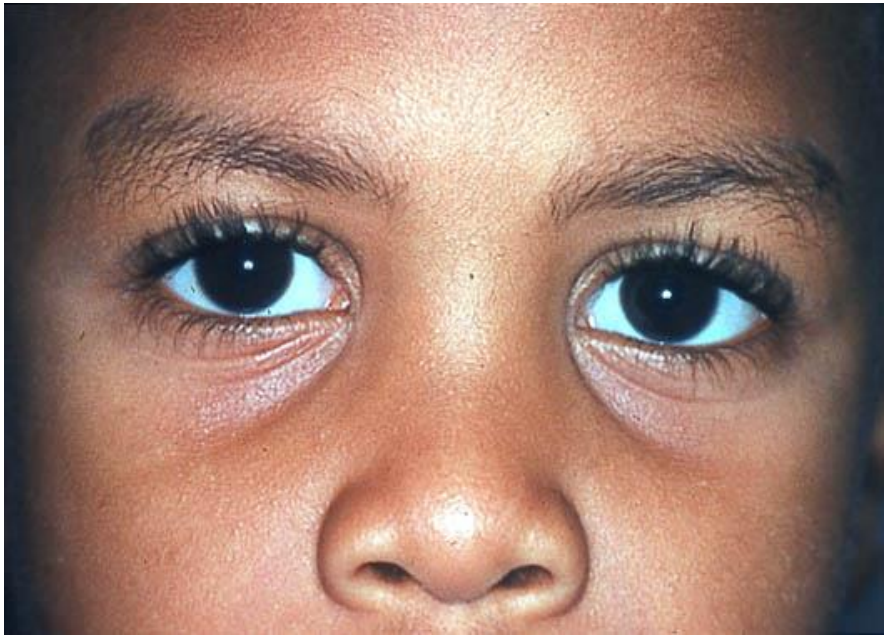

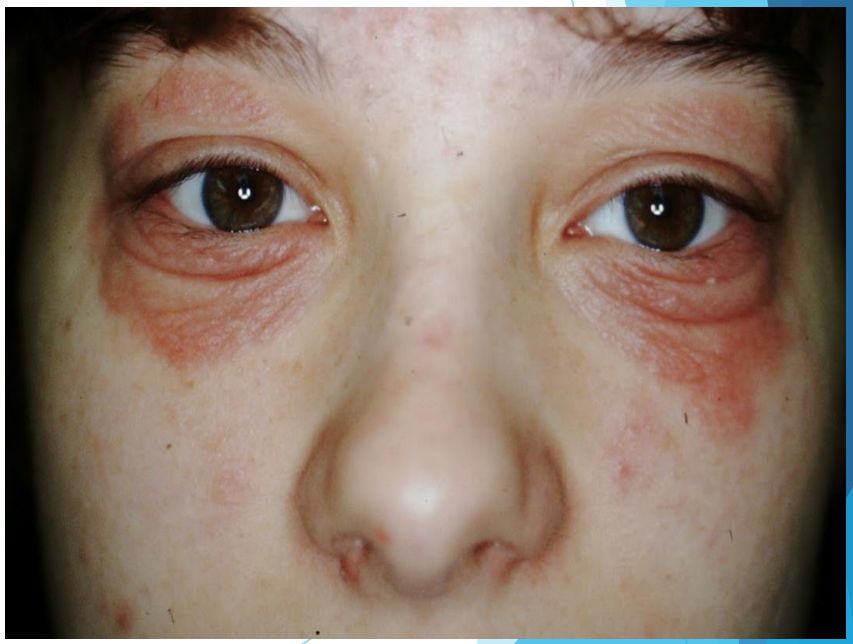

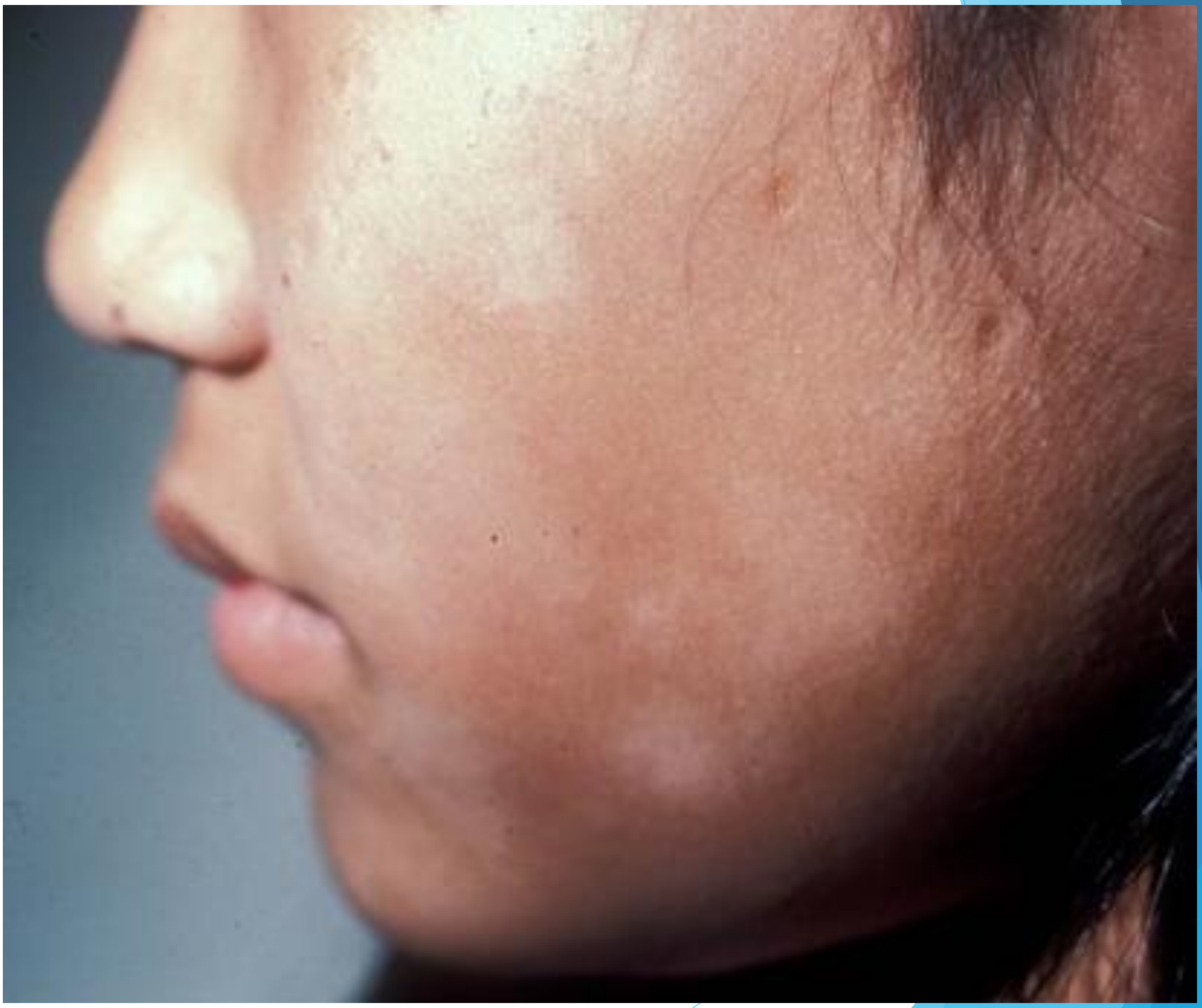

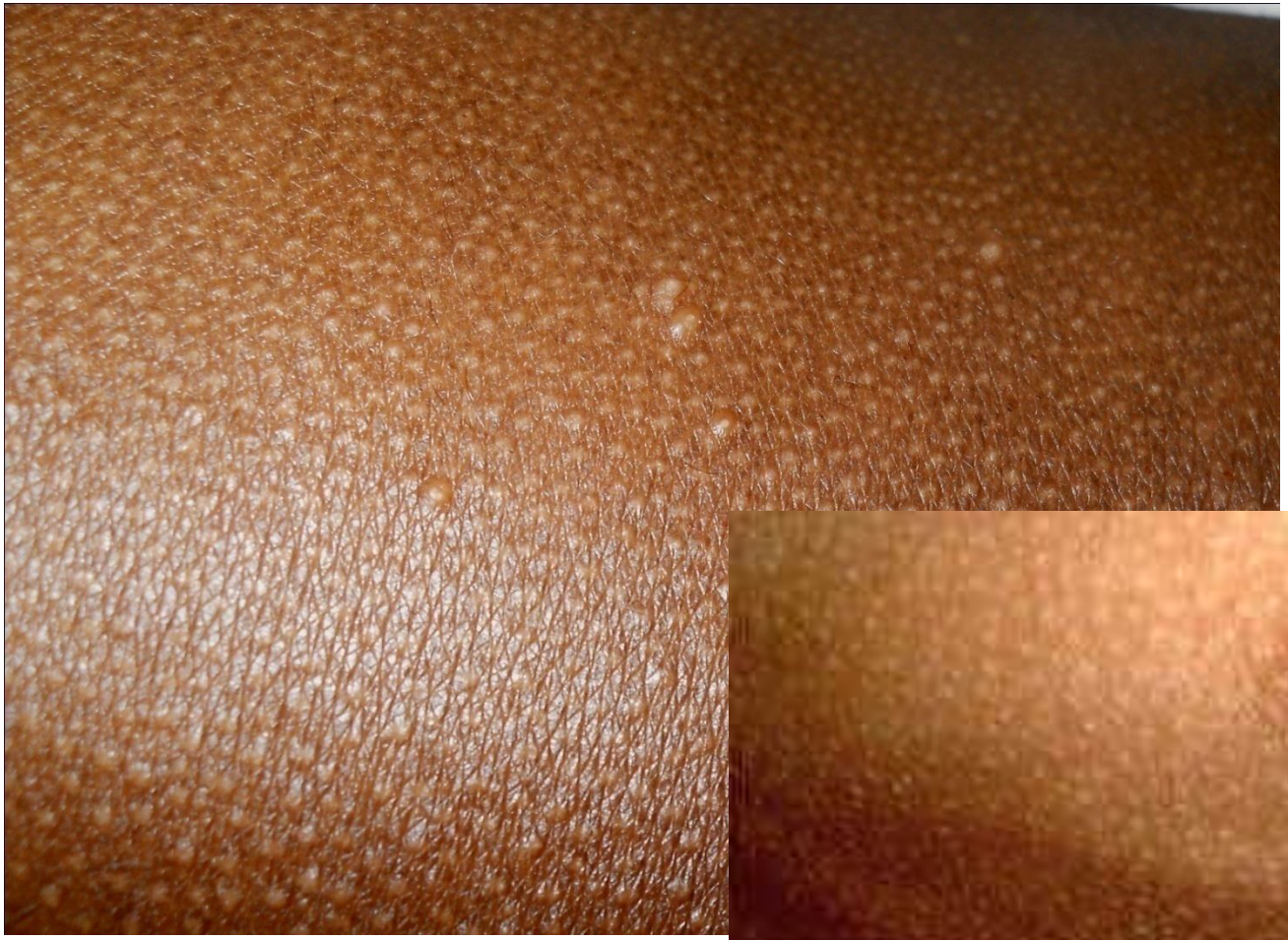

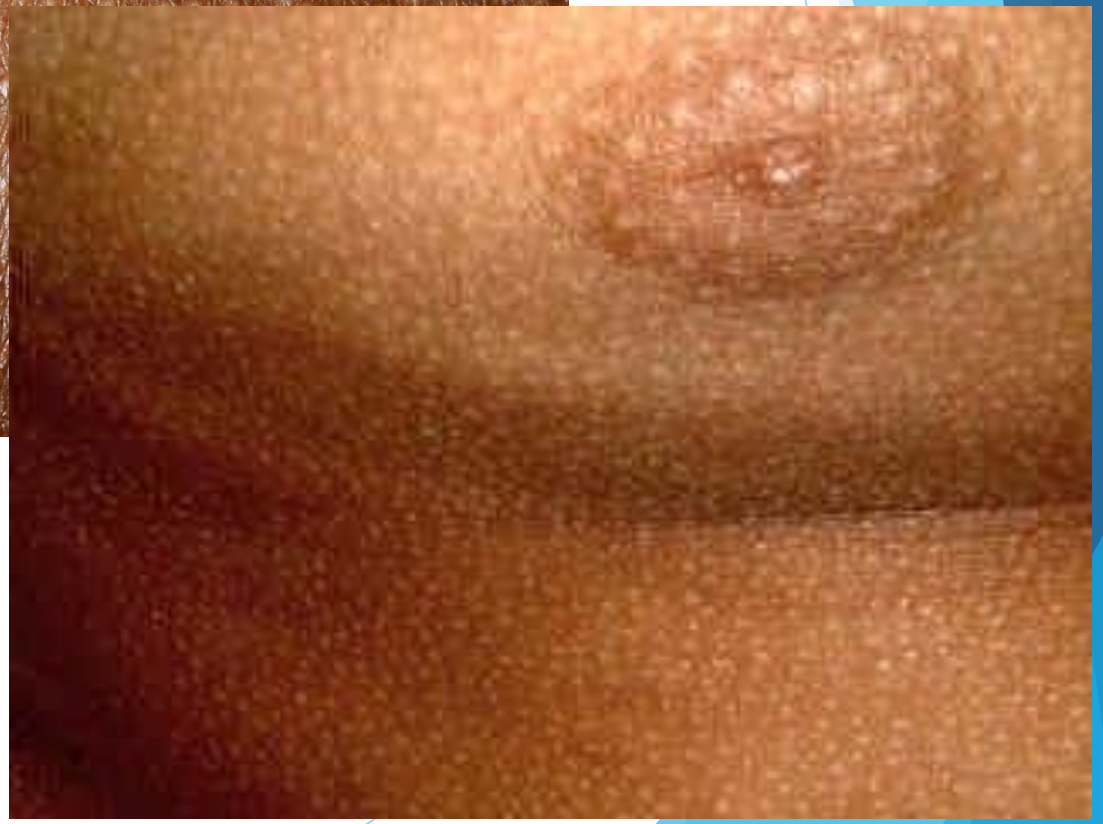

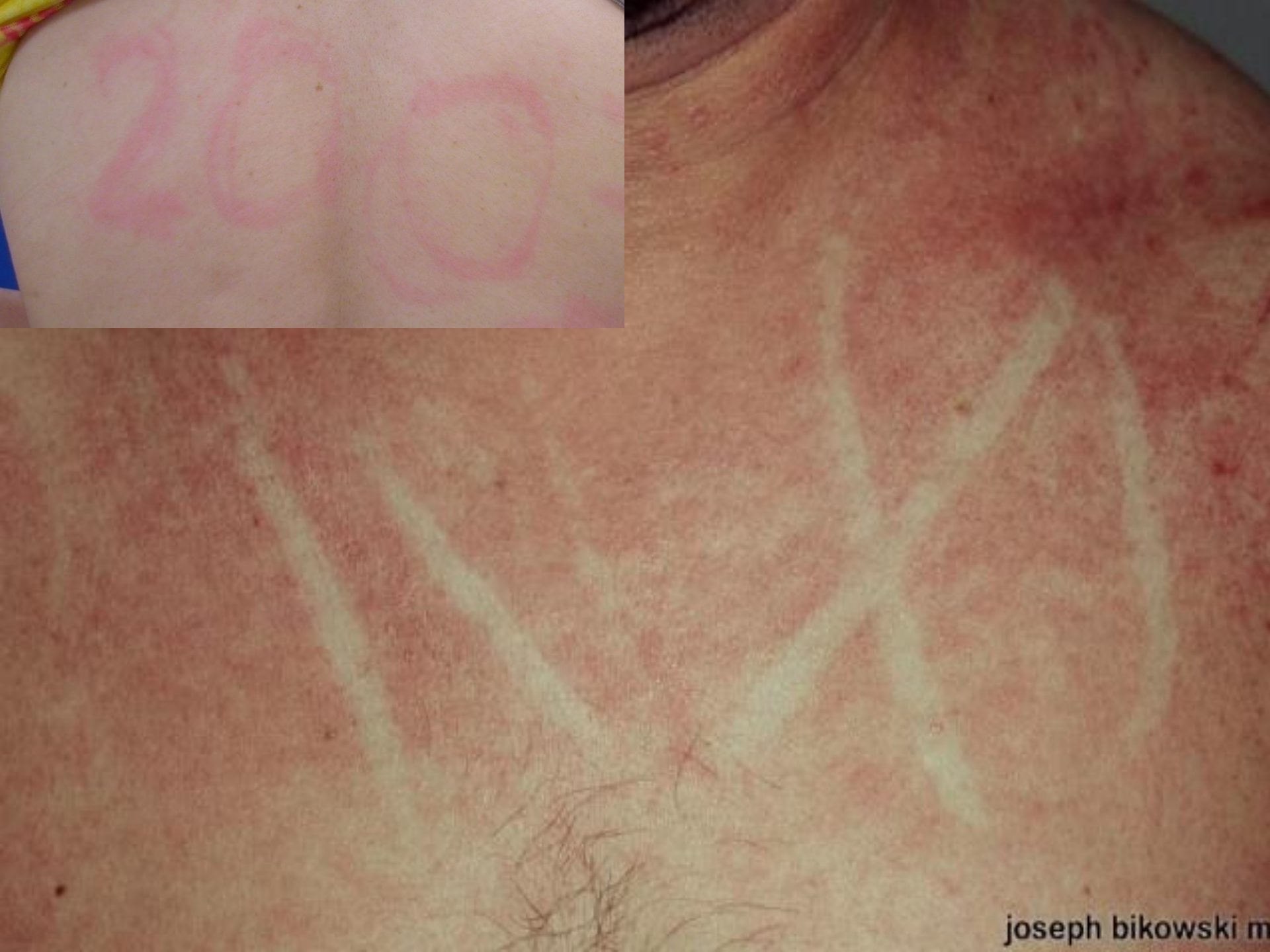
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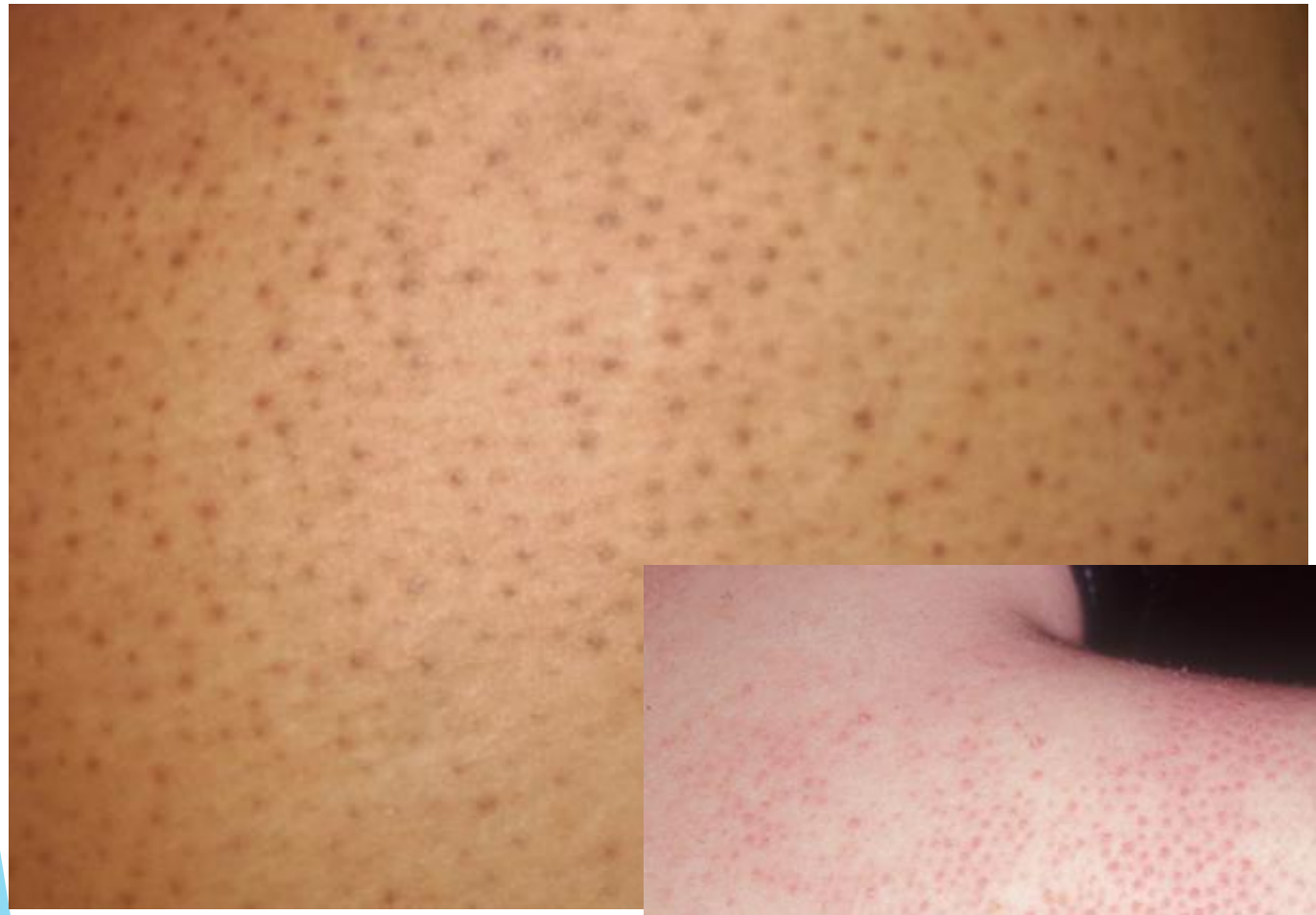
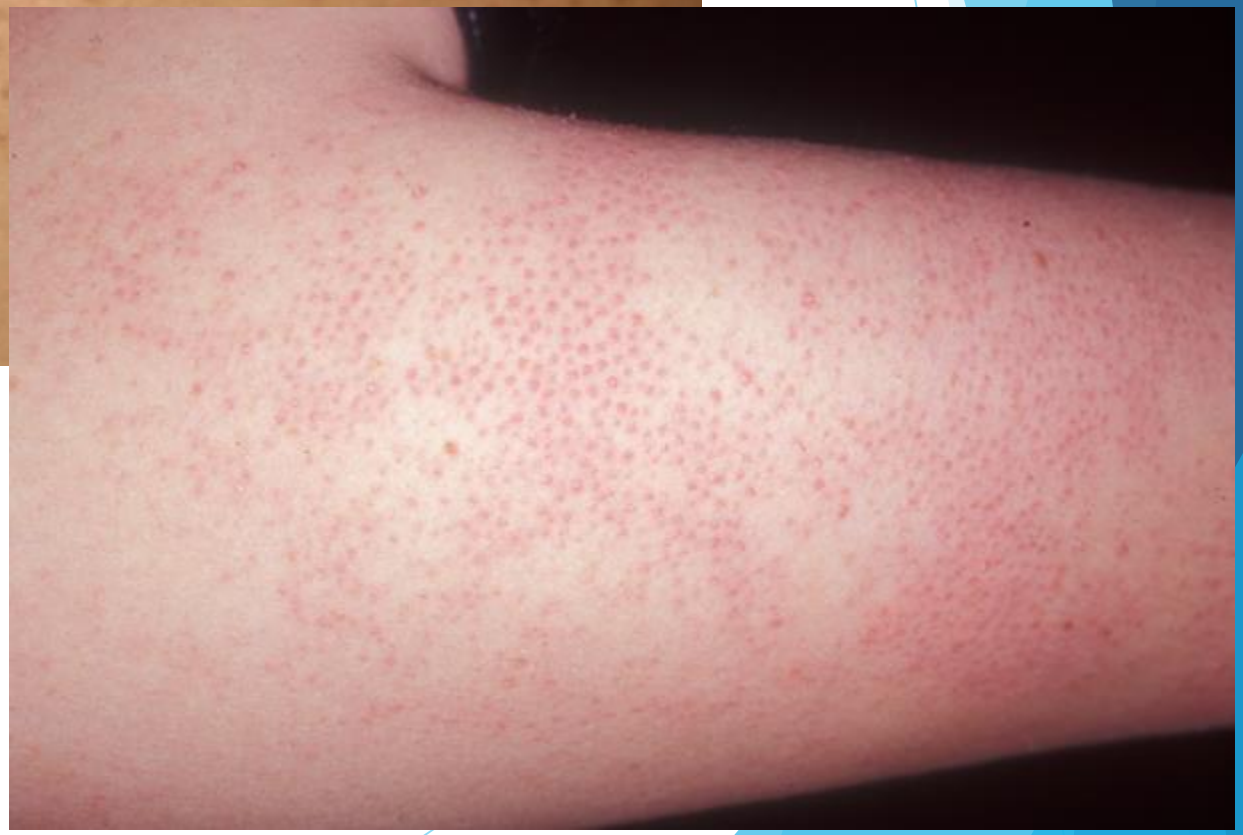
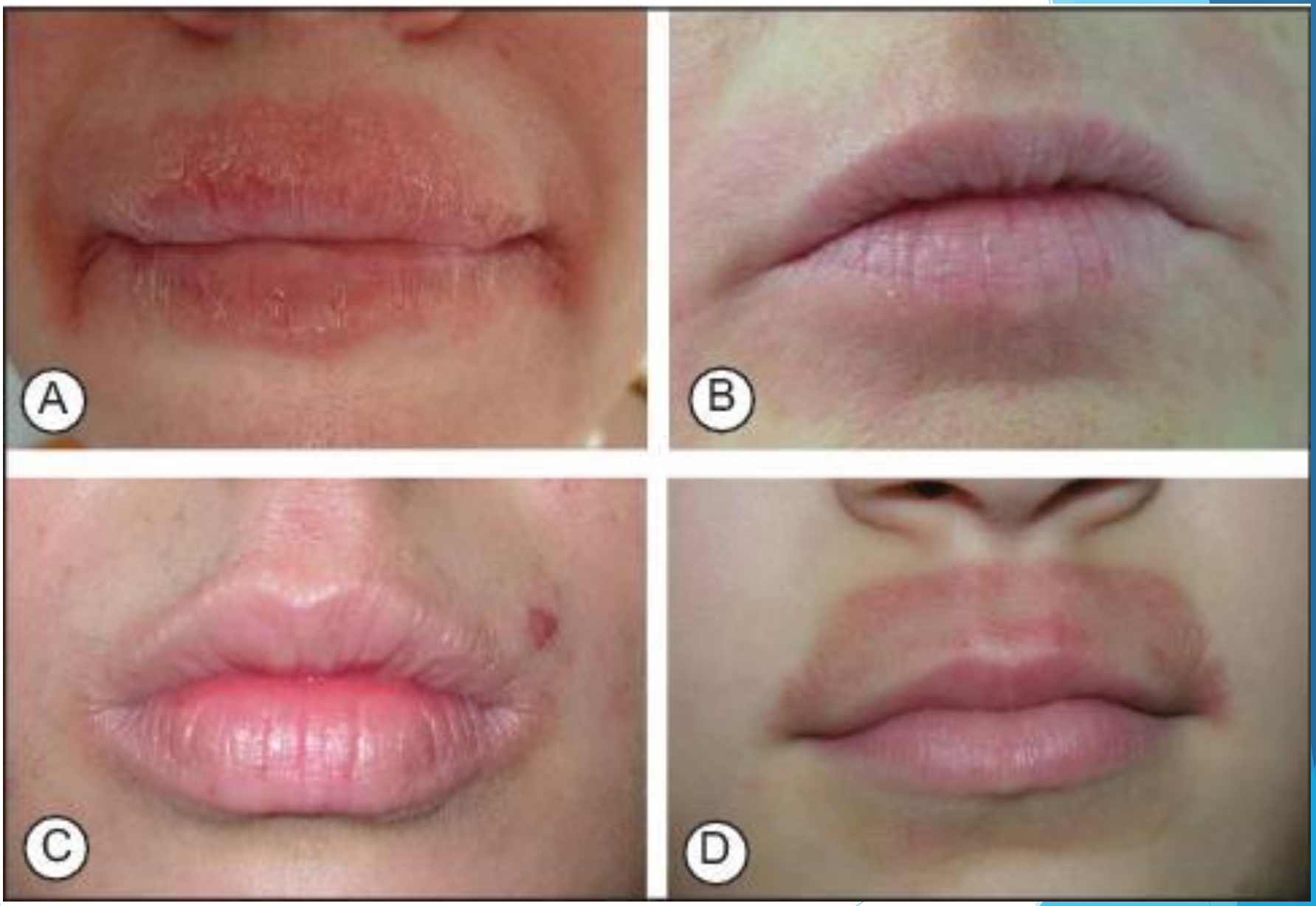





A
B
C
D

Investigations?

Management

Lets make it simple!

- Avoid irritants.
- Control the surrounding environment.

Heat

Humidity

Pits

Carpets

Detergants

- Moisturise .
- Appropriate topical treatments.

Patient-Oriented Eczema Measure

Please circle one response for each of the seven questions below. Young children should complete the questionnaire with the help of their parents. Please leave blank any questions you feel unable to answer.

1. **Over the last week, on how many days has your/your child's skin been itchy because of the eczema?**

   No Days 1-2 Days 3-4 Days 5-6 Days Every Day

2. **Over the last week, on how many nights has your/your child's sleep been disturbed because of the eczema?**

   No Days 1-2 Days 3-4 Days 5-6 Days Every Day

3. **Over the last week, on how many days has your/your child's skin been bleeding because of the eczema?**

   No Days 1-2 Days 3-4 Days 5-6 Days Every Day

4. **Over the last week, on how many days has your/your child's skin been weeping or oozing clear fluid because of the eczema?**

   No Days 1-2 Days 3-4 Days 5-6 Days Every Day

5. **Over the last week, on how many days has your/your child's skin been cracked because of the eczema?**

   No Days 1-2 Days 3-4 Days 5-6 Days Every Day

6. **Over the last week, on how many days has your/your child's skin been flaking off because of the eczema?**

   No Days 1-2 Days 3-4 Days 5-6 Days Every Day

7. **Over the last week, on how many days has your/your child's skin felt dry or rough because of the eczema?**

   No Days 1-2 Days 3-4 Days 5-6 Days Every Day

Total Score (maximum 28) _____

Figure 1. The patient-oriented eczema measure. Responses are scored as follows: 0, no days; 1, 1 to 2 days; 2, 3 to 4 days; 3, 5 to 6 days; and 4, every day.

Management

1-Avoid irritants and allergens

Environmental control measuresmay result in clinical improvement of AD

- Both respiratory and skin contact with these allergens may be important in induction/exacerbation of AD
- Avoid playing on grass, carpets

- Laundry
  - New clothing should be laundered before it is worn to reduce the content of formaldehyde and other chemicals.
  - Residual laundry detergent in clothing may be irritating, and, although changing to a milder detergent can be helpful, using a liquid rather than a powder detergent and adding an extra rinse cycle are more beneficial.
  - Avoid fabric softener and dryer sheets.

- Occlusive clothing should be avoided, and cotton or cotton blends should be used (avoid wool, synthetics)
- Minimize sweating (adjust climate)
- Avoid scratching, keep fingernails short, wear mittens at night, keep hands busy.
- Summer :
  - Swimming is usually well tolerated; however, because swimming pools are treated with chlorine or bromine, patients should shower and use a mild cleanser immediately afterward and then apply moisturizers or occlusives.
  - Sunlight may be beneficial to some patients with AD, non-sensitizing sunscreens should be used to avoid sunburn.
  - Avoid prolonged sun exposure which can cause irritating dryness, overheating, and sweating.

2-Skin cleansing

- Use cleansers with minimal defatting activity and a neutral pH (e.g. Dove sensitive skin, Cetaphil, Vaniderm, Basis, Aveeno, Purpose, and Neutrogena)
- Bathe at least daily in tub
  - Schneider: "Soak and seal method" bath.

3-Moisturizers

- occlusives (e.g. petrolatum) retard evaporation but needs to be applied on damp/wet skin.
- humectants (e.g. glycerol) attract and hold water in the skin the skin.
- emollients (e.g. lanolin) lubricate the stratum corneum
- Vehicles: ointments best for lichenified skin and have less preservatives.
- creams preferred for moist intertrigenous areas but requires preservatives that may be sensitizing.
- solutions, gels, sprays are preferred for scalp but can contain alcohol and proylene glycol that burn and irritate

Class	Generic Name	Formulation
Class 1 Very High Potency		
	Betamethasone dipropionate	0.05% G O (diprolene)
	Clobetasol	0.05% C F G L O
	Diflorasone diacetate	0.05% O
	Halobetasol propionate	0.05% C O
Class 2 High Potency		
	Amcinonide	0.1% O
	Betamethasone dipropionate	0.05% C (diprolene)
	Desoximetasone	0.05% G, 0.25% C O
	Fluocinonide	0.05% C G O S
	Halcinonide	0.1% C
	Mometasone furoate	0.1% O
Class 3 High Potency		
	Amcinonide	0.1% C L
	Betamethasone dipropionate	0.05% C (non-diprolene)
	Betamethasone valerate	0.1% O
	Desoximetasone	0.05% C
	Diflorasone diacetate	0.05% C
	Fluticasone propionate	0.005% O
	Halcinonide	0.1% O S
	Triamcinolone	0.1% O
Class 4 Mid Potency		
	Betamethasone valerate	0.12% F
	Flucinolone acetonide	0.025% O
	Flurandrenolide	0.05% O
	Hydrocortisone valerate	0.2% O
	Mometasone furoate	0.1% C
	Triamcinolone	0.1% C
Class 5 Mid Potency		
	Betamethasone dipropionate	0.05% L
	Betamethasone valerate	0.1% C
	Flucinolone acetonide	0.025% C
	Fluticasone propionate	0.05% C
	Flurandrenolide	0.05% C
	Hydrocortisone butyrate	0.1% C
	Hydrocortisone valerate	0.2% C
Class 6 Low Potency		
	Alcometasone dipropionate	0.05% C O
	Betamethasone valerate	0.1% L
	Desonide	0.05% C L O
	Flucinolone acetonide	0.01% C S
Class 7 Low Potency		
	Hydrocortisone acetate	0.5% C L O, 1% C O F
	Hydrocortisone hydrochloride	0.25% C L, 0.5% C L O S, 1% C L O S, 2% L, 2.5% C L O S

4-Corticosteroids

_ 1st line treatment for acute exacerbation.

_ For acute flare, apply BID x 7-14 days then wean to daily, every other day, to none.

- Face: use class VI-VII e.g. hydrocortisone 1-2.5% ointment.
- Body: use class II or lower, e.g. mometasone furoate 0.1% ointment (II), mometasone furoate 0.1% cream (IV), hydrocortisone valerate 0.2% ointment (IV)
- Scalp: use mid-low potency oil, lotion, foam, or gel.

- For preventative treatment of previously involved but now normal-appearing skin: apply steroid used for treatment 2 consecutive nights weekly

_ Oral corticosteroids - effective but associated with rebound flare-up, requires tapering, reserved for crisis management (0.5 mg/ kg tapered every 5 days).

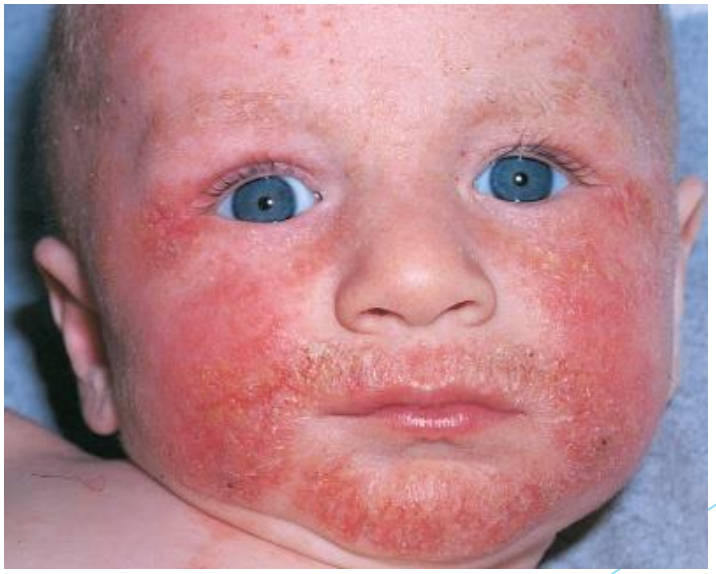
- The thickness of skin varies in different areas of the body. The thinnest skin is found on the face (particularly the eyelids), genitals, body folds and the skin of infants. These areas absorb topical steroids very readily and are more prone to local side effects from them.

- Systemic absorption and adrenal suppression is only a concern if large amounts of potent topical steroids (e.g. more than 100g/week) are used over a long period of time (months).

- Topical steroids can further reduce the skin barrier function so are best applied as intermittent courses so it can recover.

Other treatment options fo resistant cases:

- NBUVB.
- Cyclosporin.
- Methotrexate.
- Celcept.
- Topical immunmodulators.



Tacrolimus (*Protopic*) and Pimetacrollimus (*Elidel*):

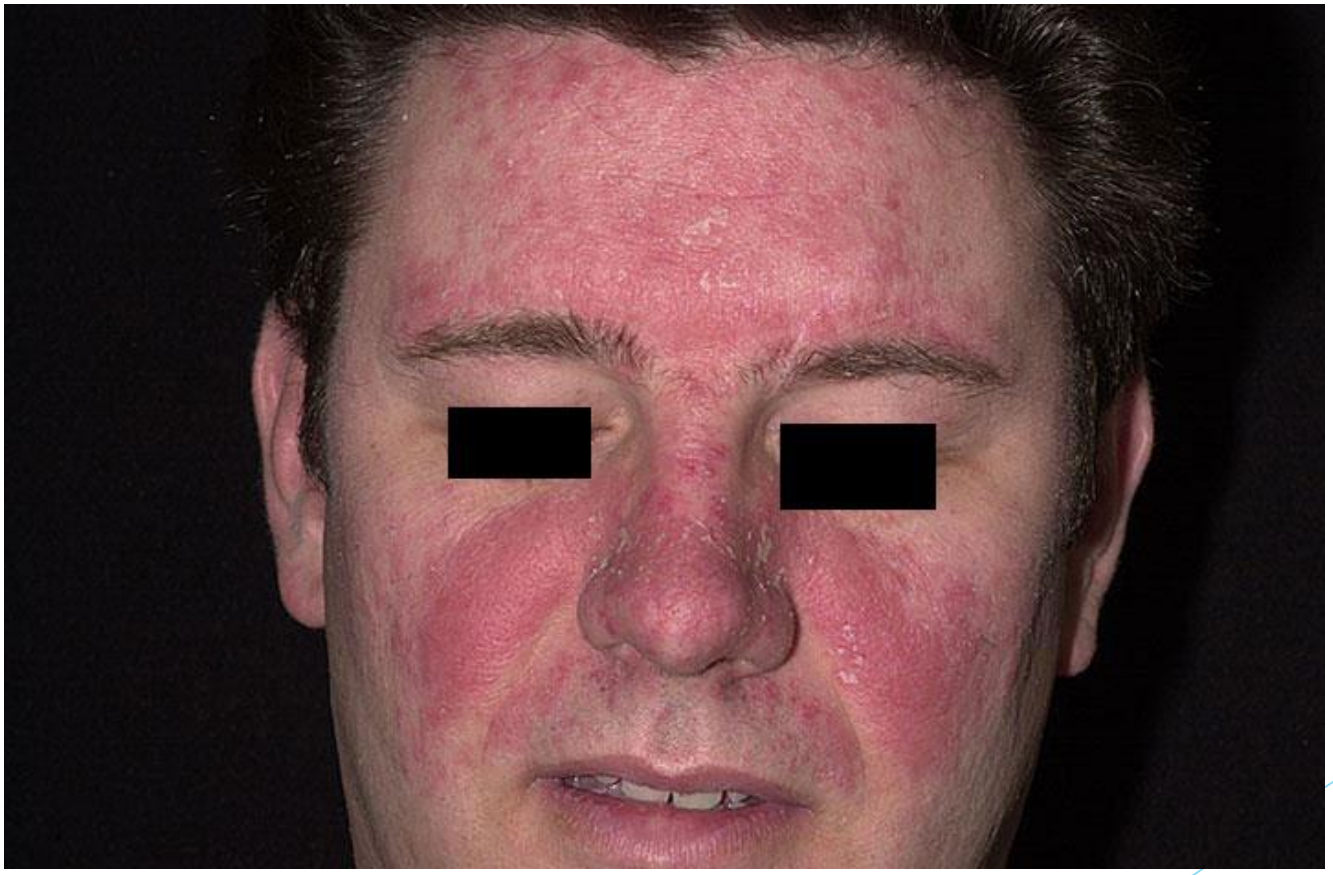
- **Belong to a class of immune-suppressant drugs known as calcineurin inhibitors.**

- **Indicated only in patients over 2 years of age.**

- **The U.S. FDA has issued a black box warning stating the long-term safety of calcineurin inhibitors has not been established. Although a causal relationship has not been established, rare cases of malignancy have been reported with their use. It is recommended that these drugs only be used as second-line therapy for cases that are unresponsive to other forms of treatment and that their use be limited to the minimum time periods needed to control symptoms.**

- **Use of these drugs should also be limited in people who have compromised immune systems.**

Seberrhoic Dermatitis



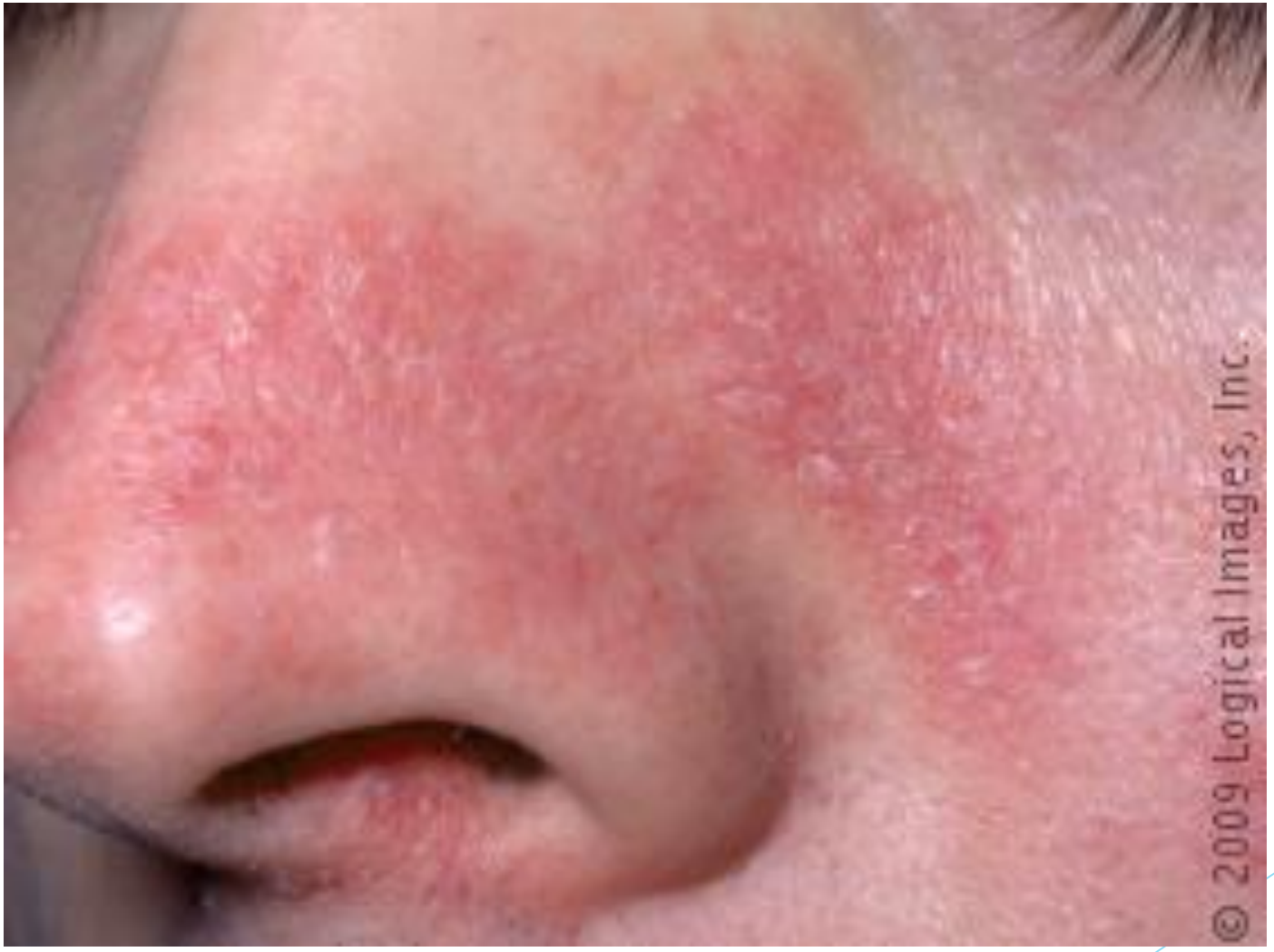
- An inflammatory skin disorder affecting the scalp, face, and body.

- YEAST ?

- Typically, seborrheic dermatitis presents with scaly, flaky, itchy, and red skin.

- Affects the sebaceous-gland-rich areas of skin.

- In adolescents and adults, seborrhoeic dermatitis usually presents as scalp scaling similar to dandruff or as mild to marked erythema of the nasolabial fold.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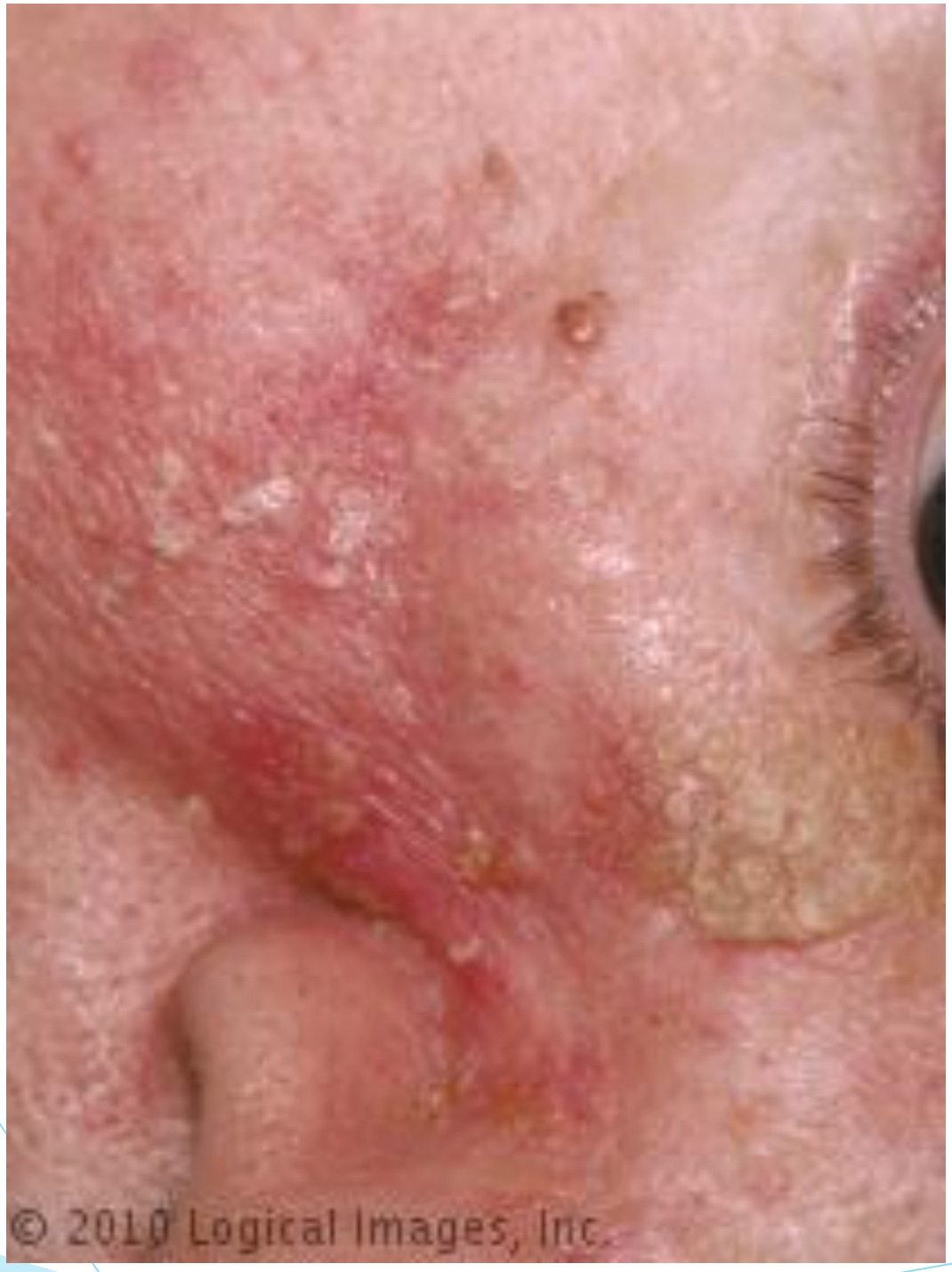
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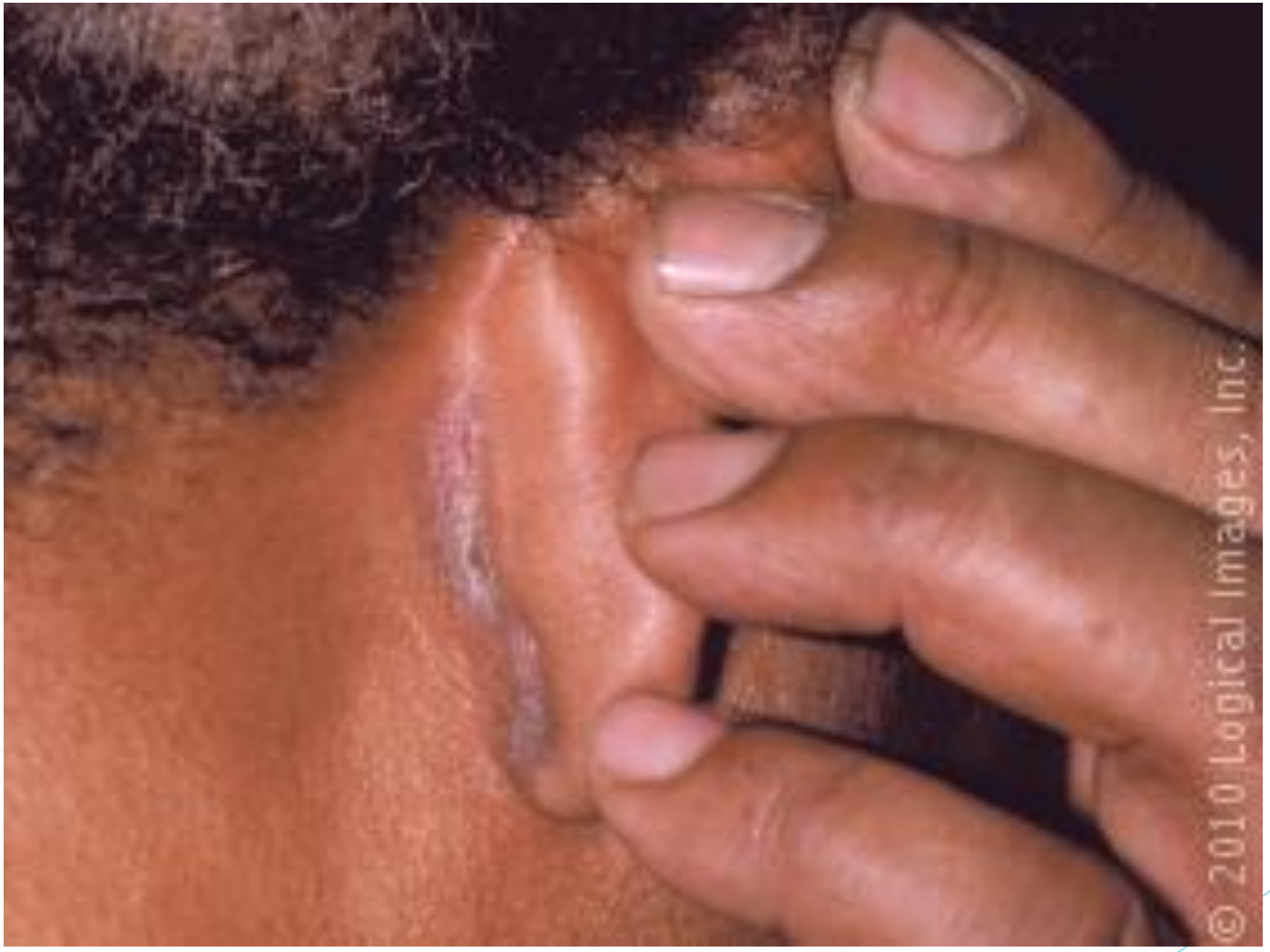
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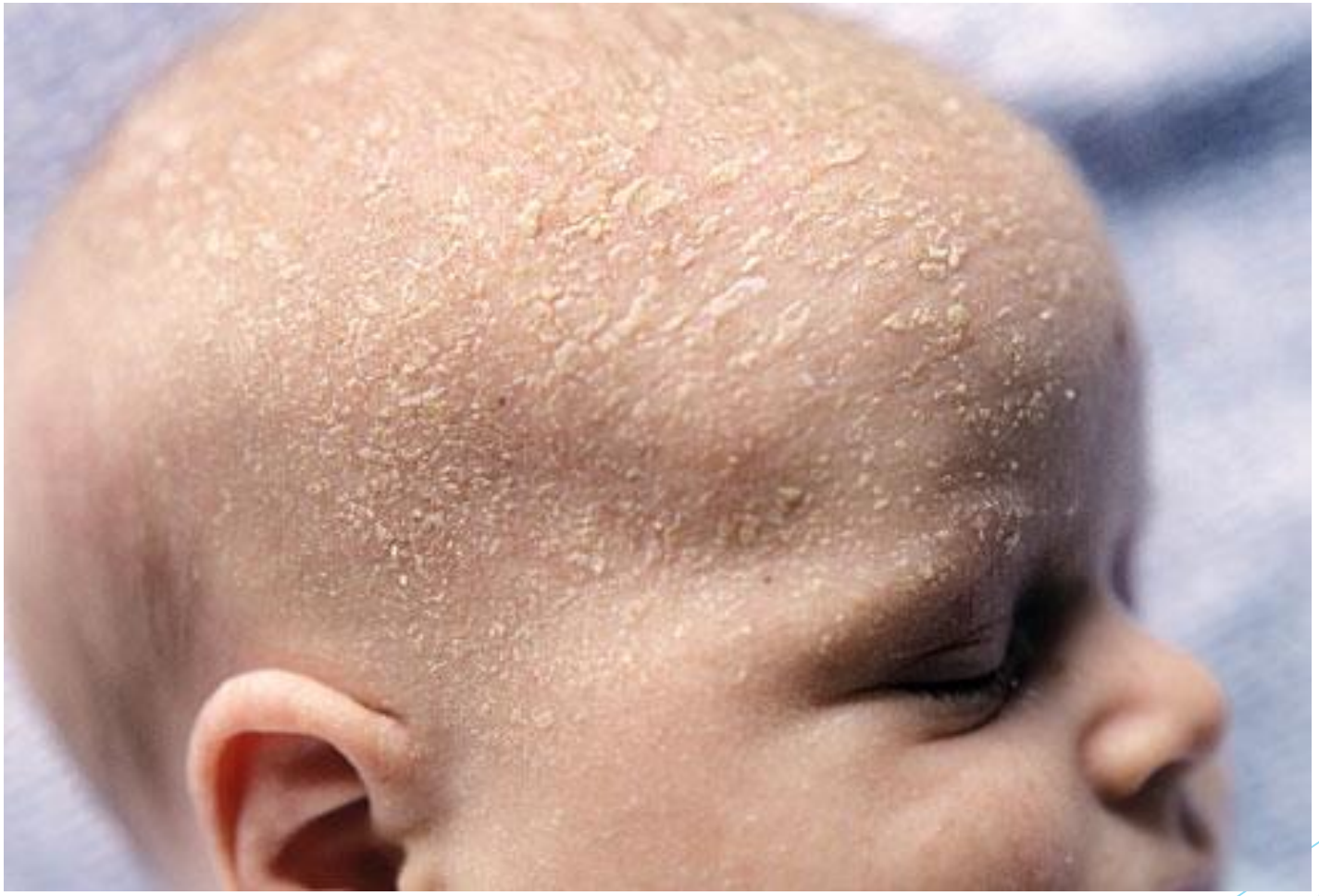
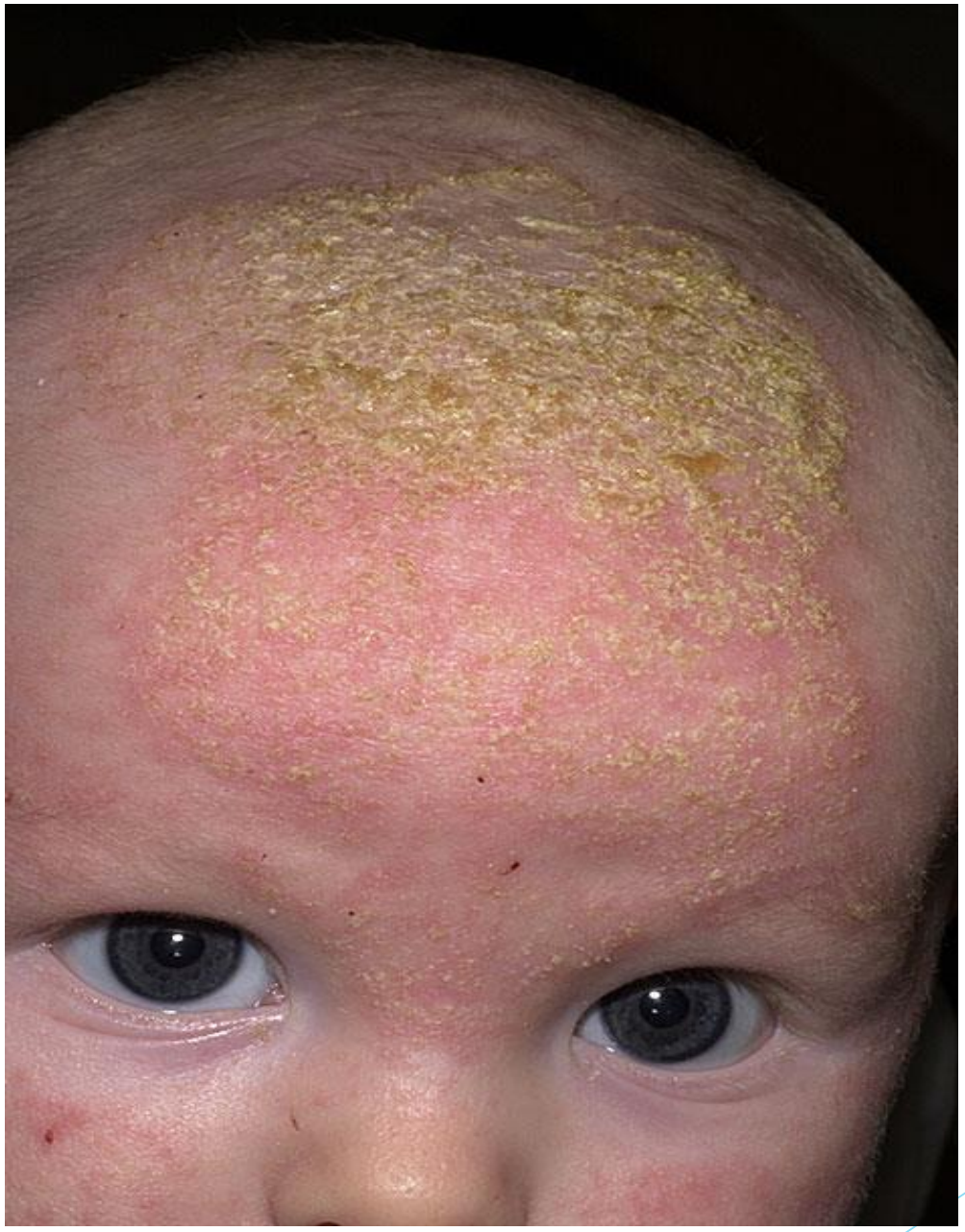
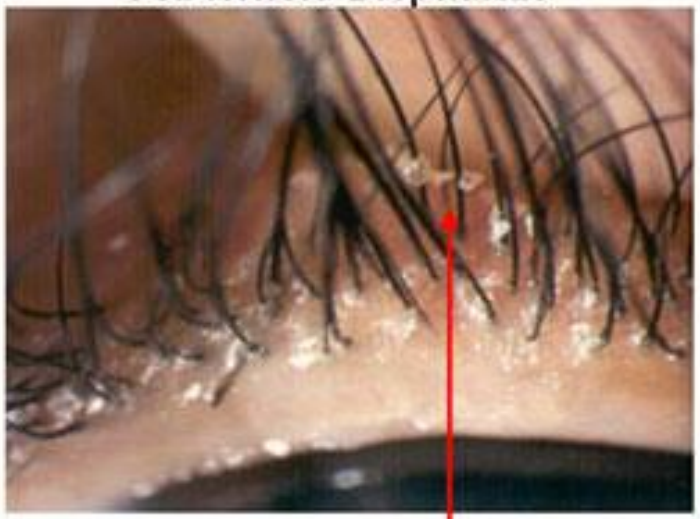
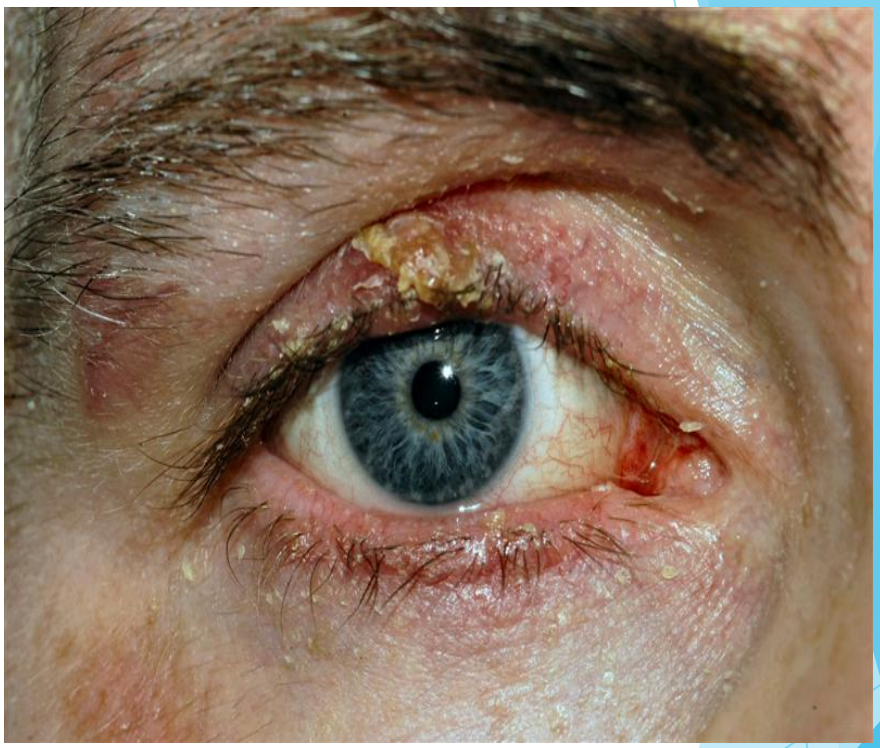




Seborrheic Blepharitis



Note the **greasy scales / flakes** along the eyelashes and lid margin. Patients have seborrheic dermatitis as well. Lid hygiene (warm compresses and eye lid scrubs) are the mainstay of treatment.



Management

-**Scalp Lesion:**

- Remove crusts: Olive oil in children, SA 2-3% in adults.
- Topical stroids lotions.
- Topical antifungal creams.
- Medicated shampoos.


List No. D613
SELSUN®
suspension
(shampoo containing
selenium sulphide 2.5% w/v)
MEDICAL
TREATMENT
FOR DANDRUFF
100 ml


SKIN-CAP®
CHAMPÚ-SHAMPOO
Uso Tópico
For External Use Only

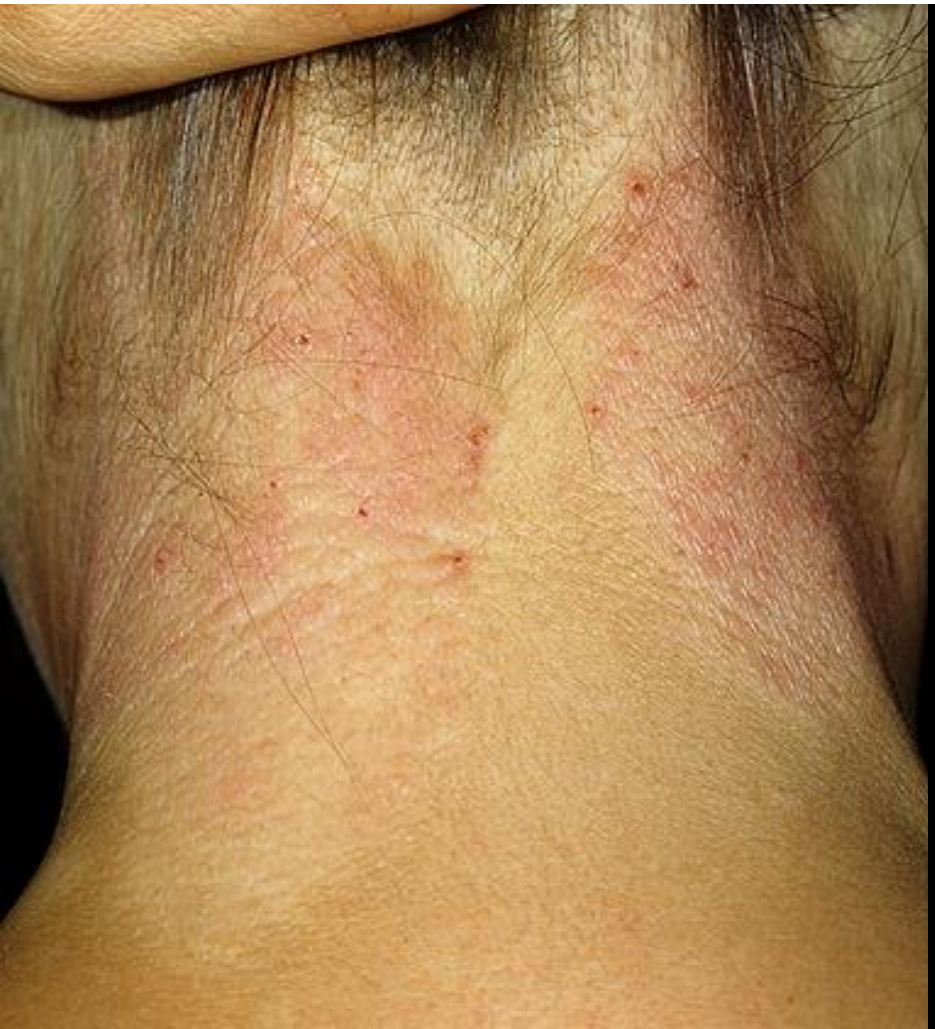

head & shoulders
classic clean

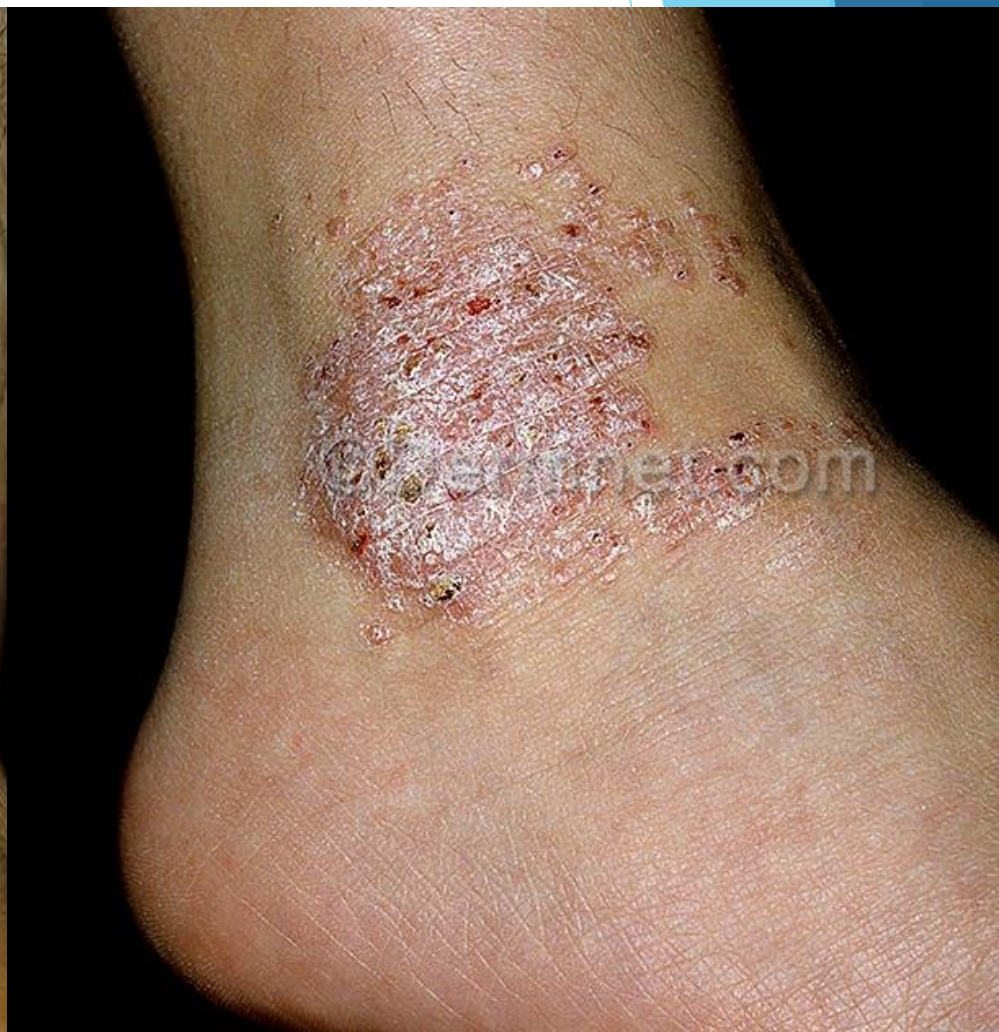

Nizoral®
dandruff shampoo
Treats & prevents
dandruff &
seborrhoeic dermatitis
Dry, flaky, red, itchy scalp
Dermatologically tested
Fragrance free
For a healthier scalp
100 ml
up to 5 months treatment

Management

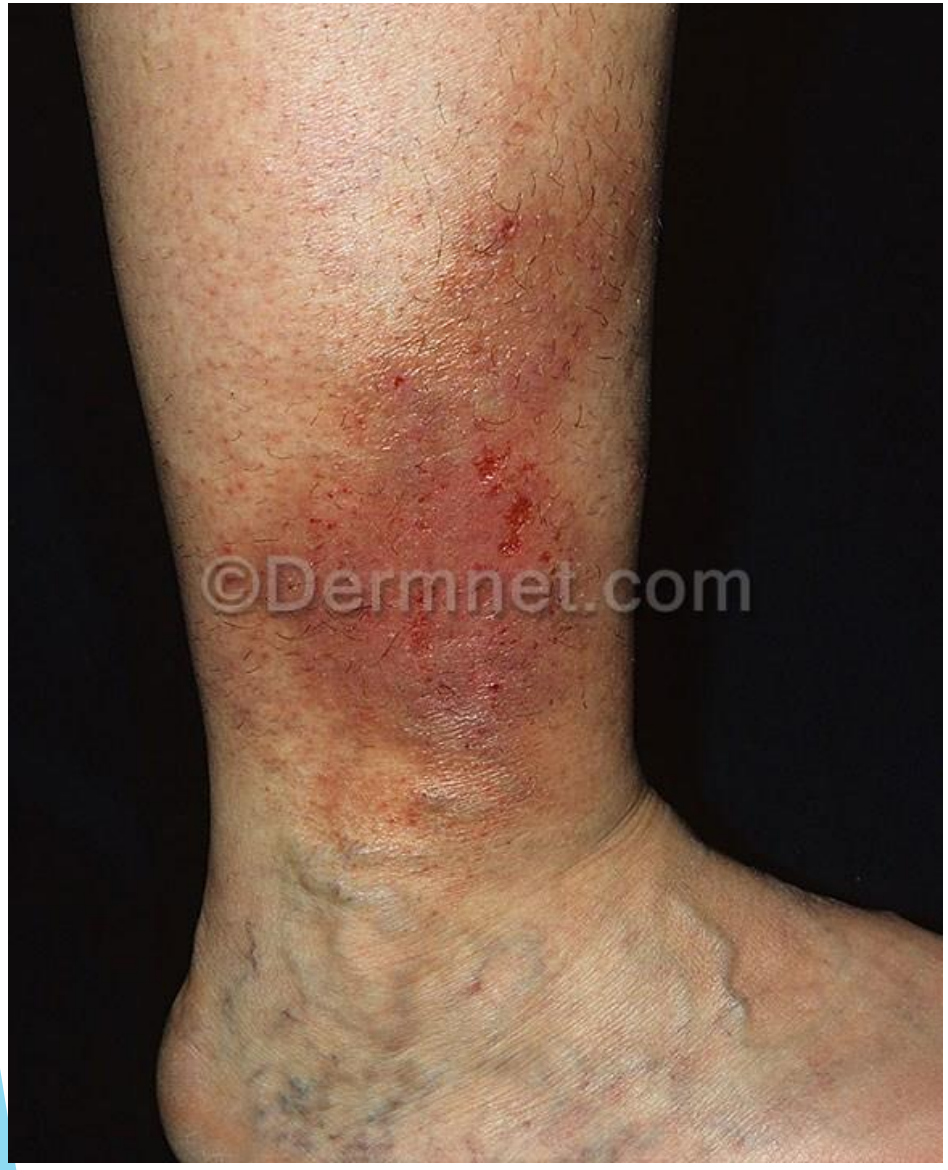
- **Face and body lesions:**
  - Topical steroids.
  - Topical antifungals.
  - Combinational Rx:

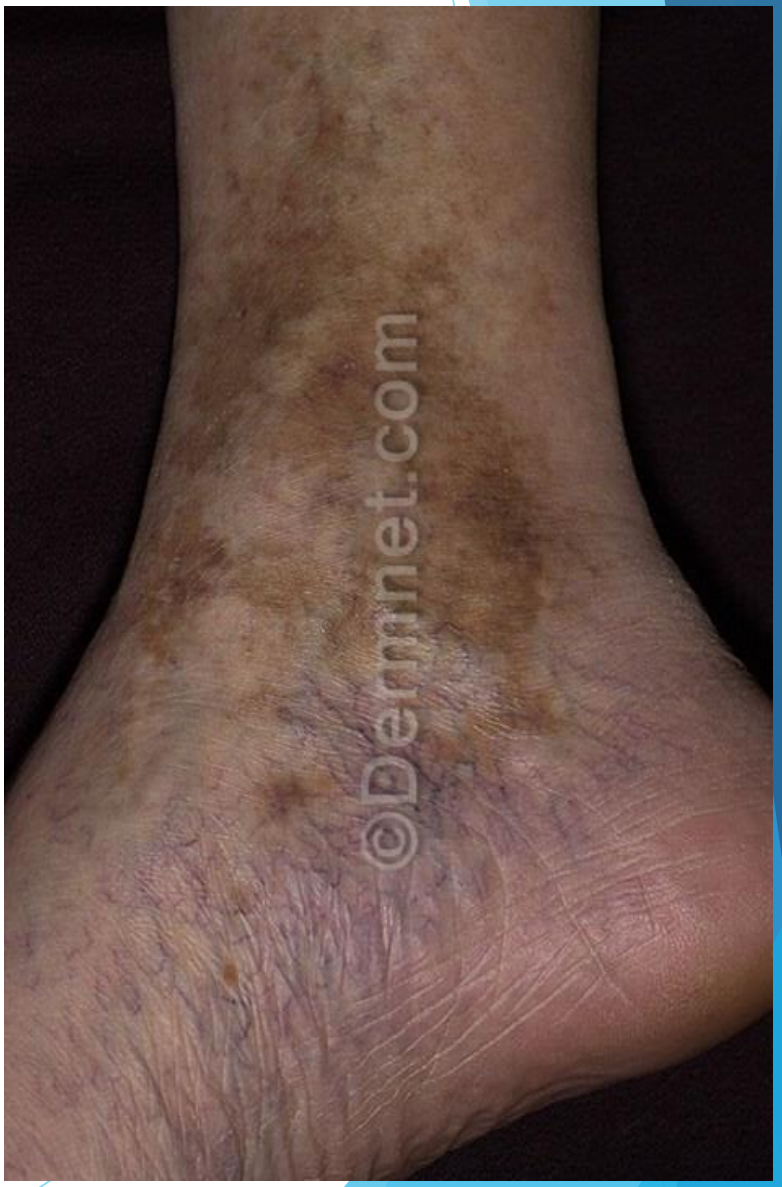
Lichen Simplex Chronicus
-Neurdermatitis-



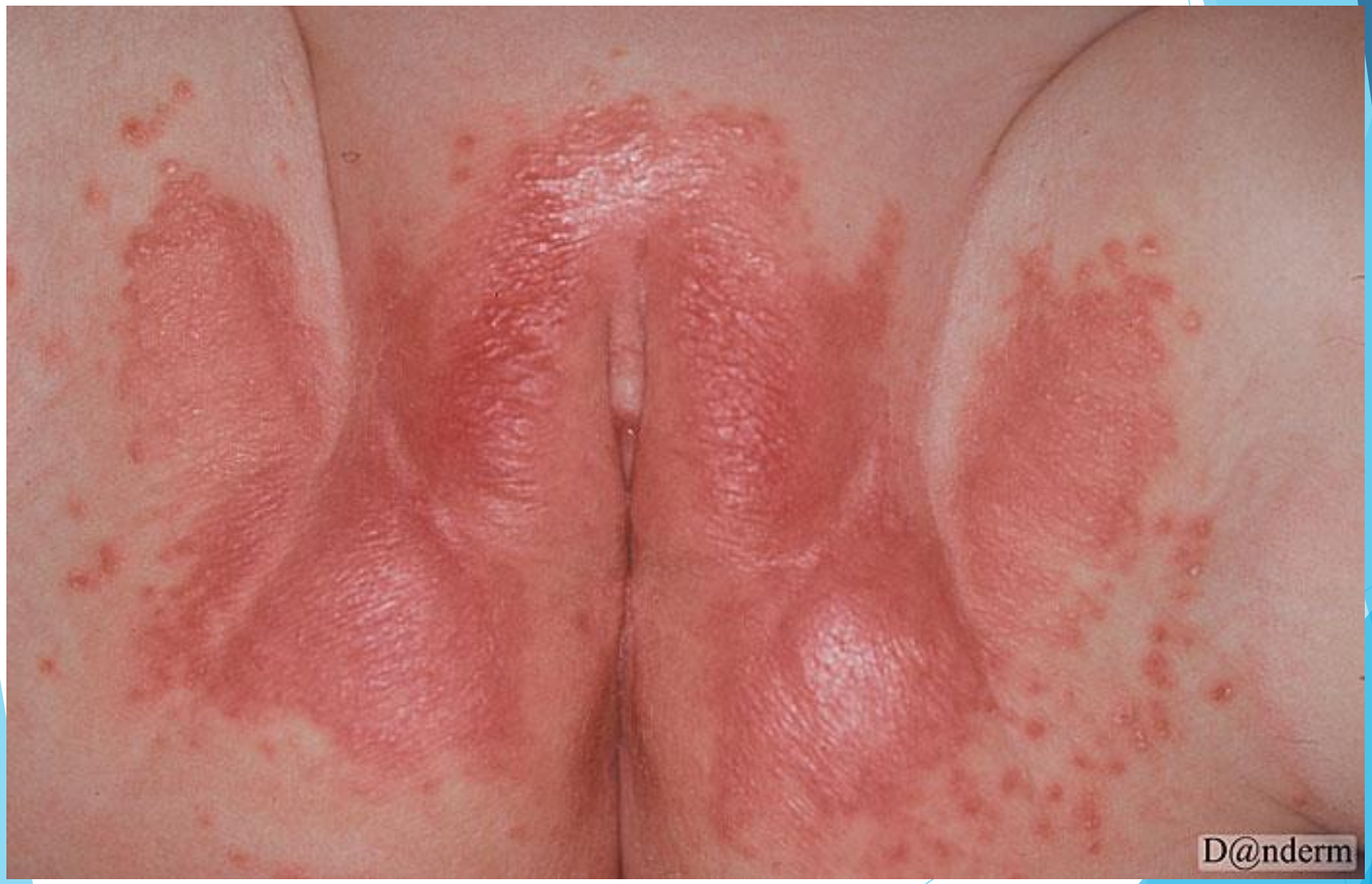


Stasis Dermatitis



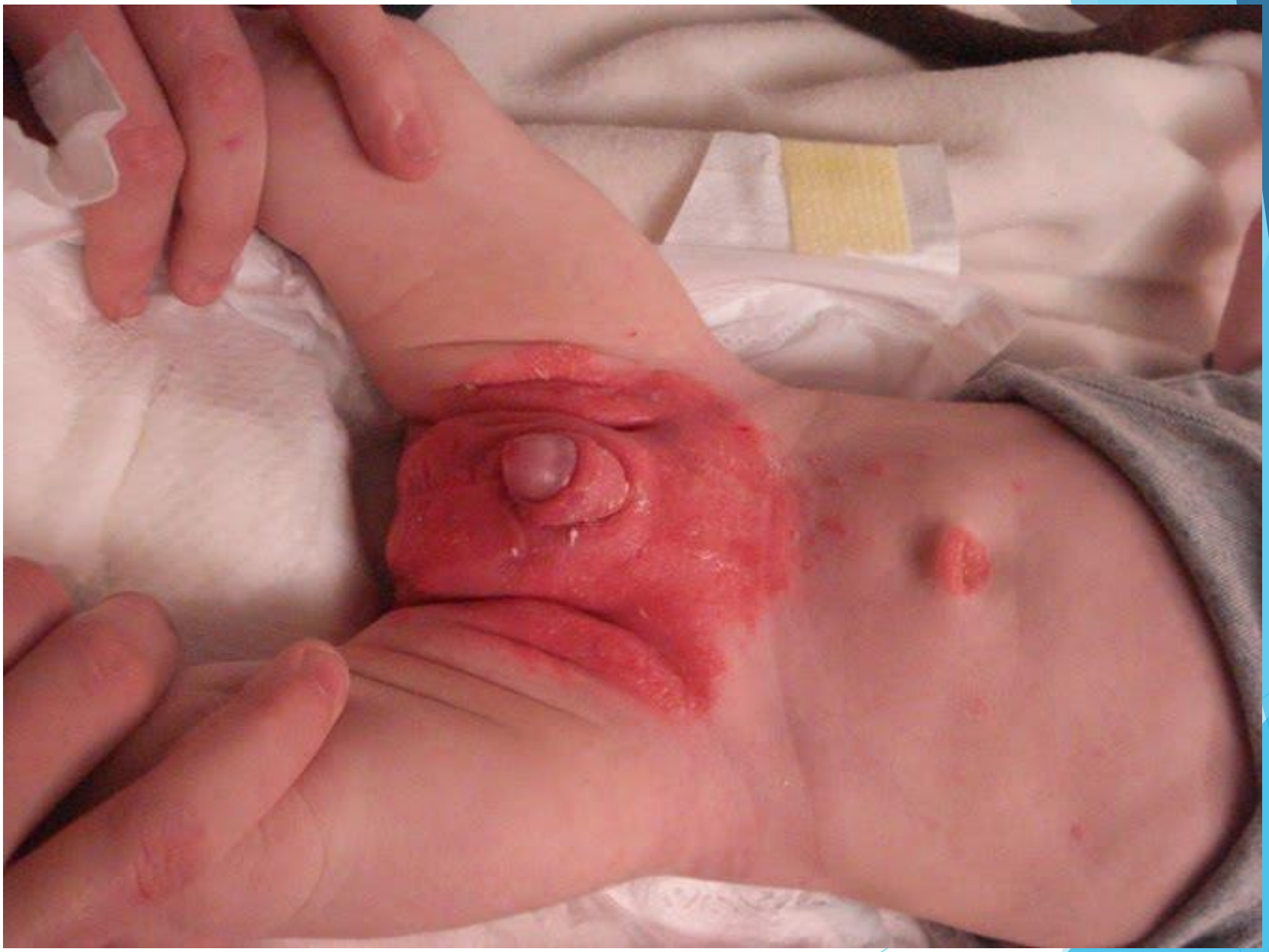


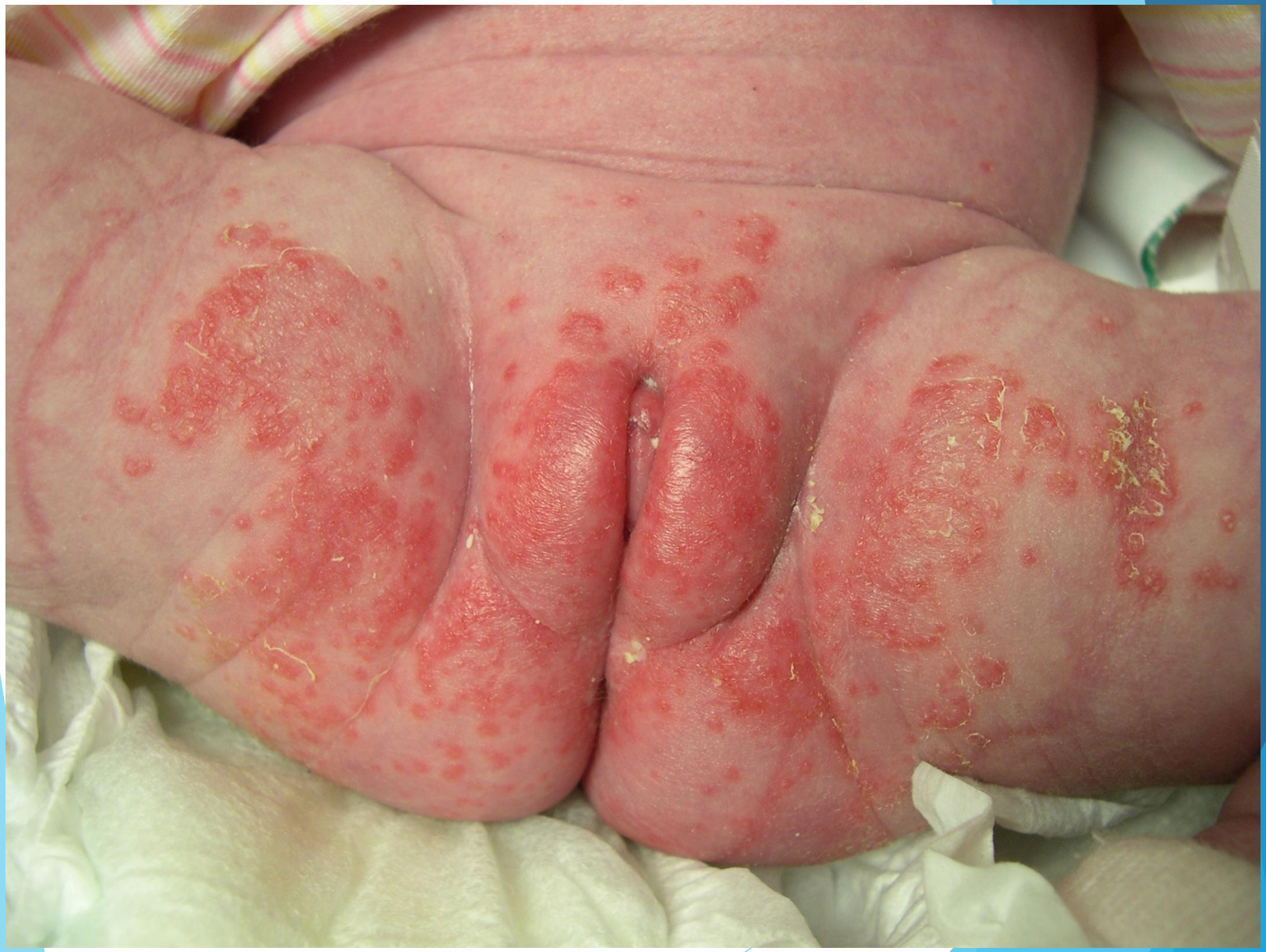
Napkin Dermatitis



What could it be?

- **What is the cause of napkin dermatitis?**
- Irritant contact dermatitis: urine and faeces will cause a rash on any skin left in contact for long enough. Sometimes ammonia is formed and burns the skin.
- Infection with bacteria and candida yeasts (thrush).
- Other skin disorders: psoriasis and atopic dermatitis can affect the napkin area.





prevention

- Use disposable nappies if possible. Those containing absorbent hydrocellulose gel are excellent at preventing the urine soaking your baby's skin.
- Change the nappies frequently - do not leave your baby in a wet or dirty nappy. You may need up to 12 changes per day.
- Give evening fluids early to reduce wetting at night. Change the baby before you go to bed yourself.
- Wash the baby's bottom at every change. Use warm water to remove all urine and bowel motions. Soap and "Wet-Ones" might sting if a rash is present. Pat dry carefully.
- Moisturize dry skin at every nappy change. If the skin feels dry, apply an non-irritating emollient to all affected areas.

Treatment

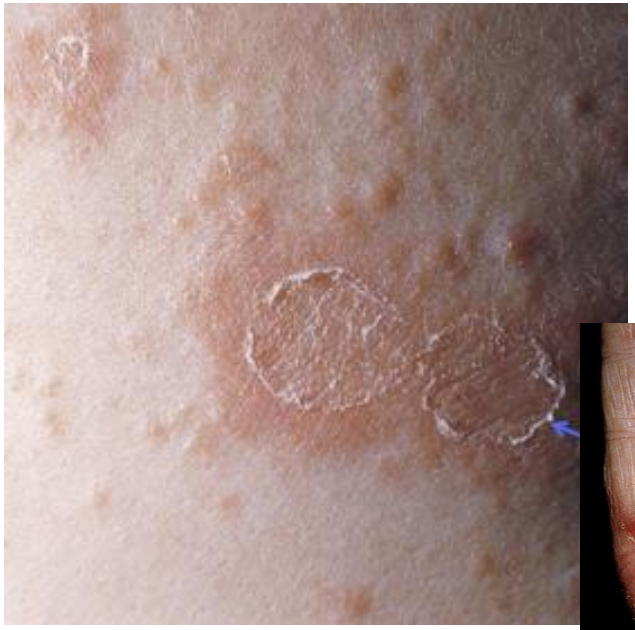
- Barrier: Vaseline or EO with cotton cloth pieces.
- Nappy off times.
- Topical treament:

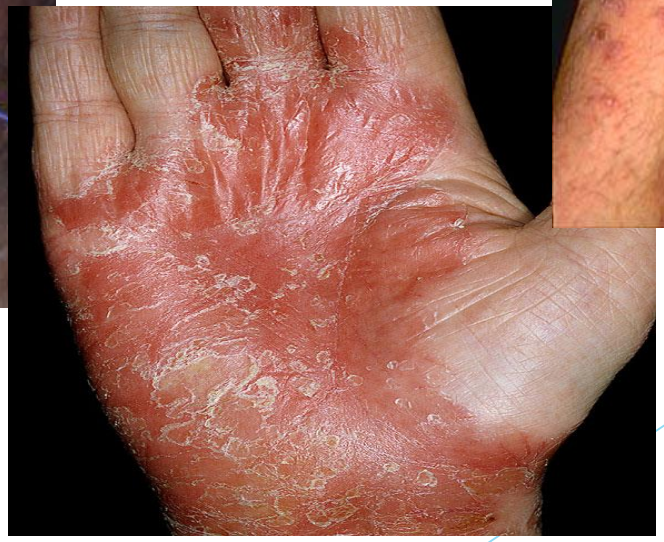
  - Topical steroids (Hydrocortisone 1% once for only 3- 5 days).

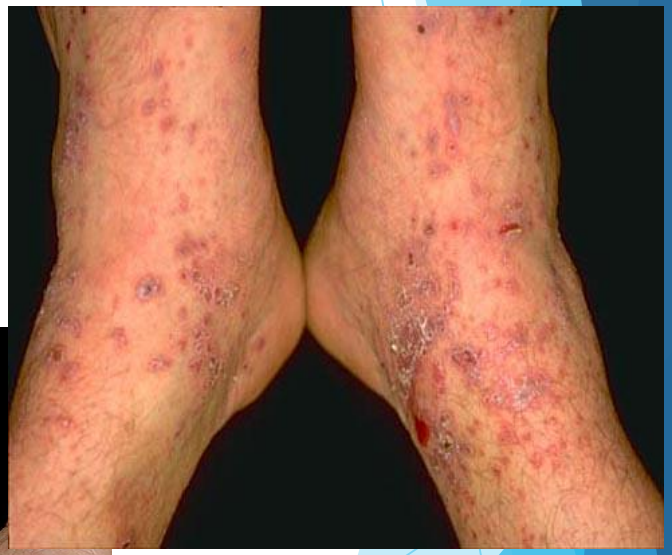
  - Travacort cream.

  - Fucidin-H cream.

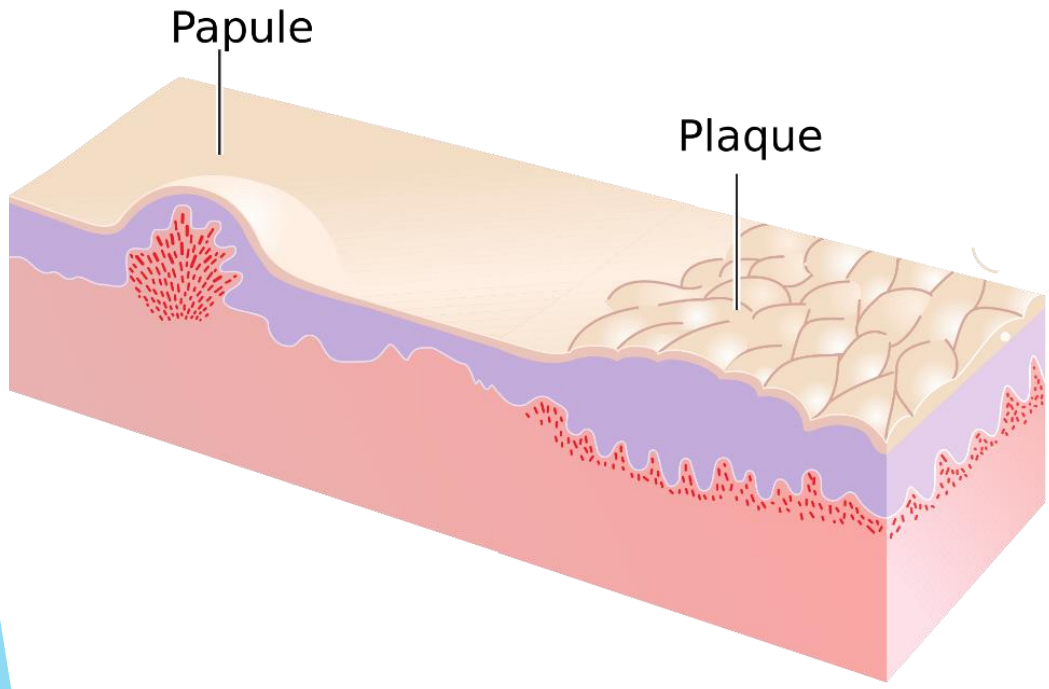
Papulosquamous disorders

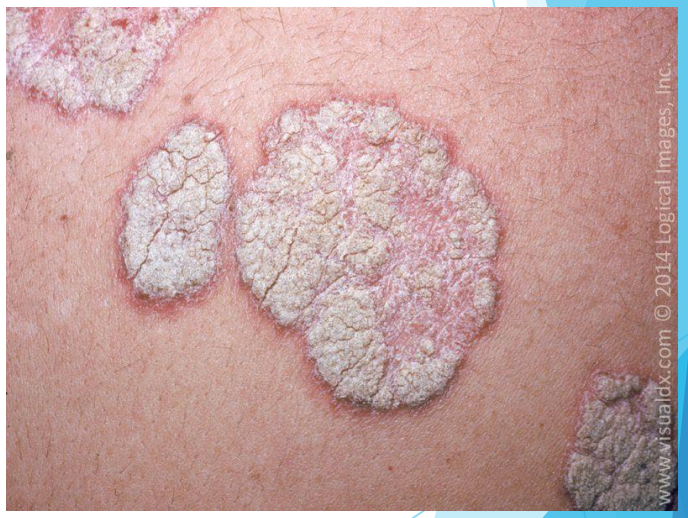


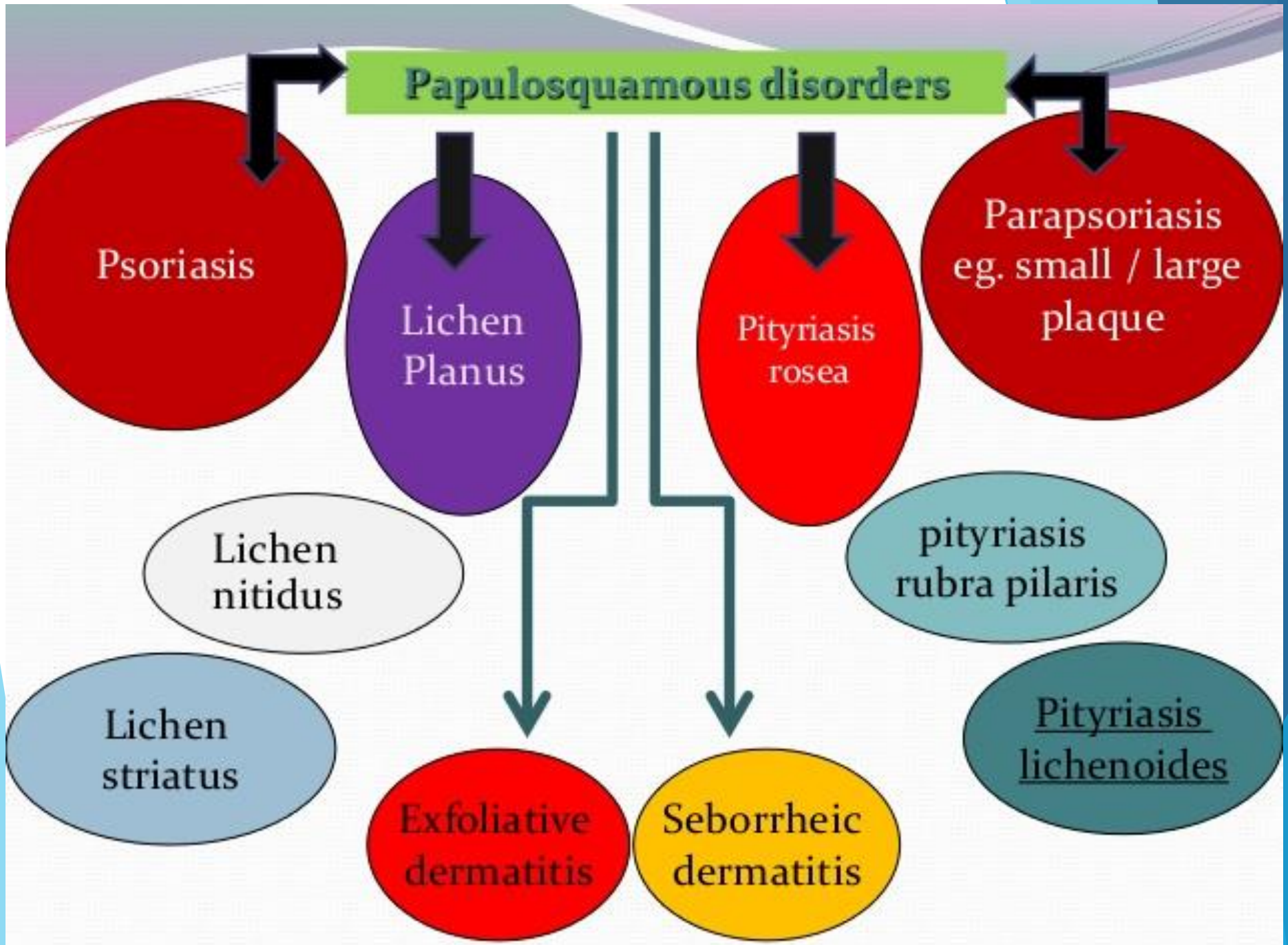




Papule/plaque + scales .





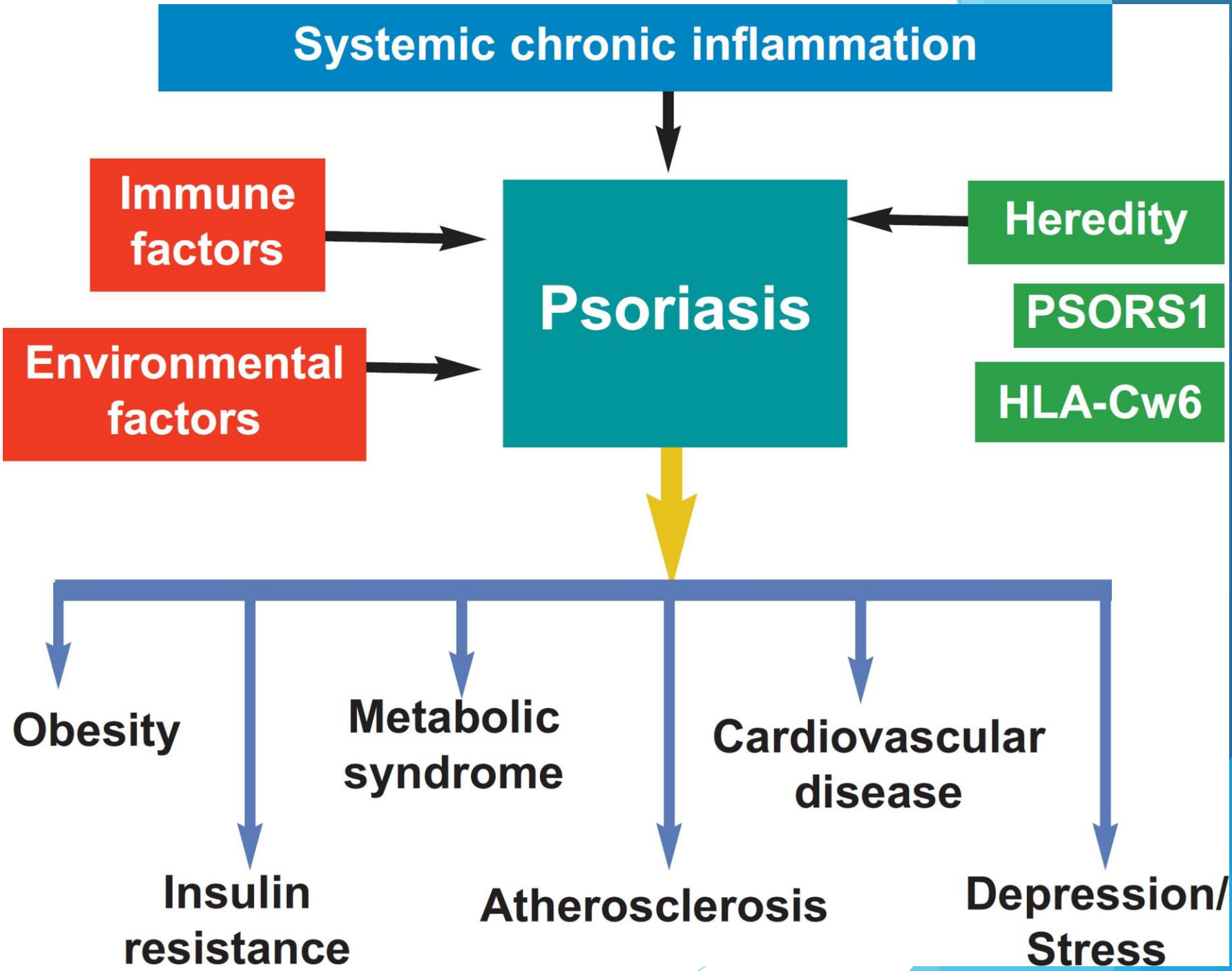

Papulosquamous disorders
Psoriasis
Lichen Planus
Pityriasis rosea
Parapsoriasis eg. small / large plaque
Lichen nitidus
pityriasis rubra pilaris
Lichen striatus
Pityriasis lichenoides
Exfoliative dermatitis
Seborrheic dermatitis

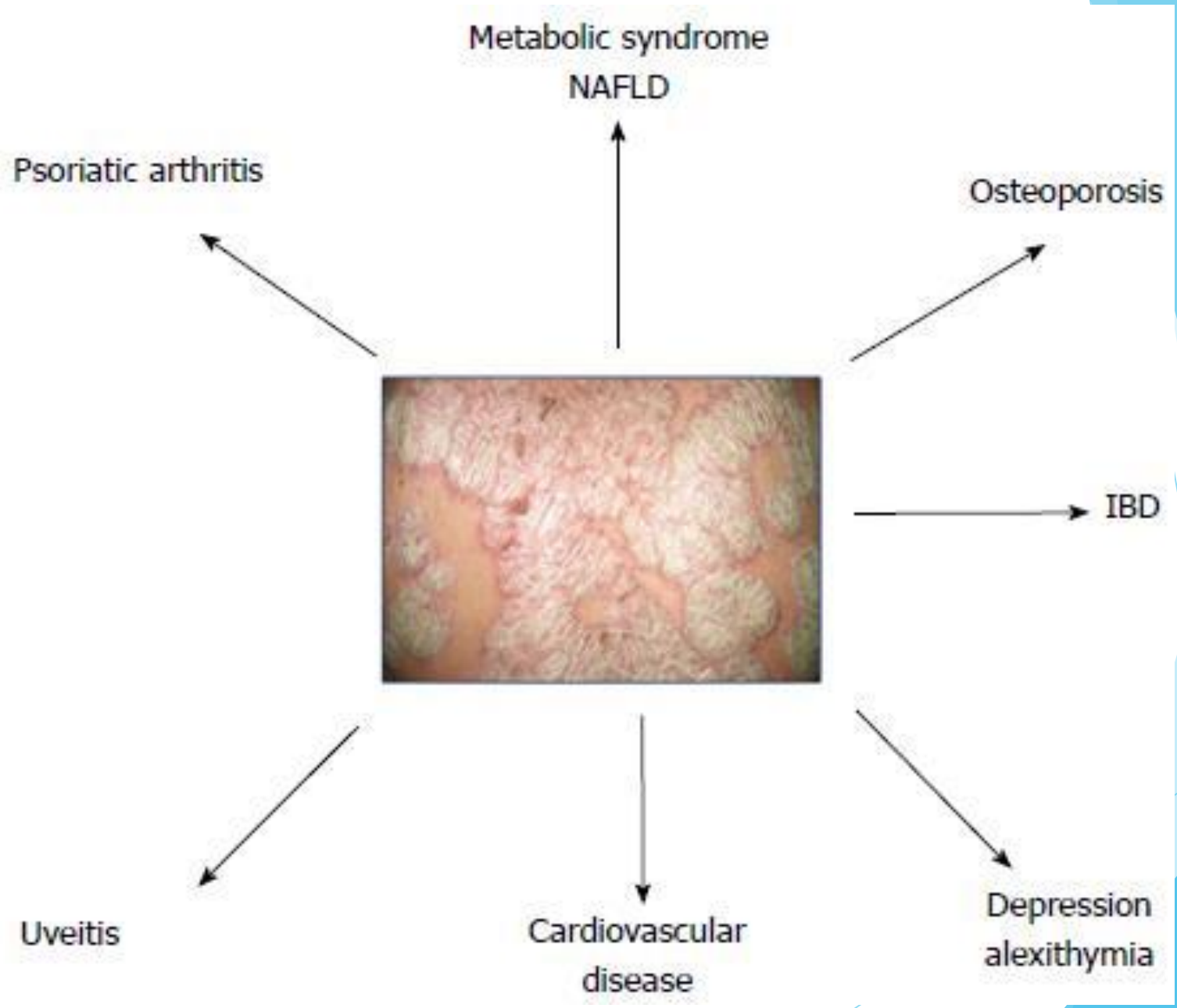
- Psoriasis.
- Pityriasis rosea.
- Lichen planus.

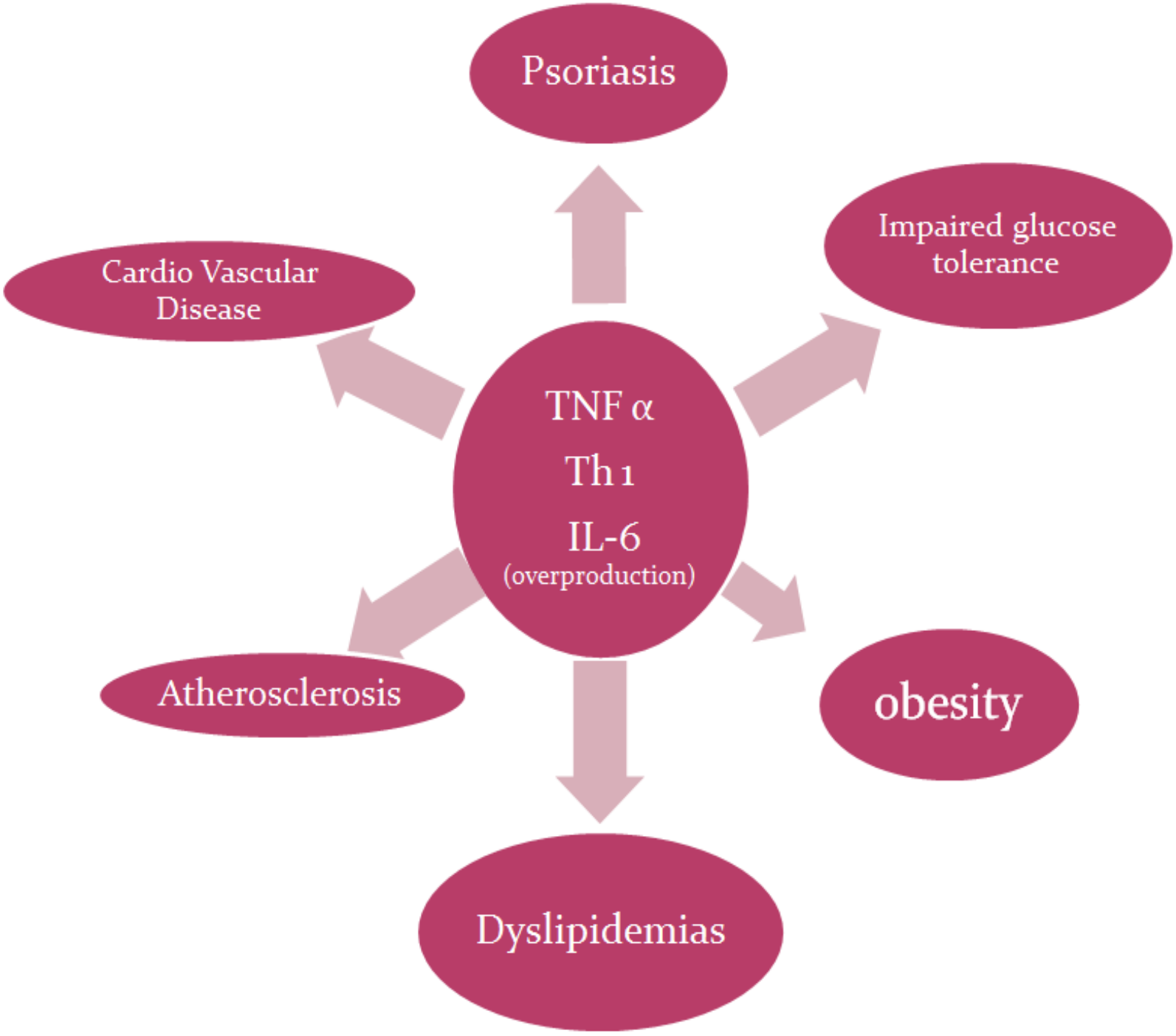
psoriasis

- A multifactoria skin disorder that presents mainly as scaly red plaques.

- Psoriasis is a systemic, immune-mediated disorder, characterized by inflammatory skin and joint manifestations.


Systemic chronic inflammation
Immune factors
Environmental factors
Psoriasis
Heredity
PSORS1
HLA-Cw6
Obesity
Insulin resistance
Metabolic syndrome
Atherosclerosis
Cardiovascular disease
Depression/ Stress


Metabolic syndrome
NAFLD
Psoriatic arthritis
Osteoporosis
IBD
Uveitis
Cardiovascular disease
Depression alexithymia


Psoriasis
Impaired glucose tolerance
Cardio Vascular Disease
TNF α
Th 1
IL-6
(overproduction)
Atherosclerosis
obesity
Dyslipidemias

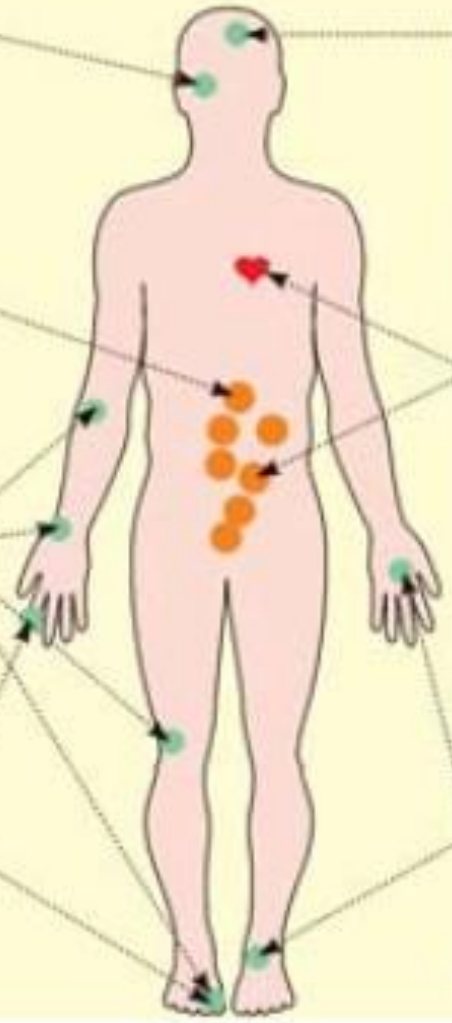
The Burden of Psoriatic Disease

- Ocular inflammation (Iritis/Uveitis/Episcleritis)

- Crohn's disease
- Ulcerative colitis

- Psoriatic arthritis
- Spondyloarthropathies

- Nail psoriasis



Psychosocial burden

- Reactive depression
- Higher suicidal ideation
- Alcoholism

Metabolic syndrome

- Arterial hypertension
- Dyslipidaemia
- Insulin resistant diabetes
- Obesity
- Higher CVD risk

Plaque psoriasis and other forms

- Generalised psoriasis
- Palmoplantar pustulosis

Etiology

- Genetics : risk of inheritance??

- Environmental :
  - Infection.
  - Stress.
  - Drugs: NAILS.

- Autoimmune.

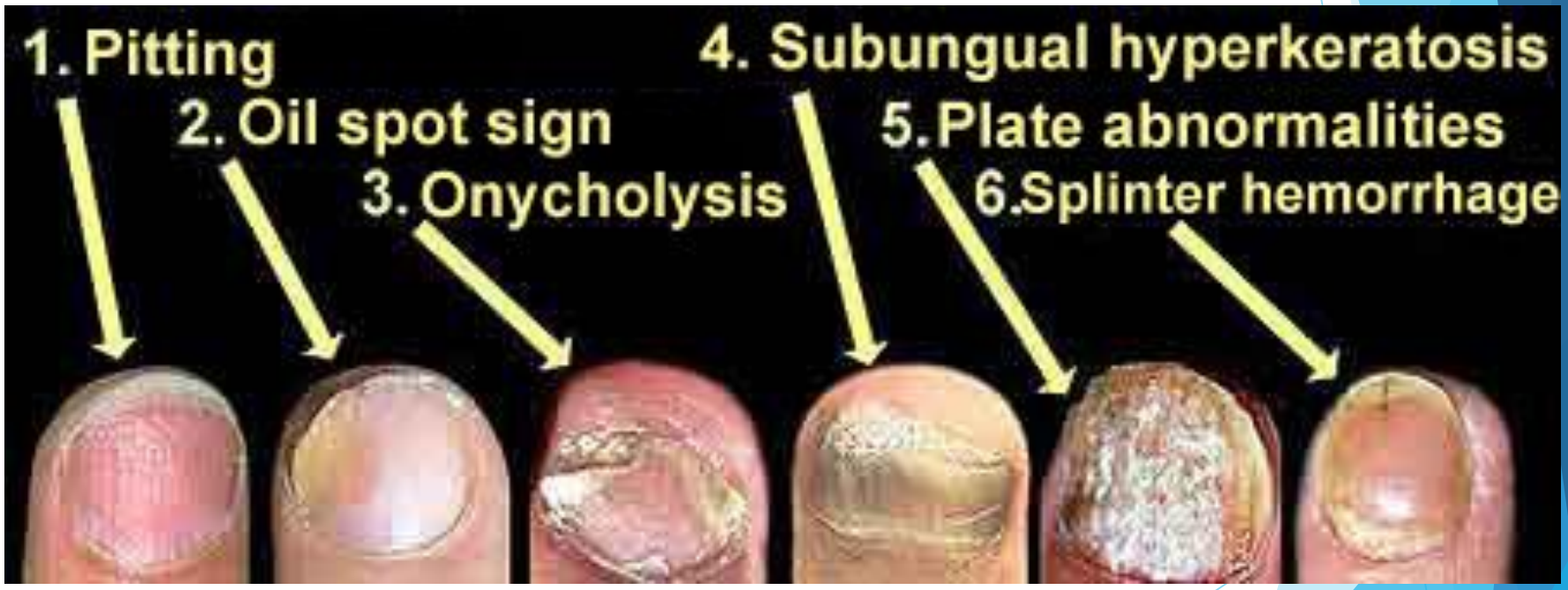
- N : NSAID.
- A:antimalarial/antihypertensives/antifungal/ alcohol.
- I : Interferons / infection (HIV, Strep).
- L: Lithium.
- S : steroids.
- Others : smoking.

subtypes

- Localized.
- Generalized.

- Localized.
- Generalized.

Nail psoriasis

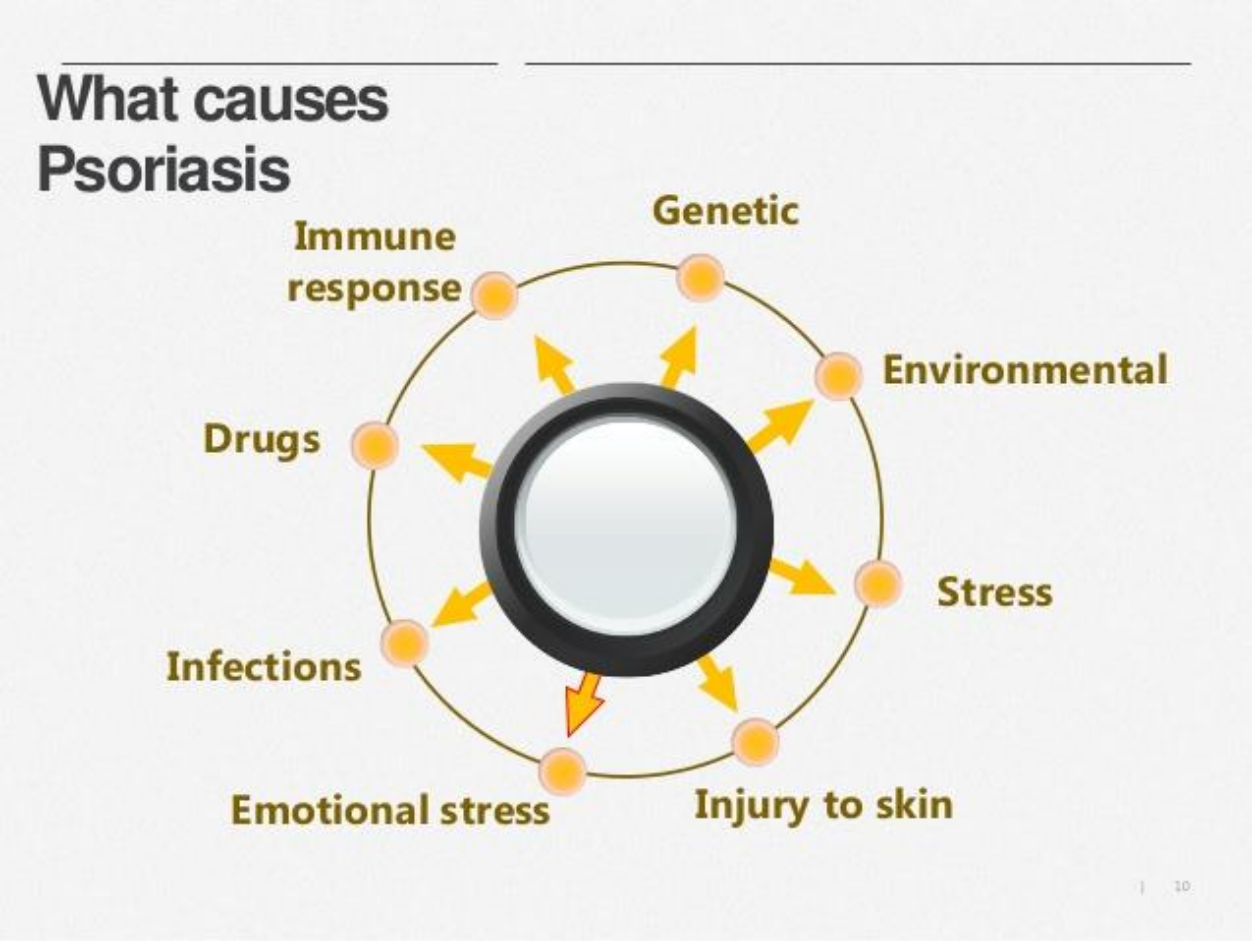


So
Back to Psoriasis vulgaris!

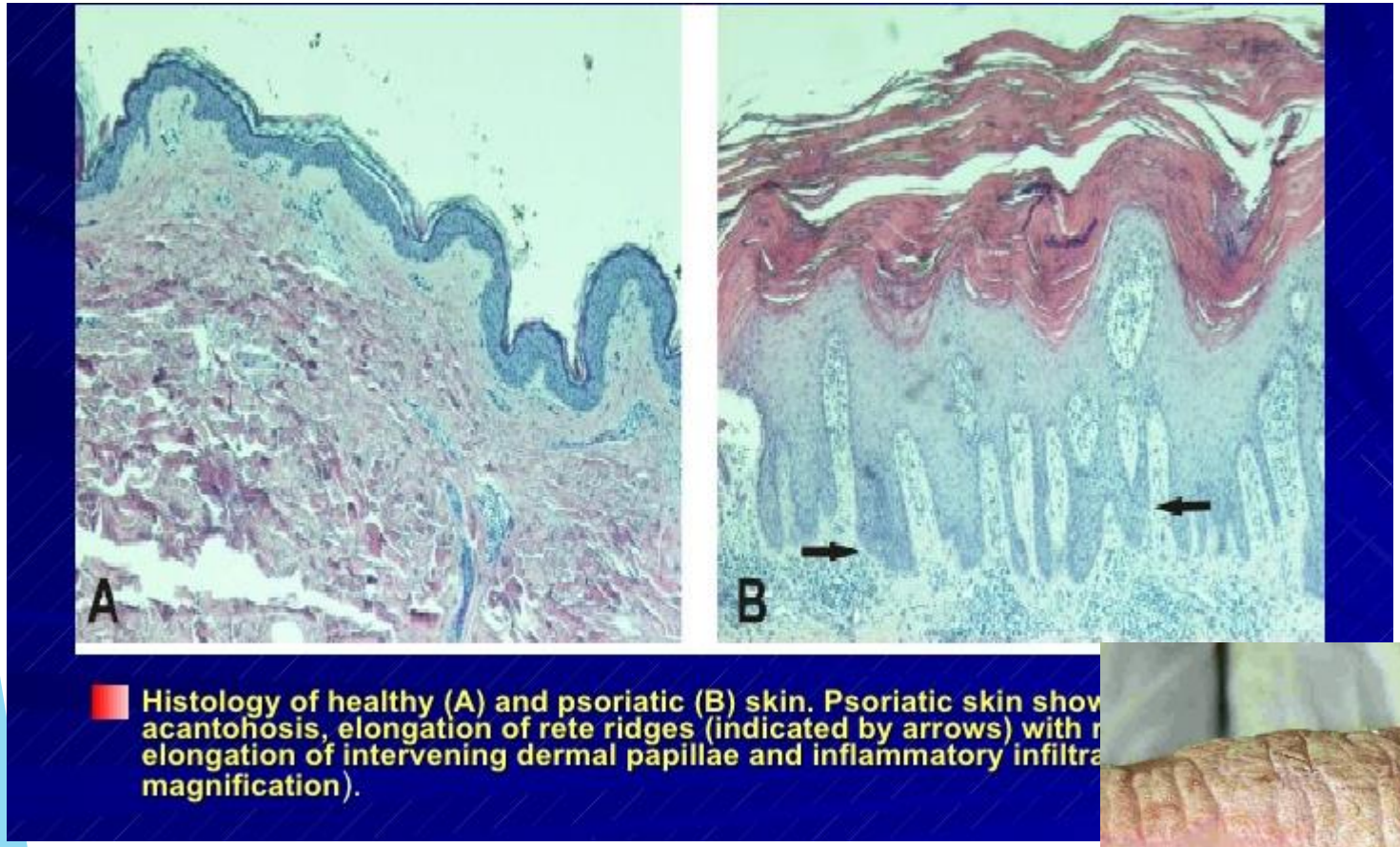
Psoriasis vulgaris

- Scaly, erythematous plaques.
- Itchy!
- Chronic.
- Controllable, not curable.

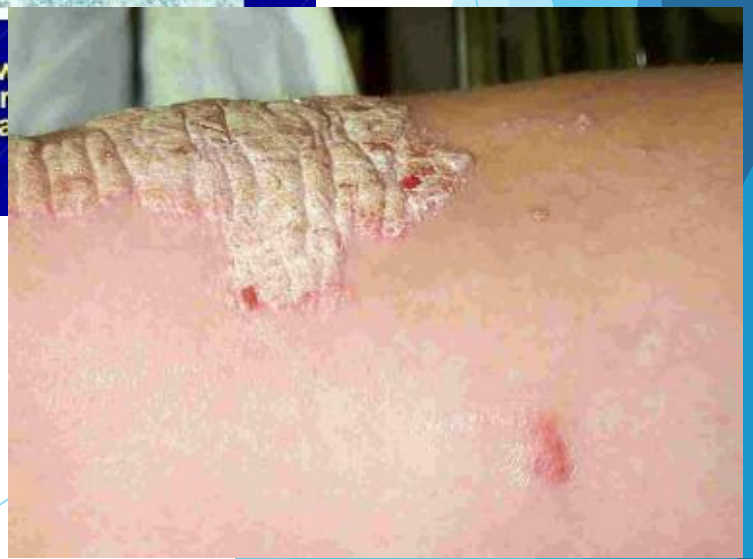
Aetiology


What causes
Psoriasis
Genetic
Immune
response
Environmental
Drugs
Stress
Infections
Emotional stress
Injury to skin

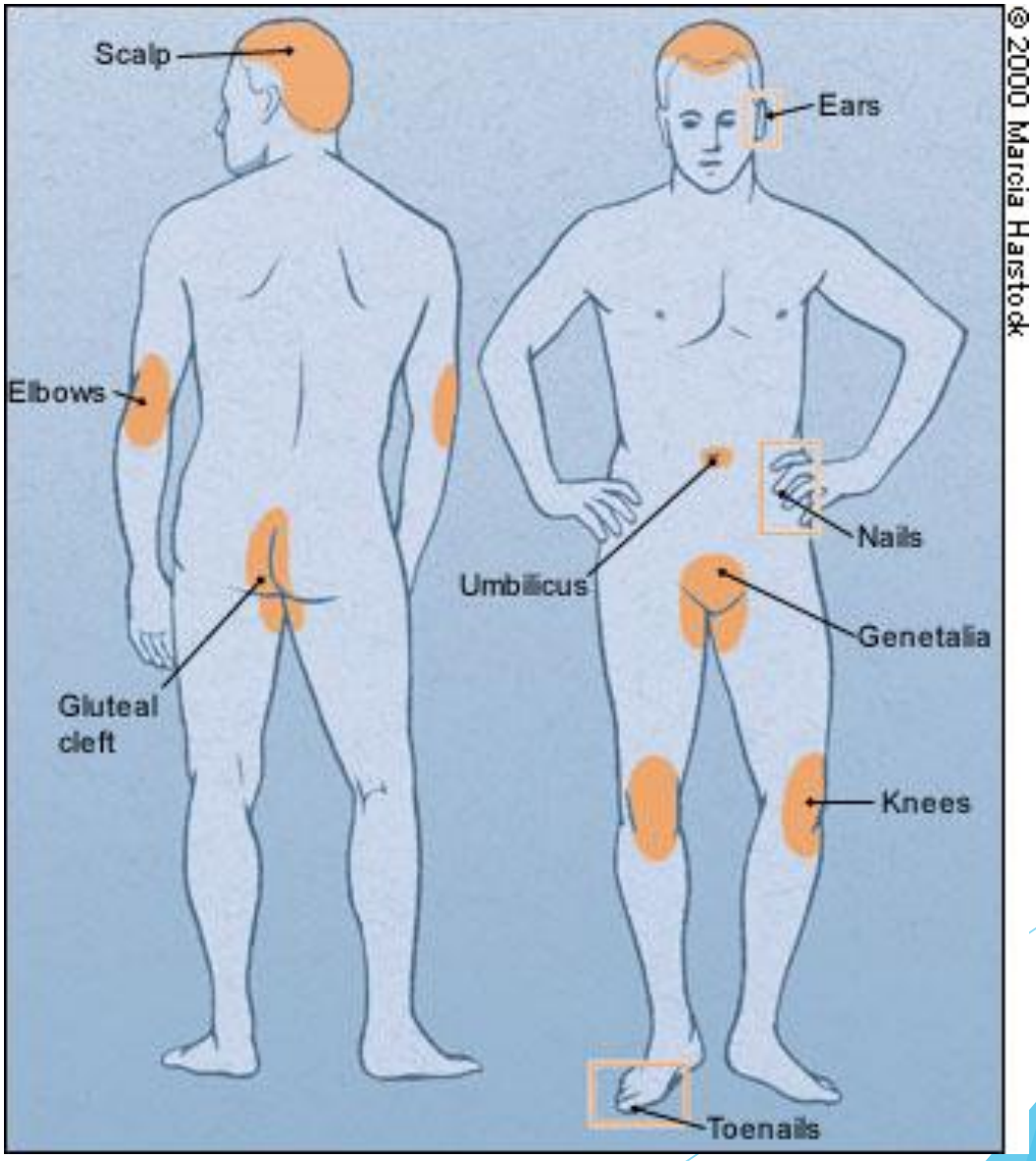
presentation

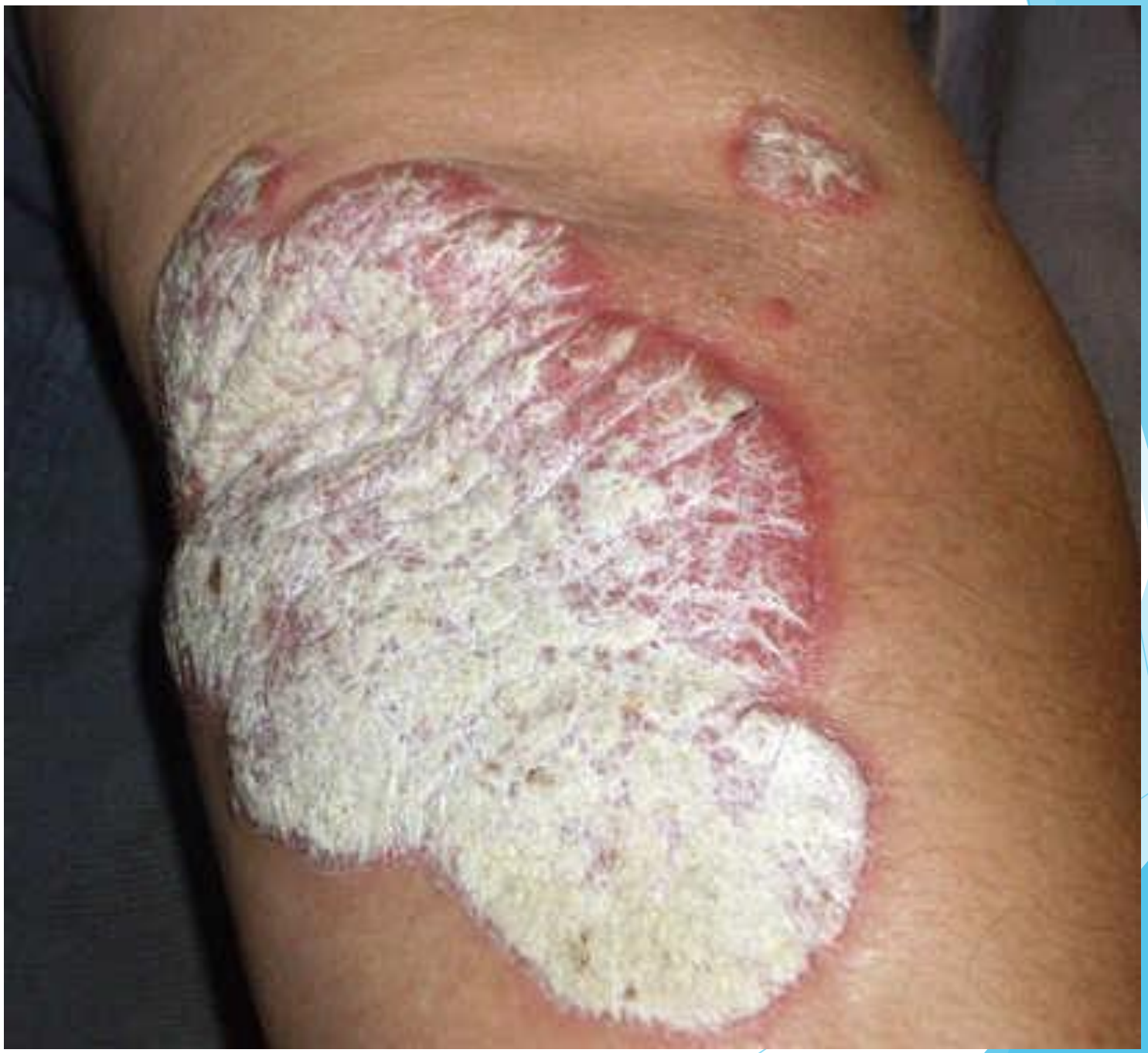


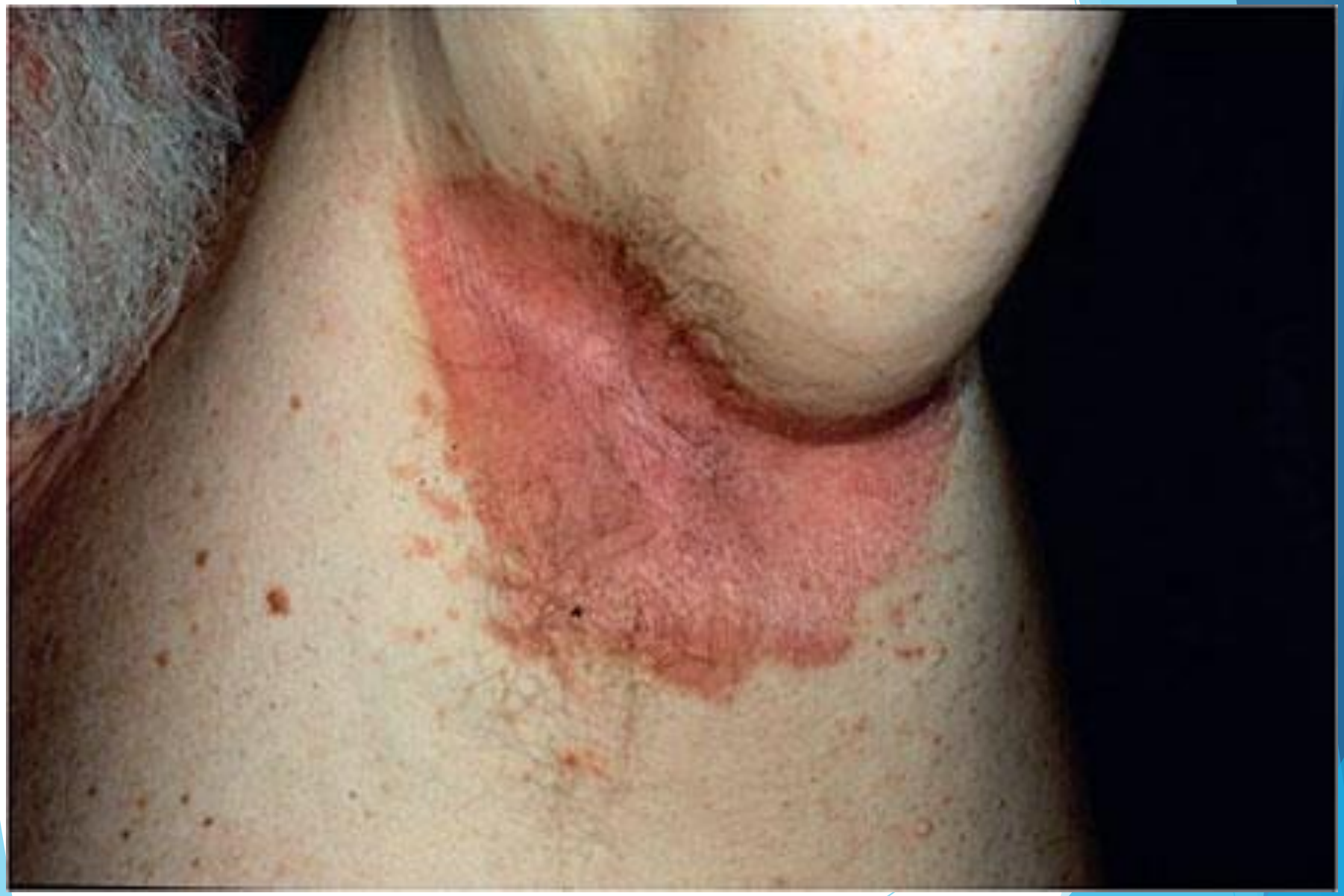
Histology of healthy (A) and psoriatic (B) skin. Psoriatic skin shov
acantohosis, elongation of rete ridges (indicated by arrows) with r
elongation of intervening dermal papillae and inflammatory infiltra
magnification).

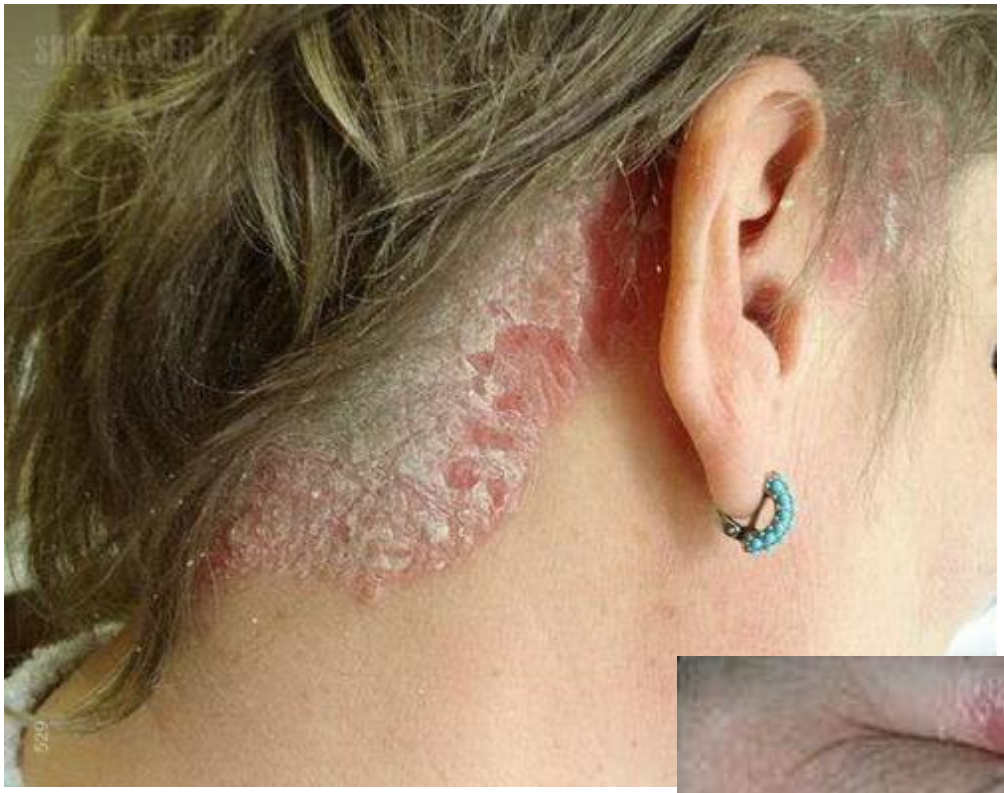


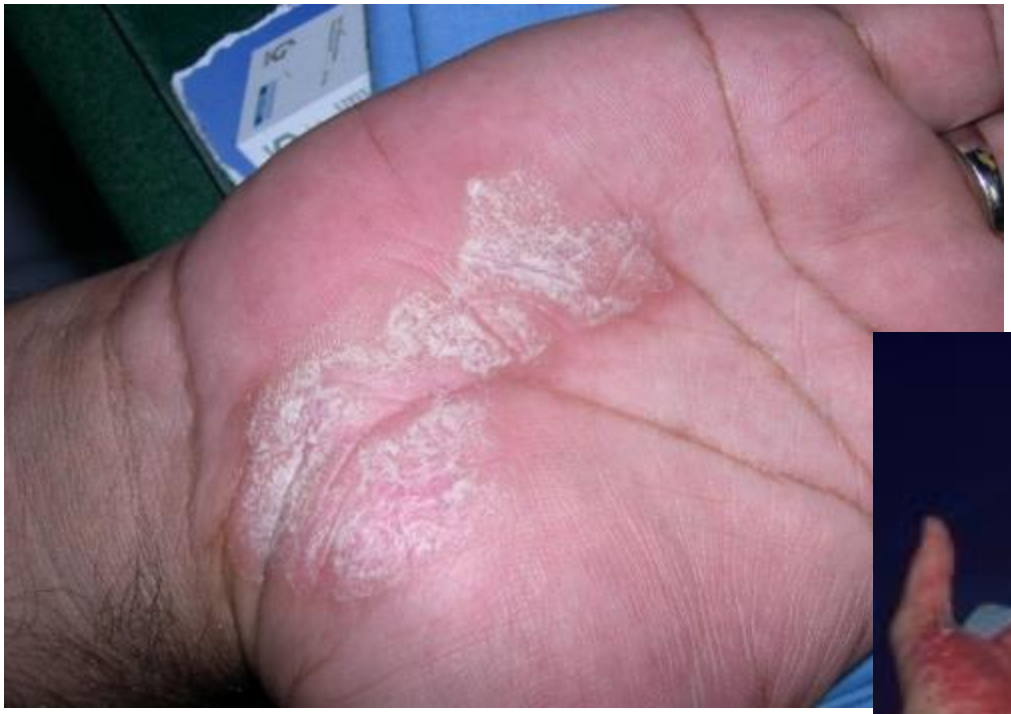
presentation

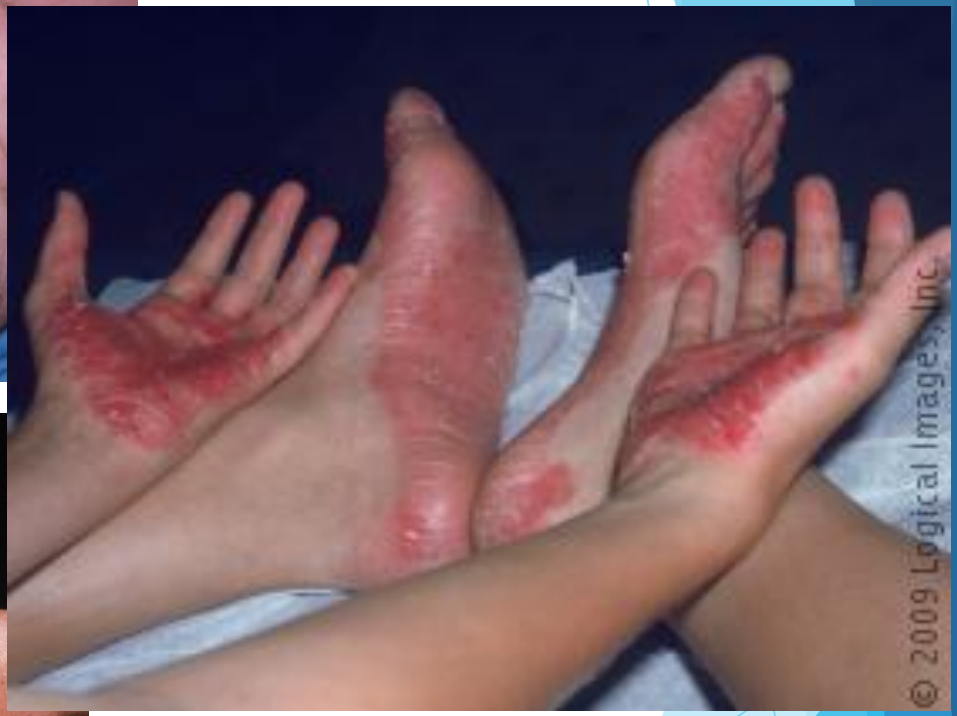








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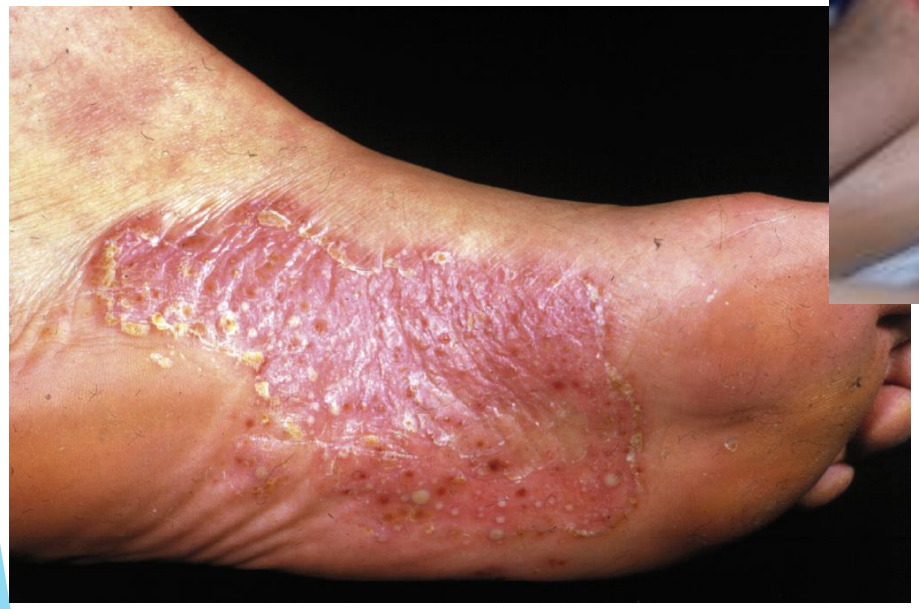
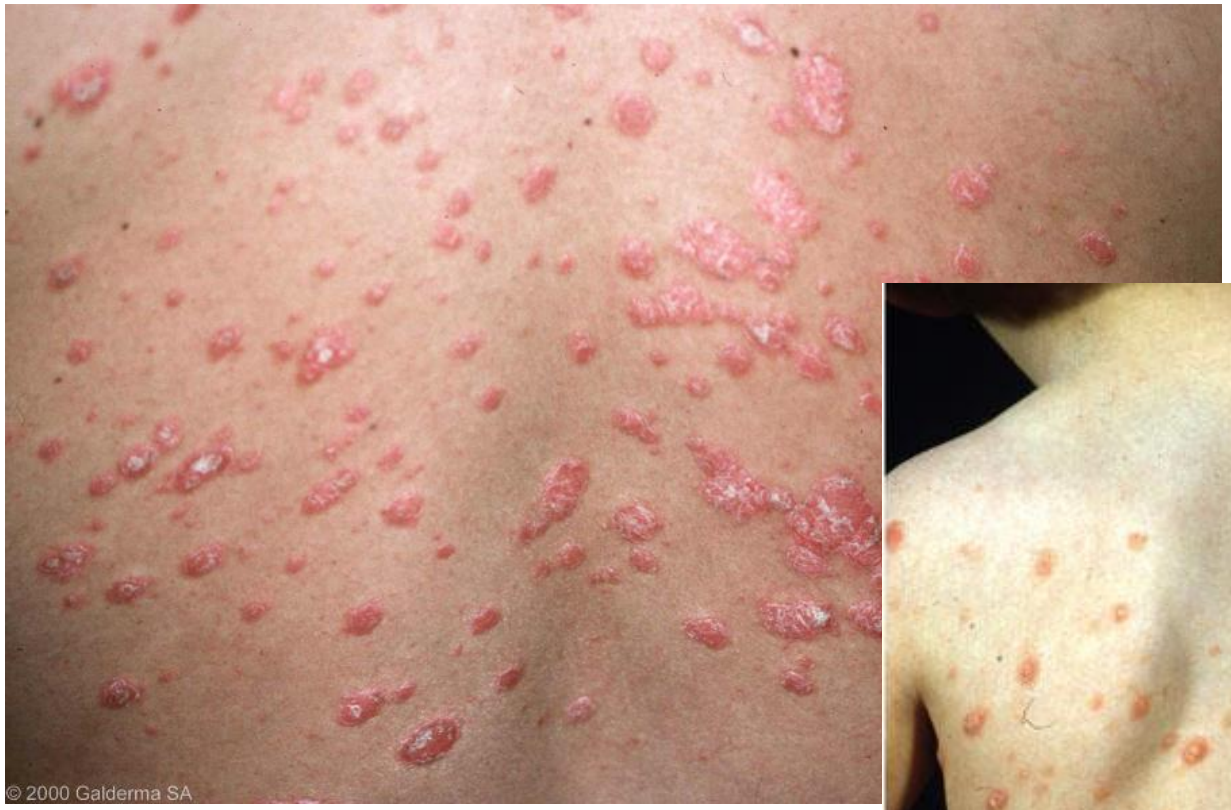
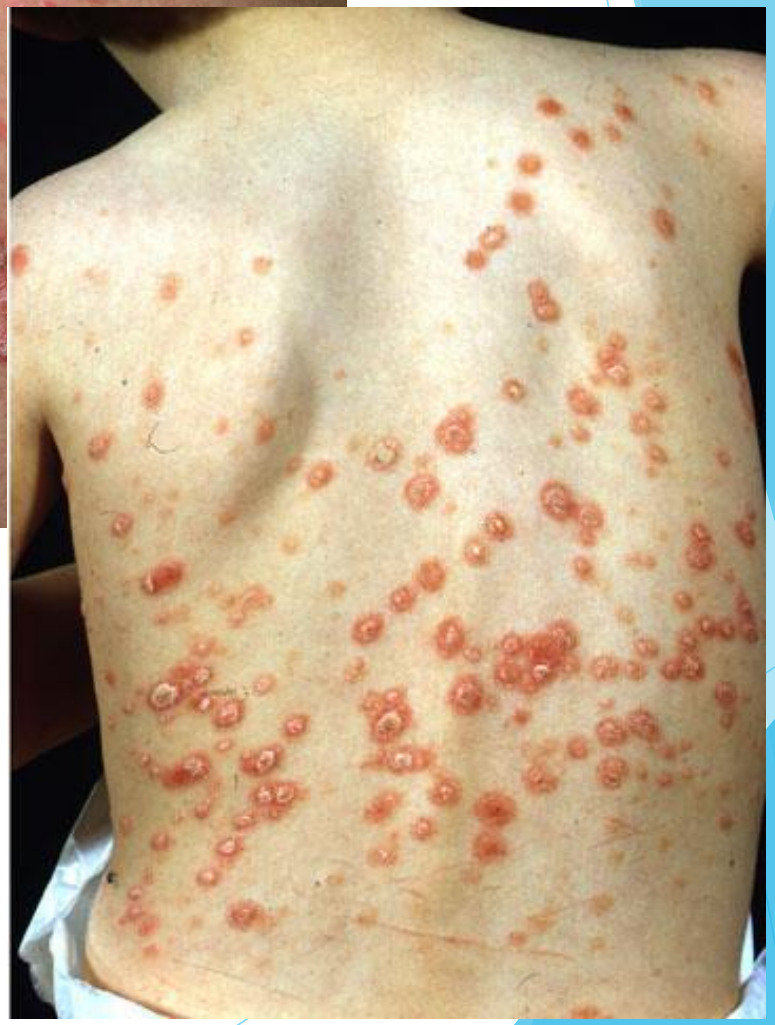
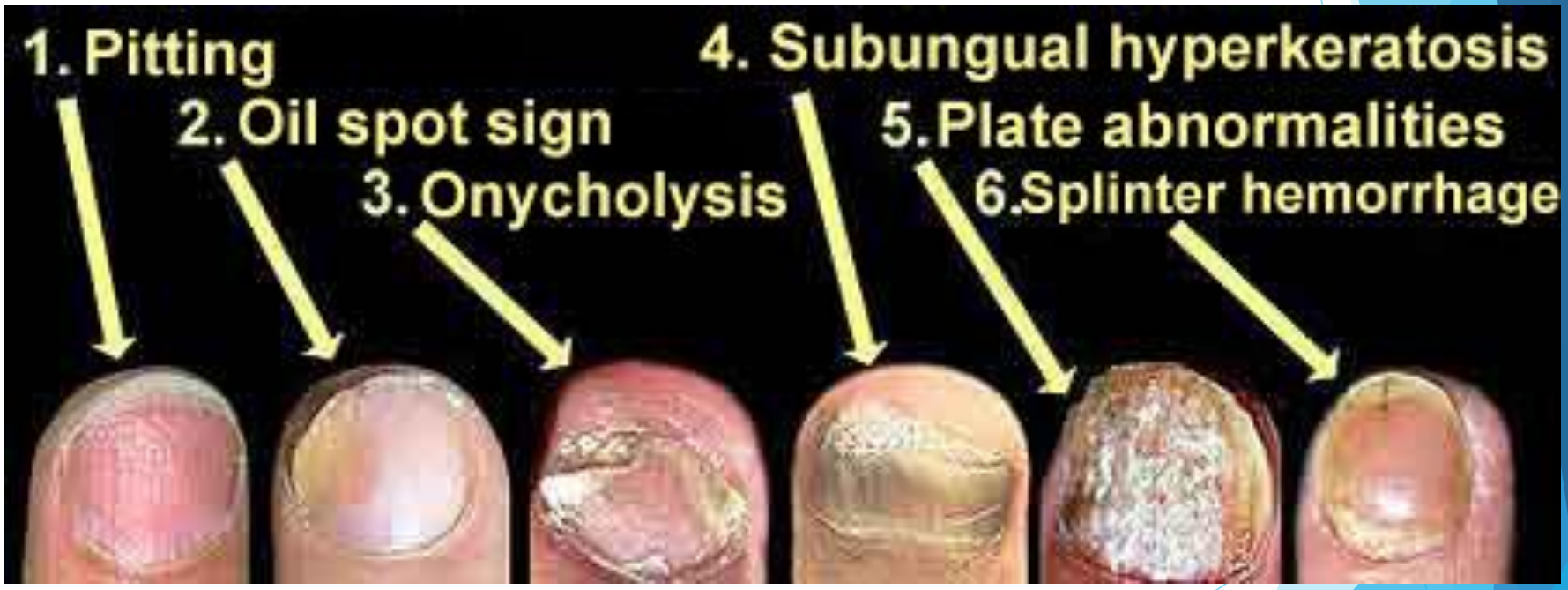



© 2000 Galderma SA



Nail psoriasis



Differential diagnosis

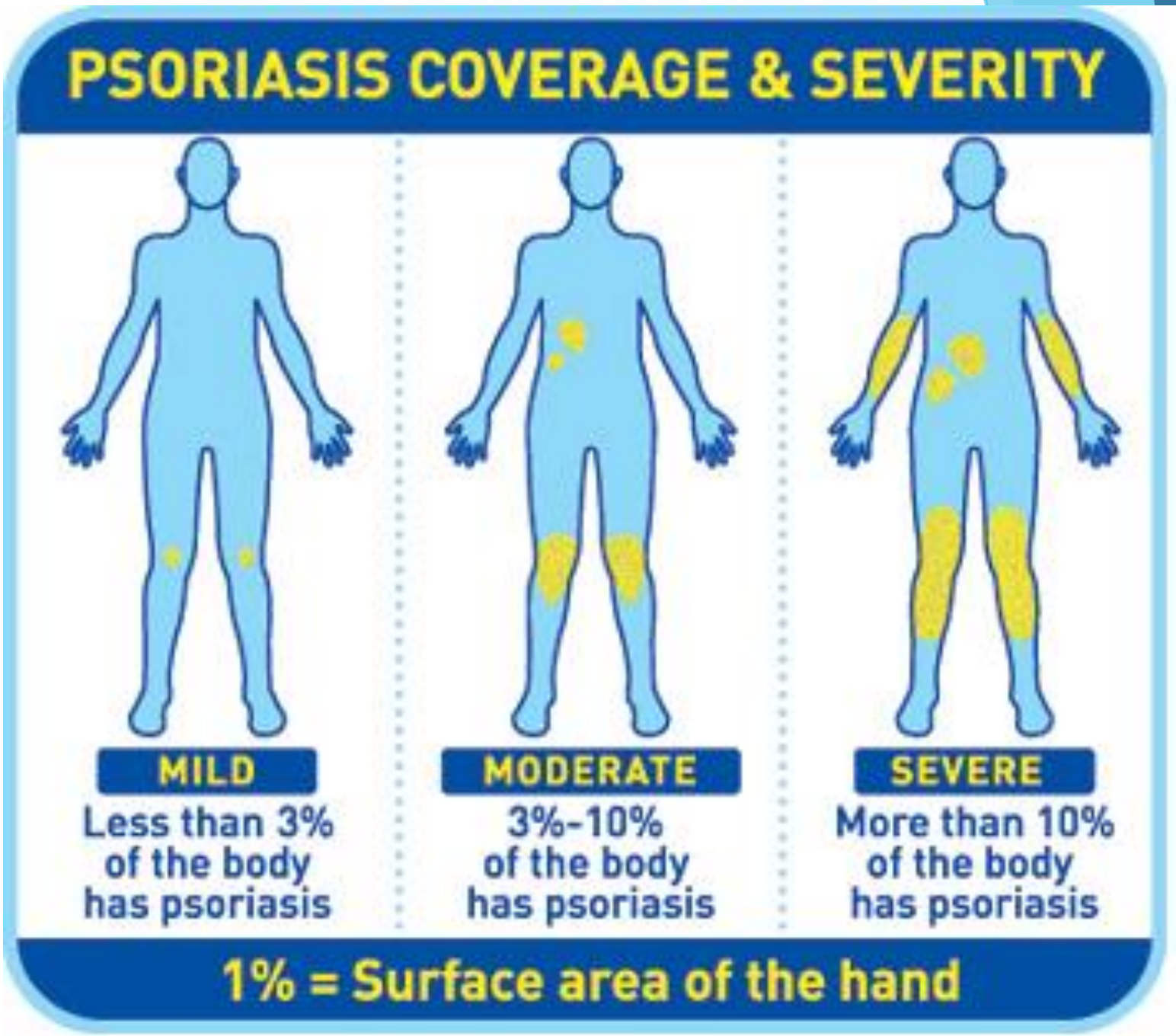
- Eczema.
- Contact dermatitis.
- Lichen planus.
- Tinea.
- Seberrhoic dermatitis.
- Melasma.
- PRP.
- Keratoderma.
- Paraneoplastic syndromes.
- Mycosis fungoides.

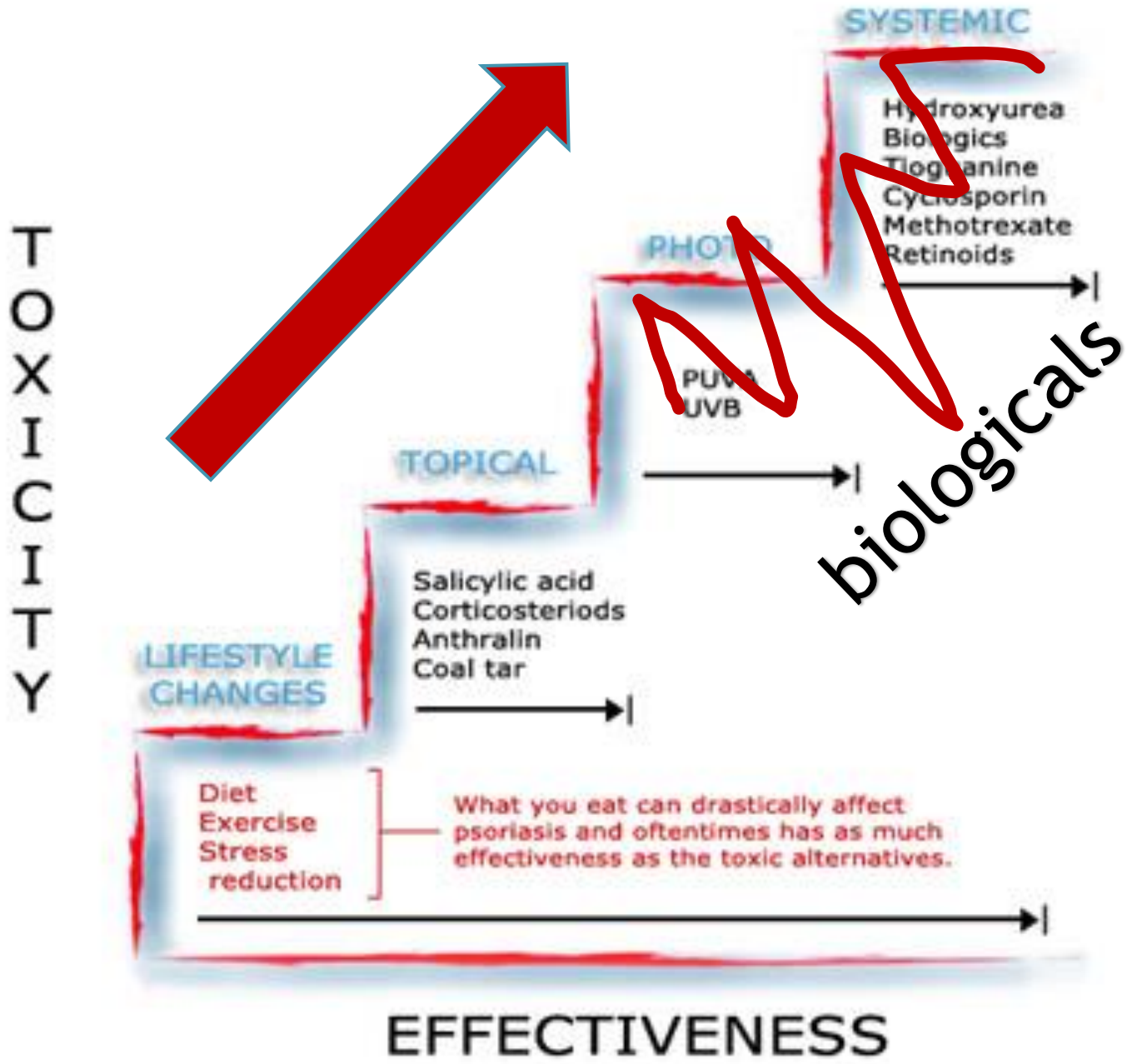
Approach \ IX

- Full history (triggering factors , comorbidities).
- Baseline IX.
- Weight/ BMI.
- BP.
- CXR ?
- PPD?
- Pregnanct test.
- Biopsy.
- Full skin examination .

First goals

- Reduce weight.
- Stop smoking/ alcohol.
- Nutrition.
- Destress.
- Treatment protocol.
- Complete skin exam.


PSORIASIS COVERAGE & SEVERITY
MILD
Less than 3% of the body has psoriasis
MODERATE
3%-10% of the body has psoriasis
SEVERE
More than 10% of the body has psoriasis
1% = Surface area of the hand


TOXICITY
SYSTEMIC
Hydroxyurea
Biologics
Thioguanine
Cyclosporin
Methotrexate
Retinoids
PHOTO
PUVA
UVB
TOPICAL
Salicylic acid
Corticosteriods
Anthralin
Coal tar
LIFESTYLE CHANGES
Diet
Exercise
Stress reduction
What you eat can drastically affect psoriasis and oftentimes has as much effectiveness as the toxic alternatives.
biologicals
EFFECTIVENESS

Overview of Treatment Options for Psoriasis

Lifestyle Changes

Goals are to improve skin appearance and decrease itch

- Moisturizer use
- Brief periods of sun exposure
- Smoking cessation
- Weight loss
- Reduced alcohol consumption
- Stress management
- Avoidance of skin trauma

Topical Therapies

- Corticosteroids
- Keratolytics
- Vitamin D analogs
- Tar-based shampoos and creams
- Calcineurin inhibitors
- Retinoids

Oral Systemic Therapies

- Methotrexate
- Cyclosporine
- Acitretin

Biologic Therapies

Topical treatment

- Same rule applies to all dermatologic conditions.
- Finger tip unit.
- Day off regimen.
- Site appropriate potency.

Phototherapy

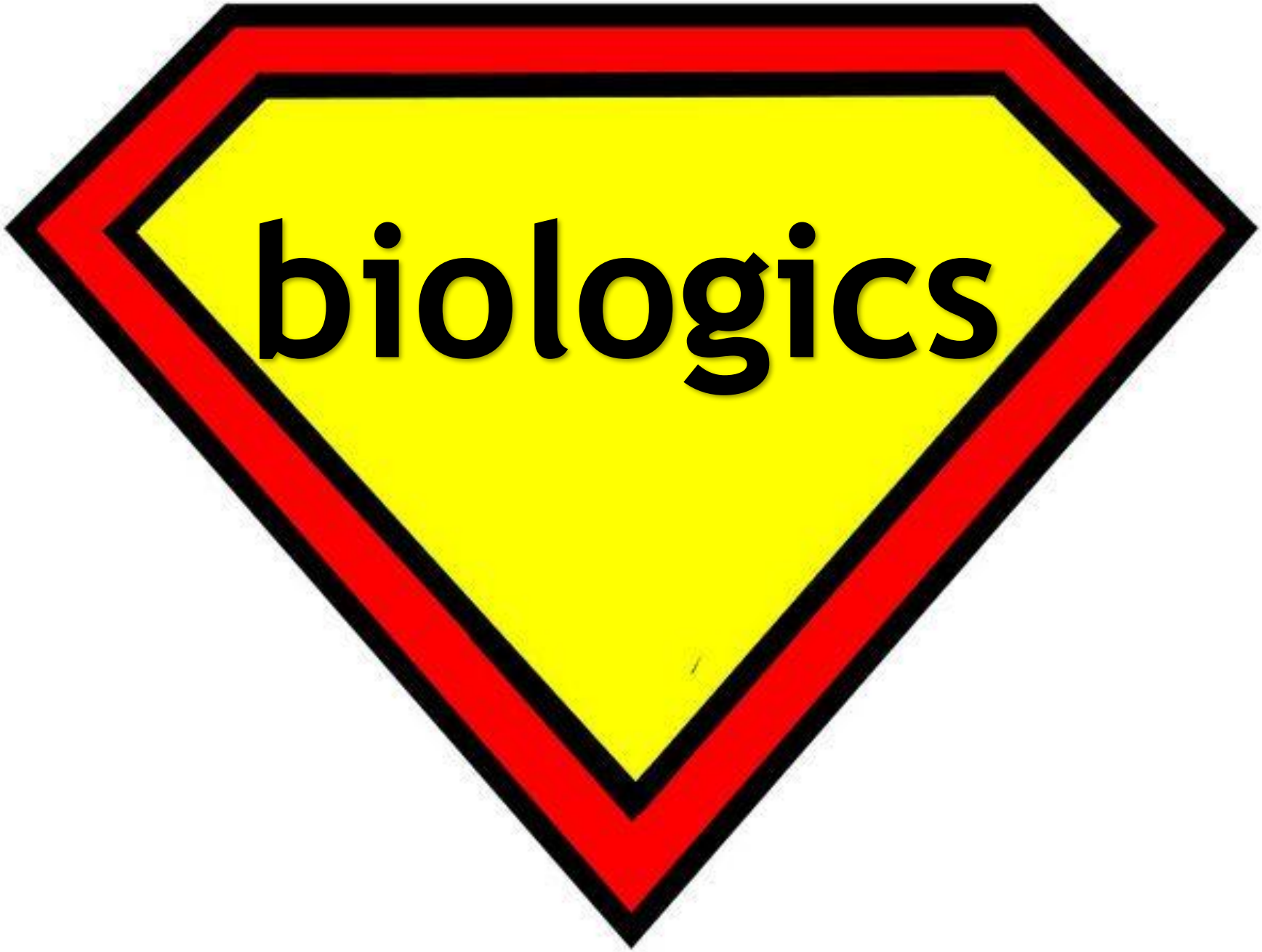
- Unknown mechanism.
- 308-310 UVB.
- UVA.
- UVA +psoralen : PUVA.

UVB:

- Category B.
- 3 session / week.
- Protect eyes and genitals.
- Come with clean skin.

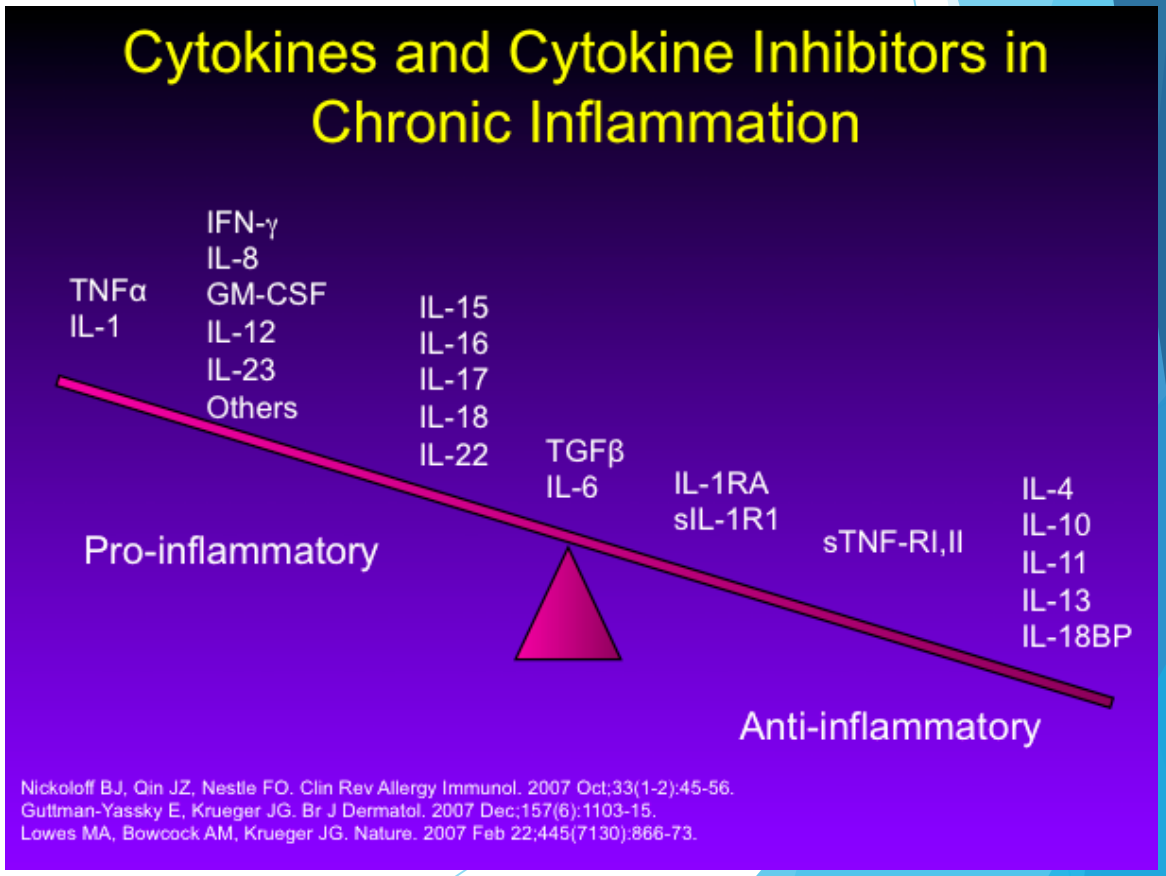
Systemic treatment

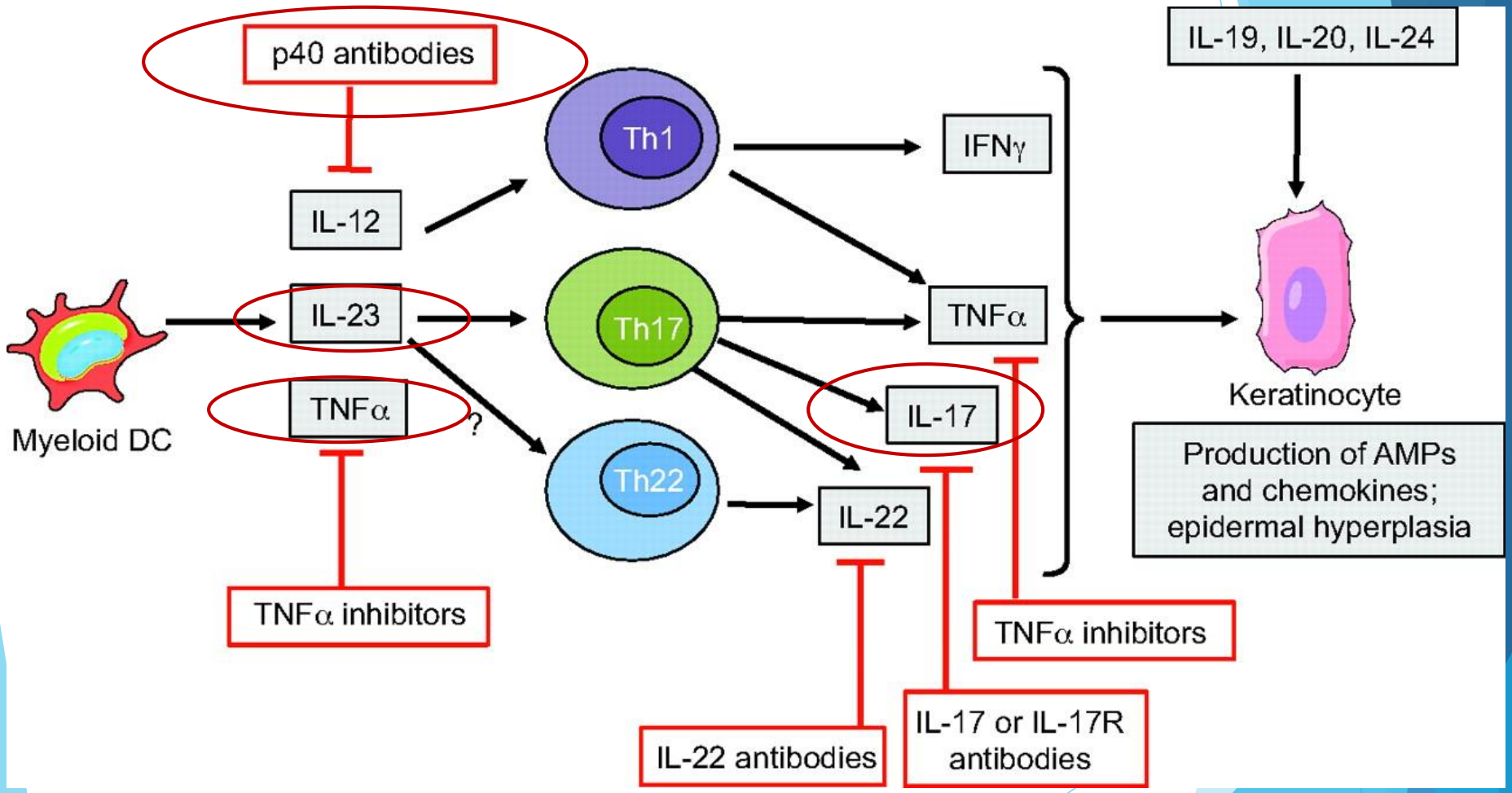
- Methotrexate.
- Cyclosporin.
- Neotagazone.

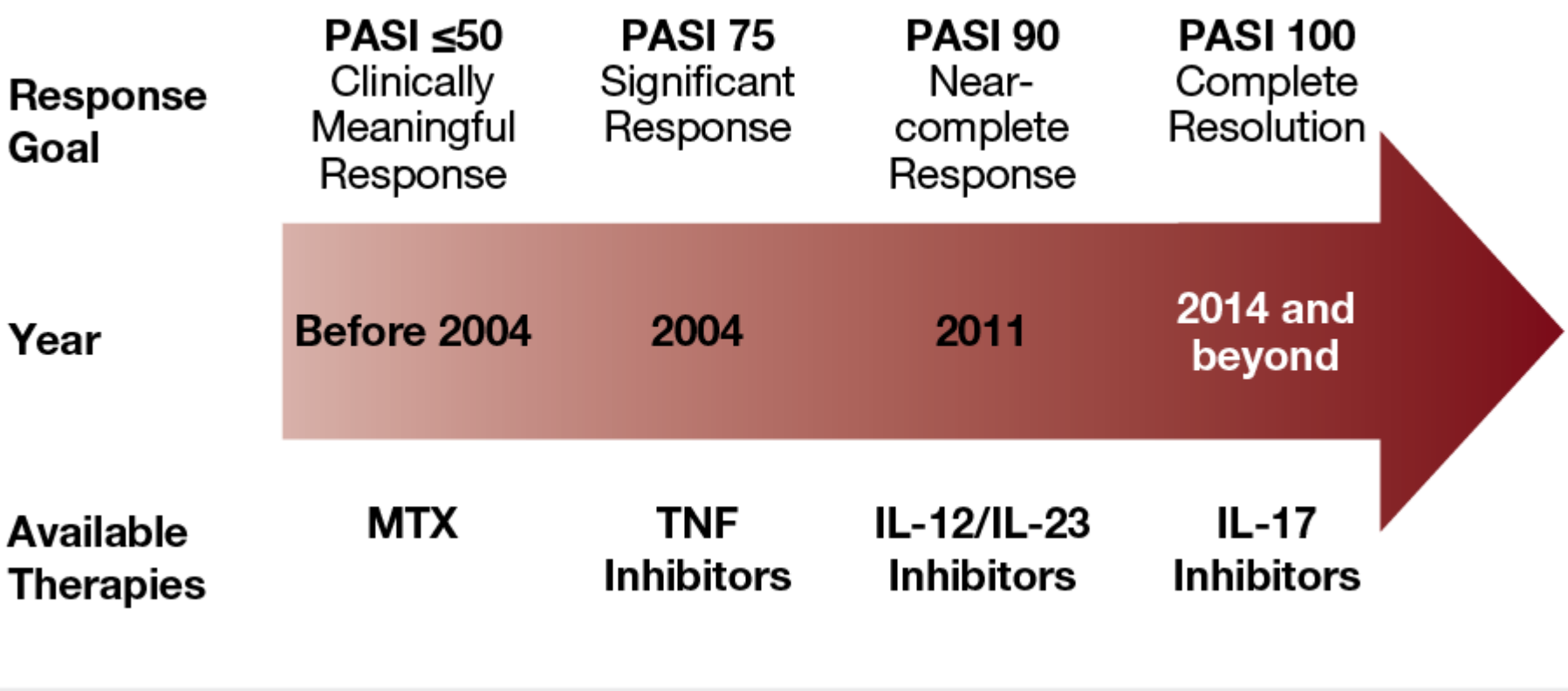

biologics

Biologics

- medication that is tailored to specifically target an immune or genetic mediator of disease.




p40 antibodies
IL-12
IL-23
TNFα
?
Myeloid DC
Th1
Th17
Th22
IFNγ
TNFα
IL-17
IL-22
TNFα inhibitors
IL-22 antibodies
IL-17 or IL-17R antibodies
TNFα inhibitors
IL-19, IL-20, IL-24
Keratinocyte
Production of AMPs and chemokines; epidermal hyperplasia


Response Goal
PASI ≤50 Clinically Meaningful Response
PASI 75 Significant Response
PASI 90 Near-complete Response
PASI 100 Complete Resolution
Year
Before 2004
2004
2011
2014 and beyond
Available Therapies
MTX
TNF Inhibitors
IL-12/IL-23 Inhibitors
IL-17 Inhibitors

indications

- 10% BSA.
- Severe psych. Impact.
- Faliure of other Rx.
- Unablity to use other Rx.
- Pustular psoriasis.
- Nail psoriasis.
- Psoriatic arthritis.
- Erythrodermic psoriasis.

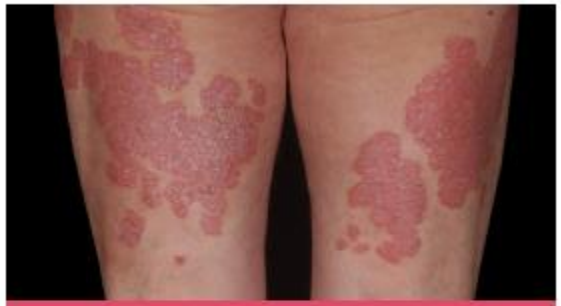
Baseline investigations.

- Full history : CHF, CA, MS, infection.
- CBC, LFT, RFT, Lipids.
- Serology : ANA, Hep, HIV, VDRL, RF.
- CXR.
- PPD.
- Complete skin examination.

dosing

- Enbrel : 50mg SC , twice /week.
- Humeria : 40mg SC every 2 weeks.
- Remicade : 5 mg/kg IV, every 6-8 weeks.

IN PHASE III CLINICAL TRIALS PATIENTS TREATED WITH COSENTYX™ ACHIEVED PASI 90 AND PASI 100



BASELINE

The skin of a patient at baseline (week 0)

PASI 90

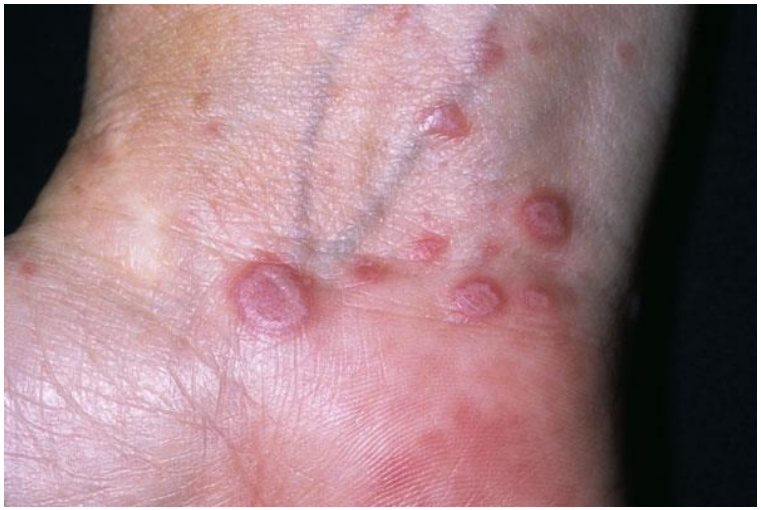
PASI 90, clear to almost clear skin[1], was achieved between week 0 and week 24

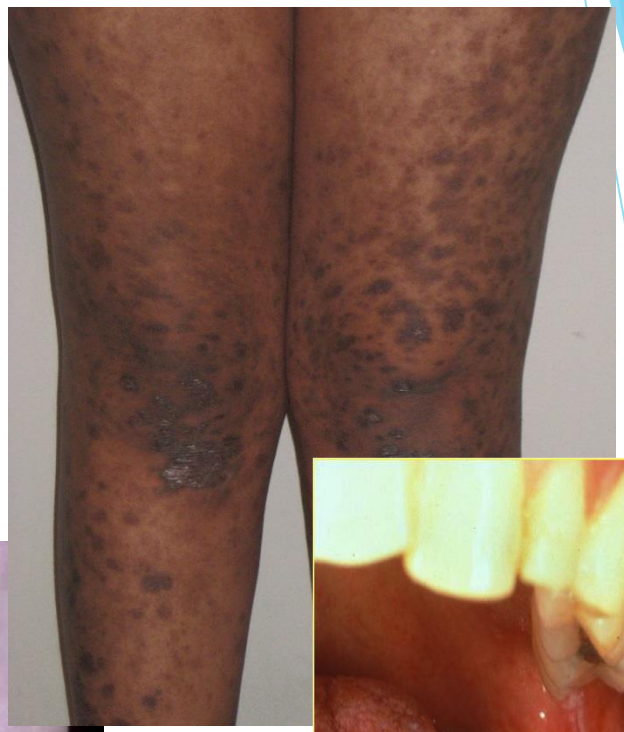
PASI 100

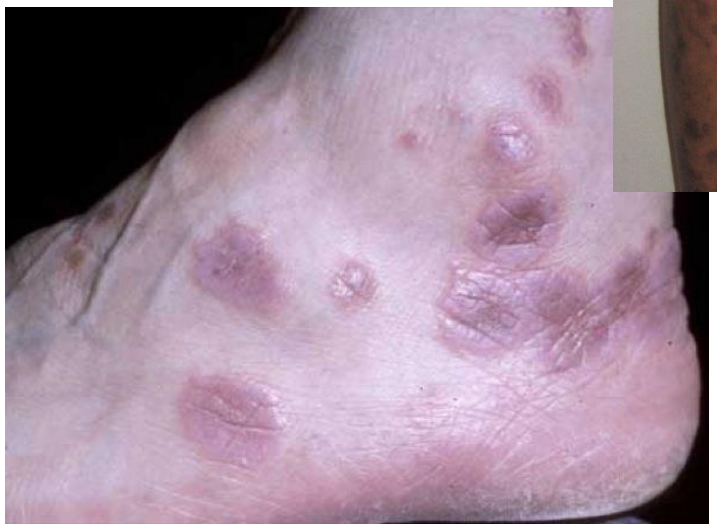
PASI 100, completely clear skin[2], can be seen at week 36

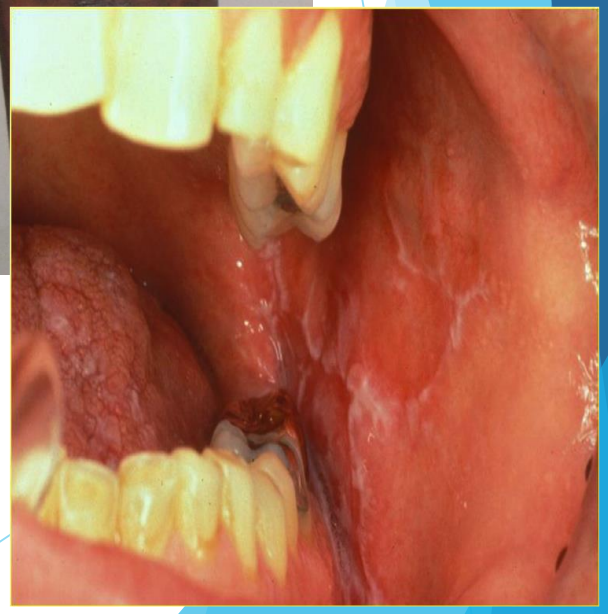
REFERENCES **1.** European Medicines Agency (EMA) Committee for Medicinal Products for Human Use (CHMP) Guidelines on clinical investigation of medicinal products indicated for the treatment of psoriasis. 2004. Available at: http://www.ema.europa.eu/docs/en_GB/document_library/Scientific_guideline/2009/09/WC500003329.pdf Accessed March, 2015. **2.** Thaci D, Blauvelt A, Reich K, et al. Secukinumab is superior to ustekinumab in clearing skin of subjects with moderate to severe plaque psoriasis: 16 week results from the CLEAR study. American Academy of Dermatology 73rd Annual Meeitng. San Francisco, California. 20th March.

Lichen planus



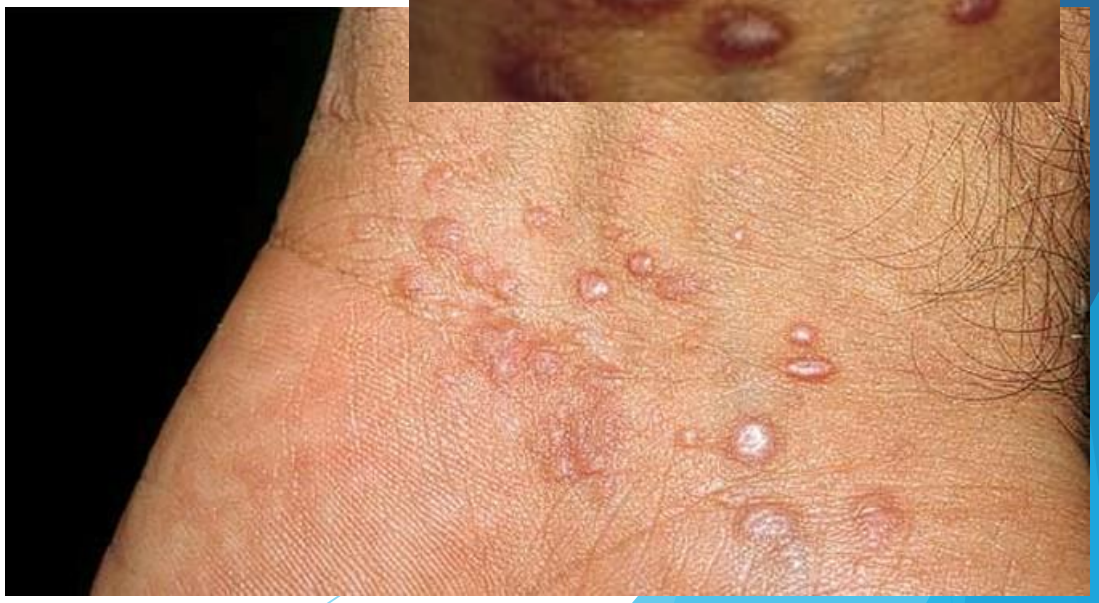






Lihen planus

- Multifactorial cell mediated autoimmune dise
- Itchy.
- Described as the 5 Ps:
- **P:** planar
- **P:** polygonal
- **P:** pruritic
- **P:** purple
- **P:** papular

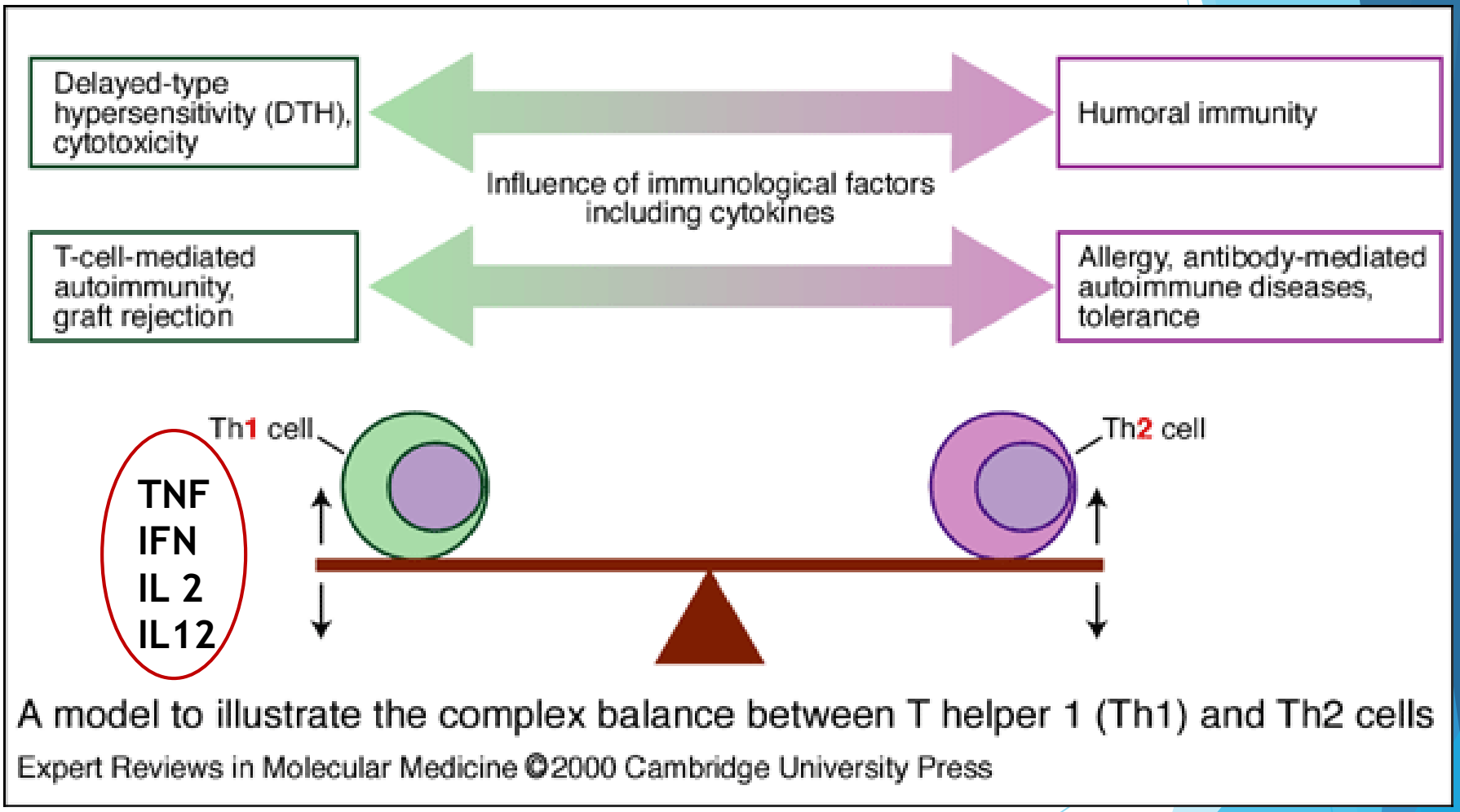


Associations

- ulcerative colitis.
- alopecia areata.
- Vitiligo.
- Dermatomyositis.
- morphea.
- lichen sclerosis.
- myasthenia gravis.
- hepatitis C virus infection.
- chronic active hepatitis.
- primary biliary cirrhosis.
- Drugs.

subtypes

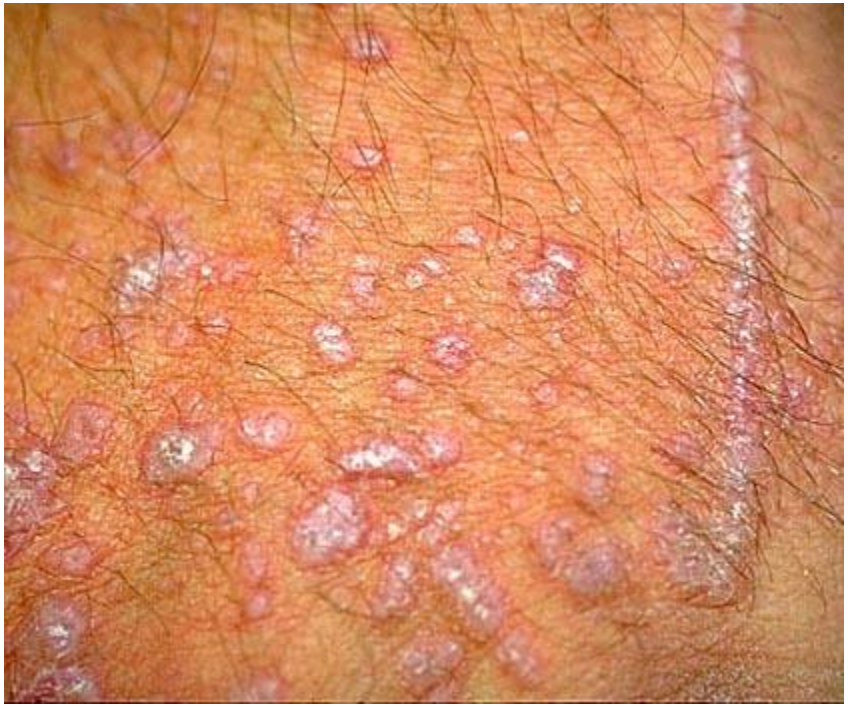
- Hypertrophic lichen planus
- Atrophic lichen planus
- Erosive/ulcerative lichen planus
- Follicular lichen planus (lichen planopilaris)
- Annular lichen planus
- Linear lichen planus
- Vesicular and bullous lichen planus
- Actinic lichen planus
- Lichen planus pigmentosus
- Lichen planus pemphigoide
- 2o nail dystrophy.

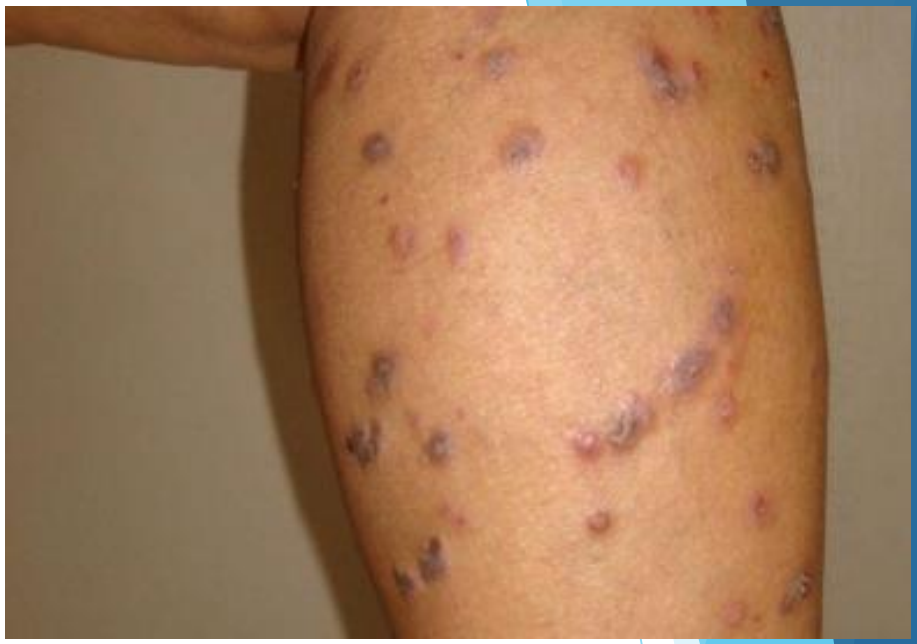


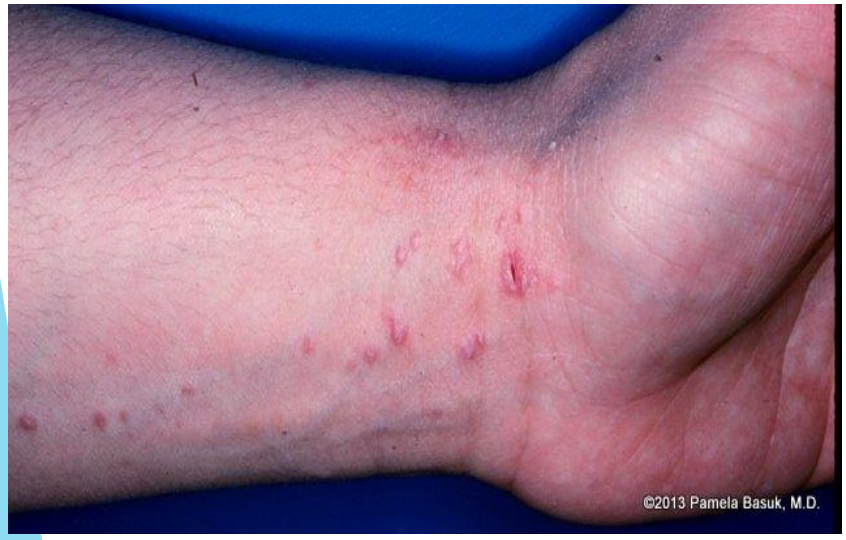
A model to illustrate the complex balance between T helper 1 (Th1) and Th2 cells

Presentation

- Skin.
- Mucous membranes.
- Genitals.
- Nails.
- Hair.



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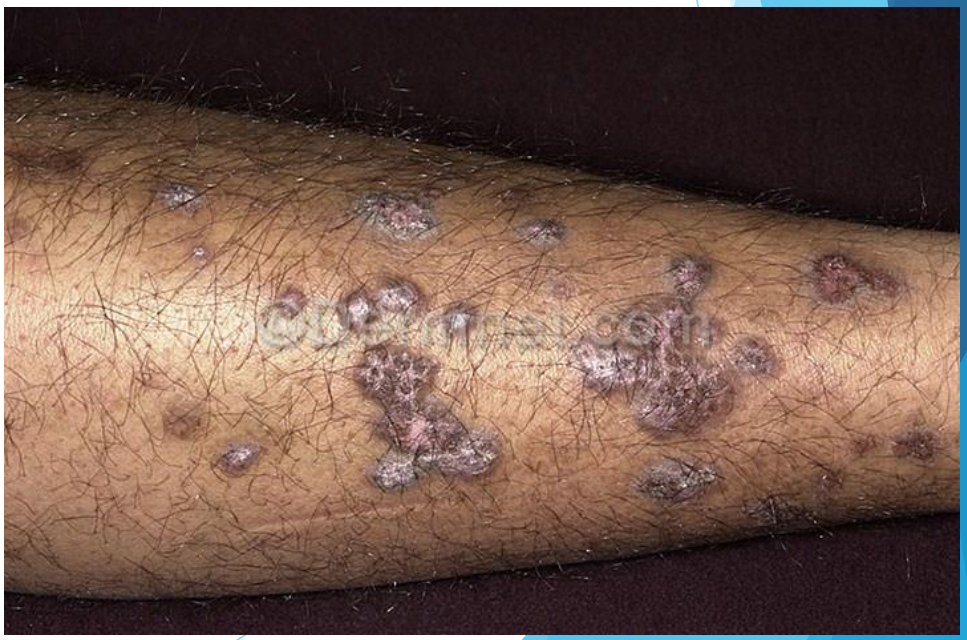

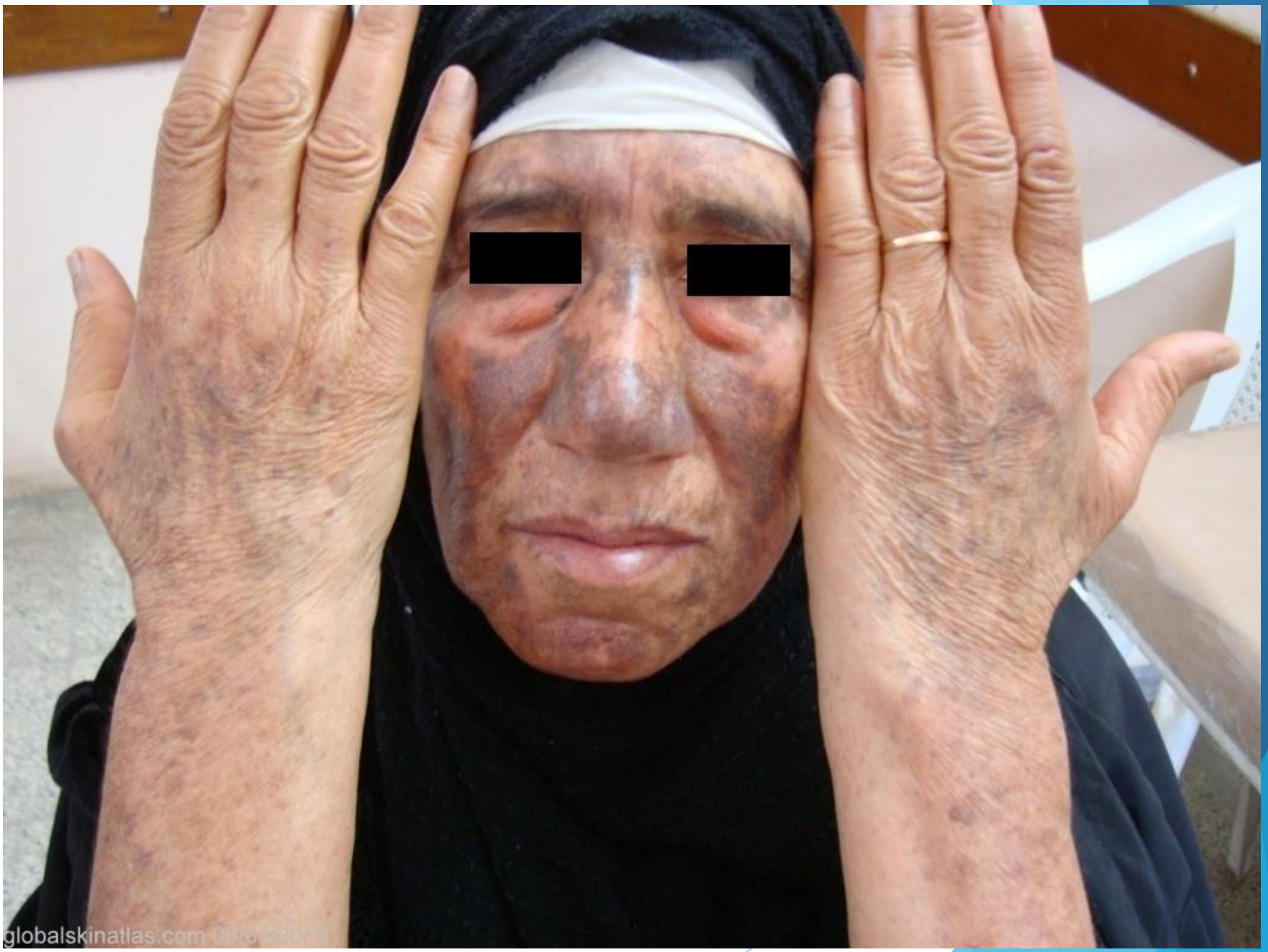
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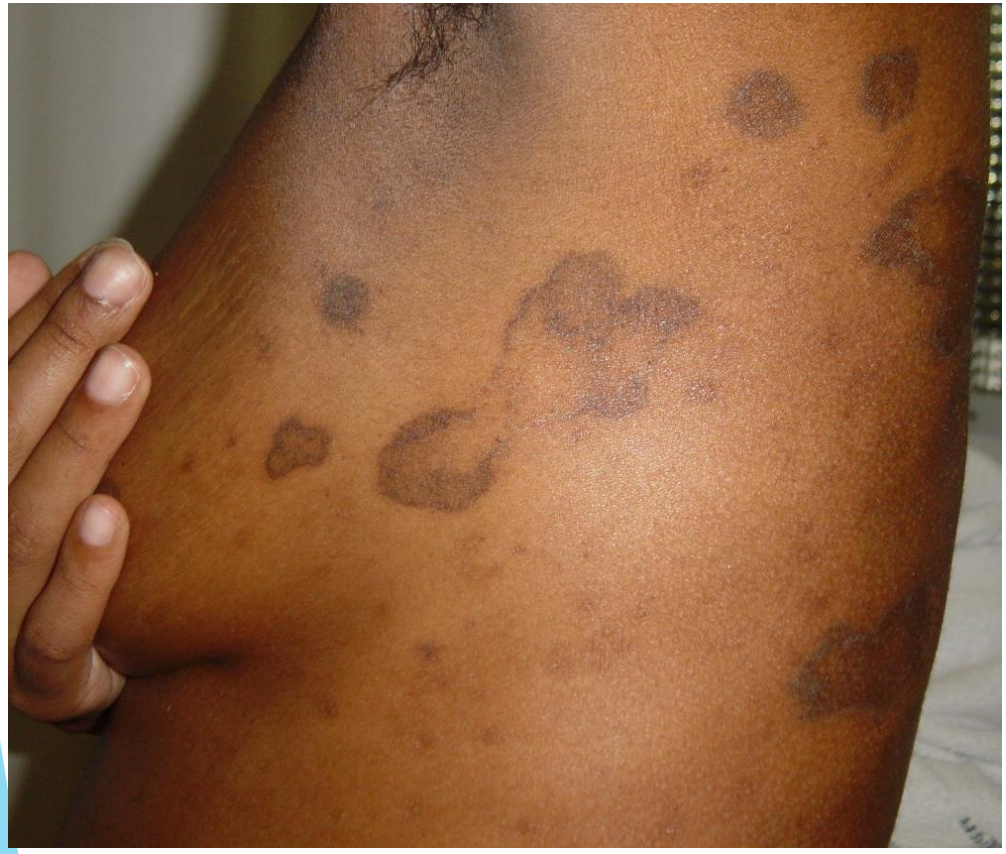

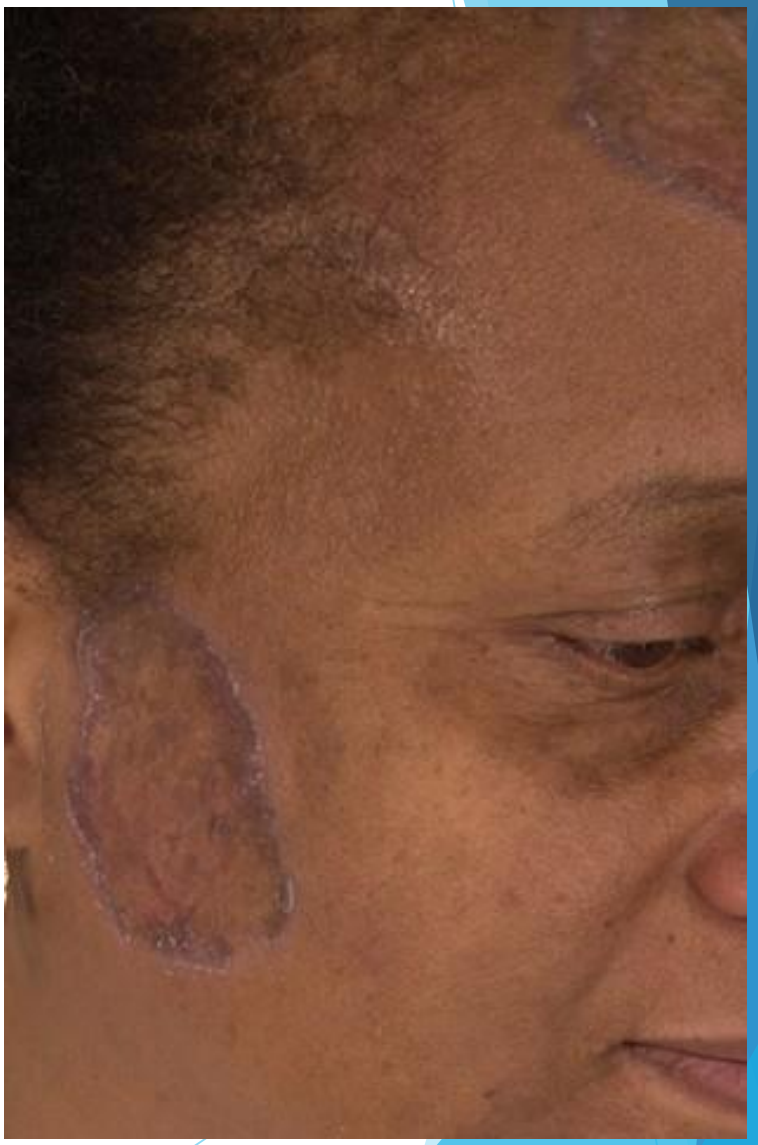

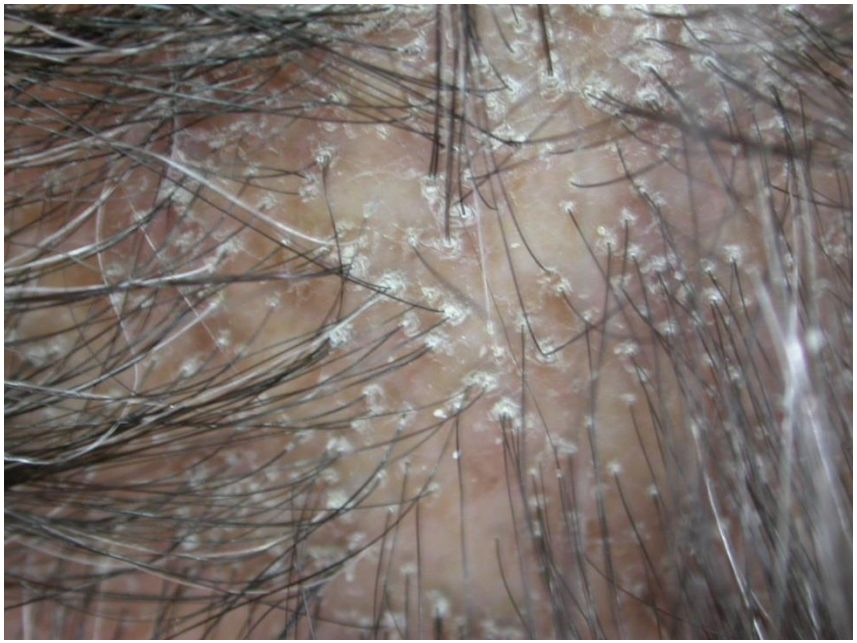

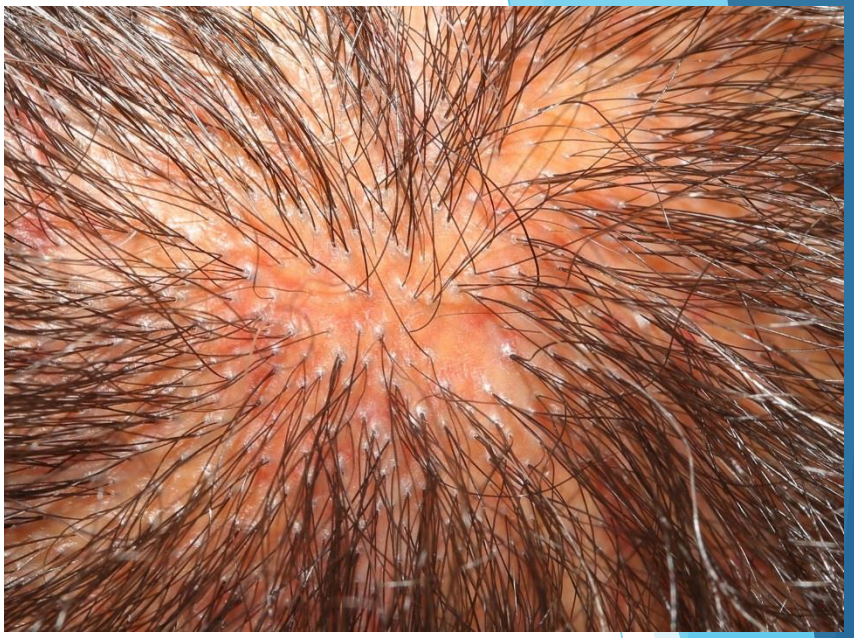

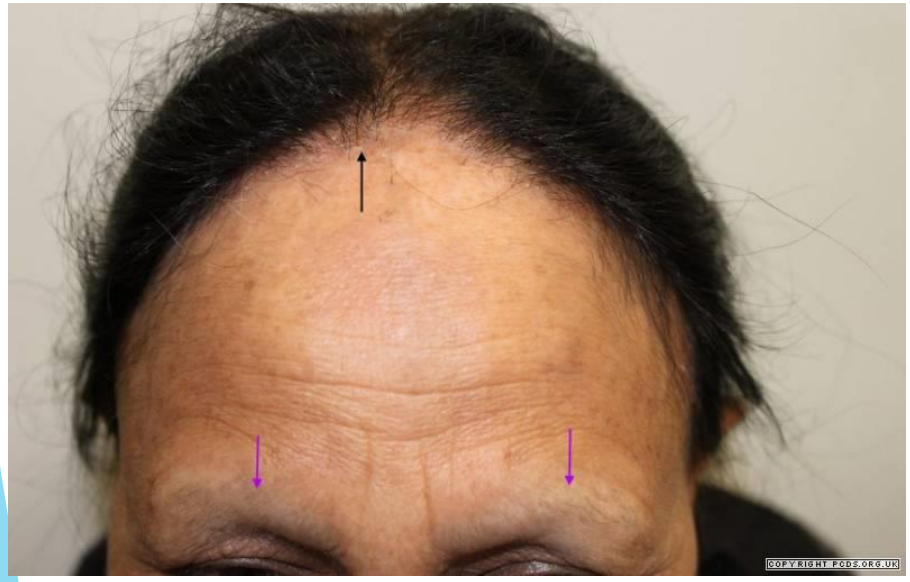
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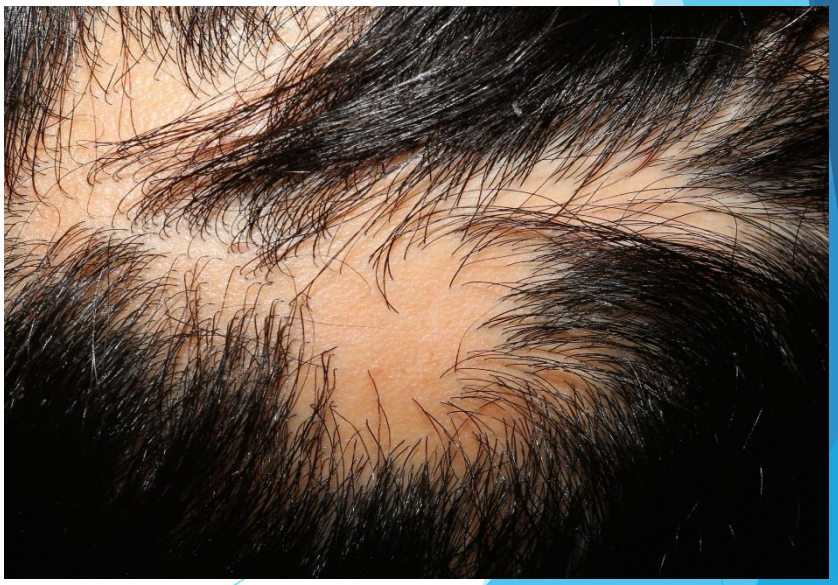
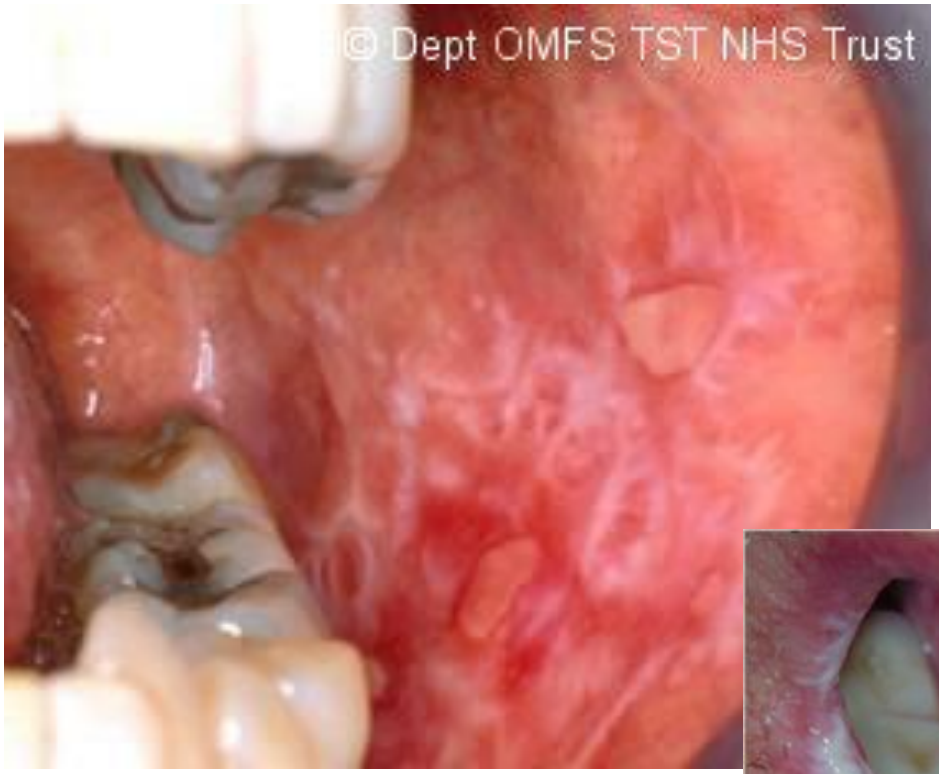
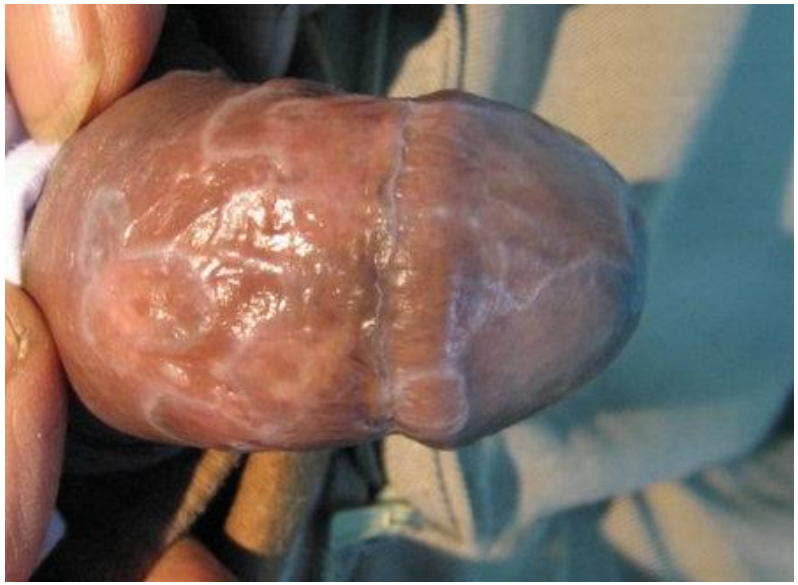
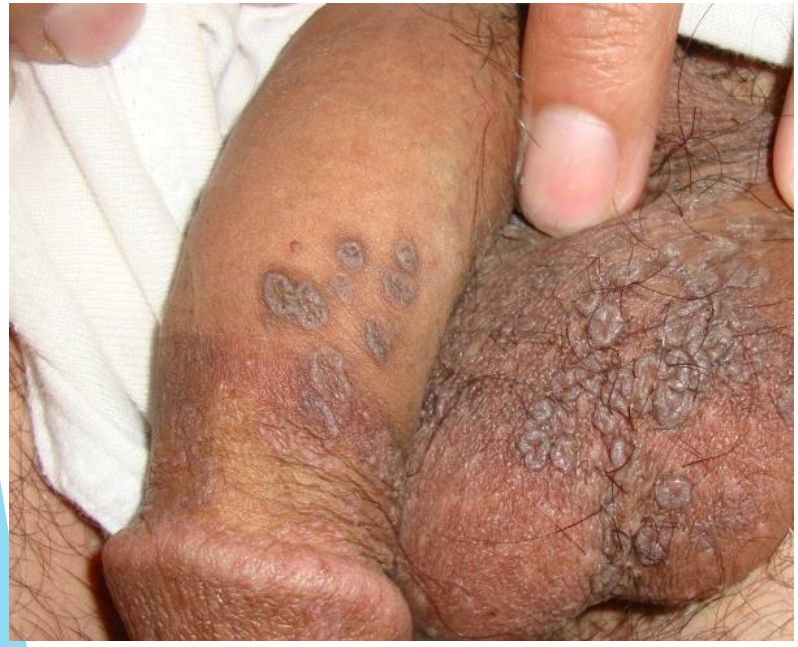
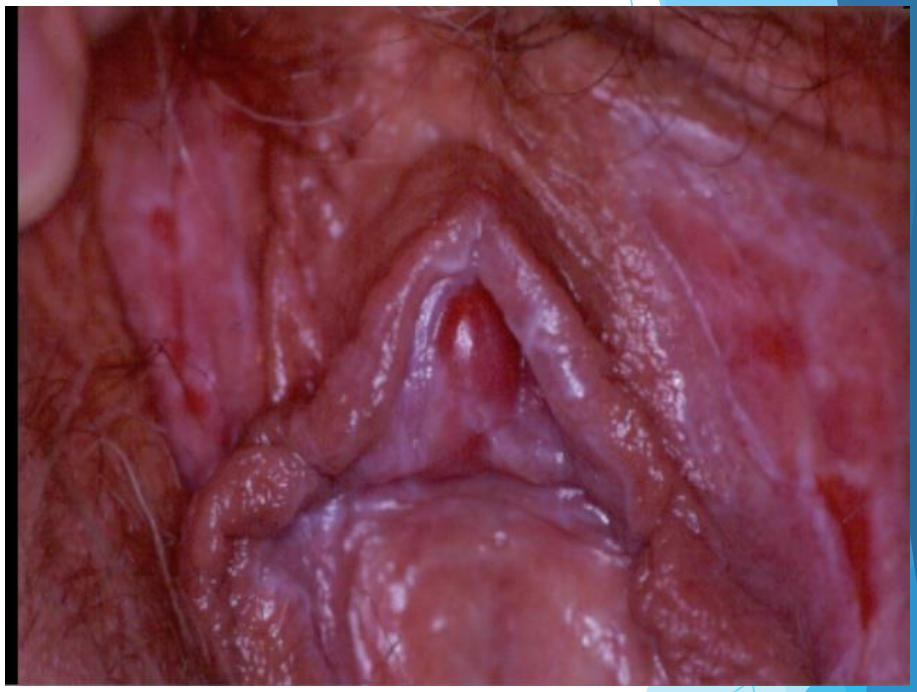


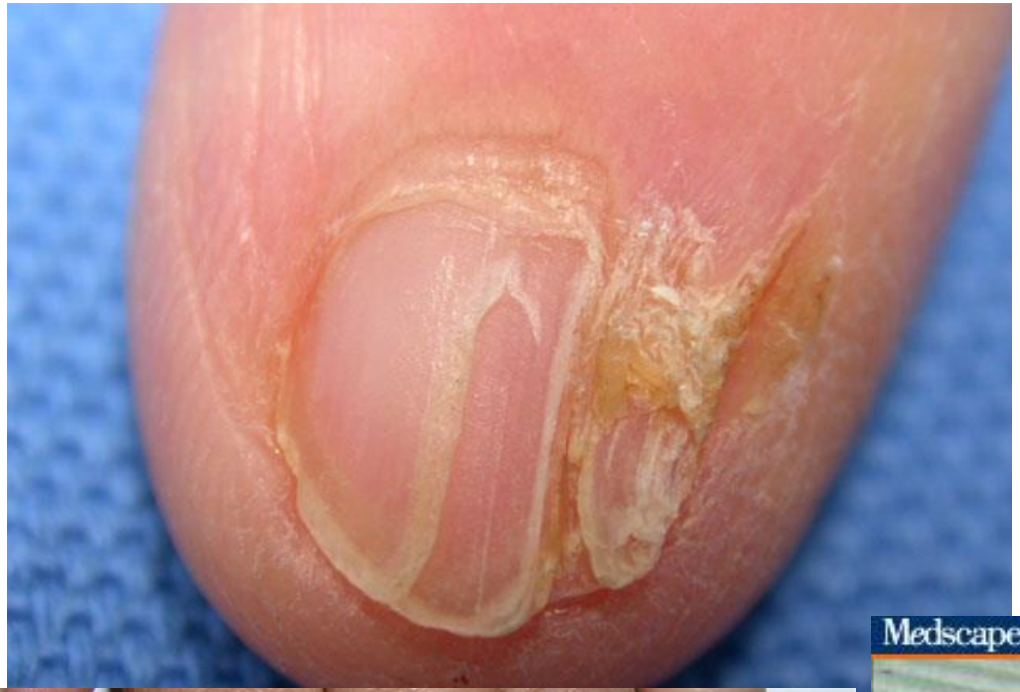


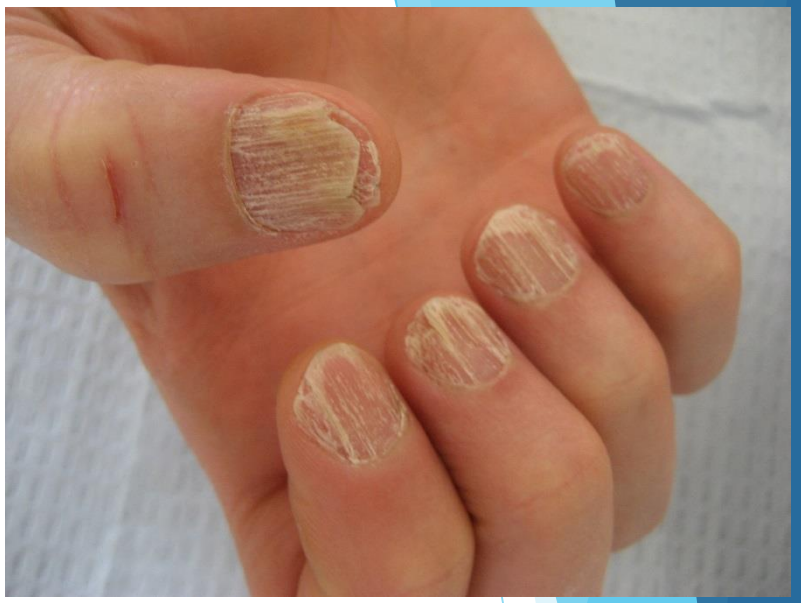
- Ulcer.
- Striaes.
- Bulla.
- Papules.

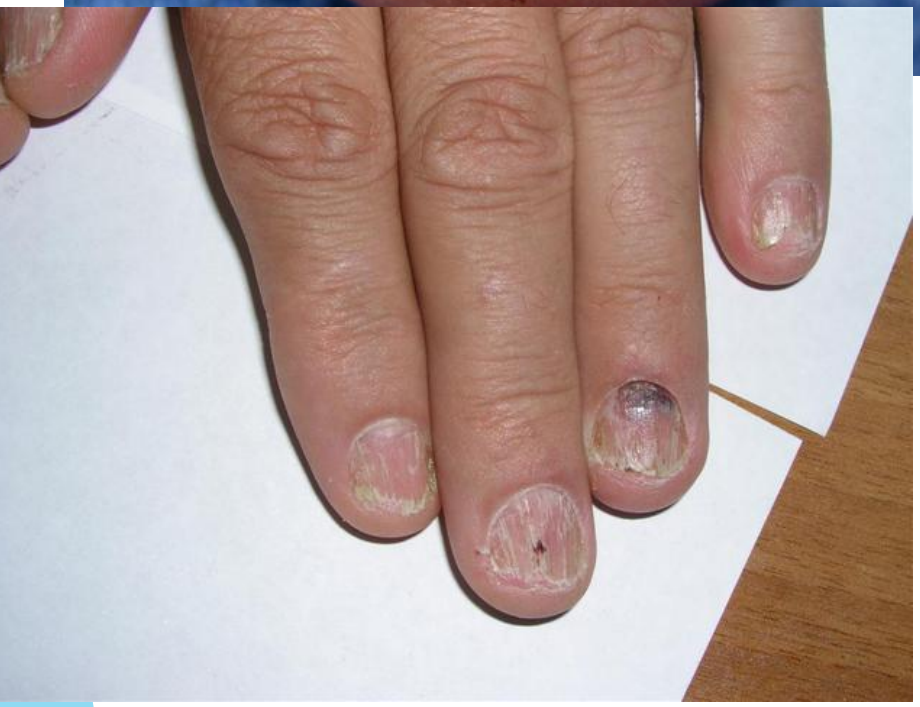


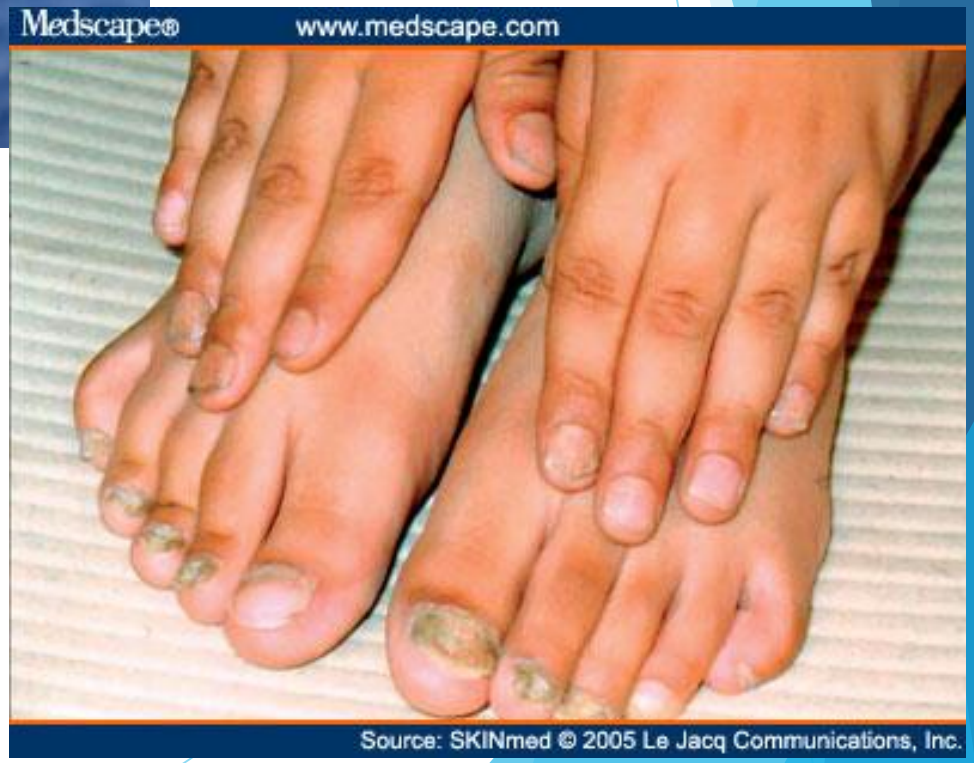








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Approach

- Full history (associations or triggers).
- Full examination.
- CBC, ESR.
- Ferritin.
- G6PD.
- Hepatitis profile.
- H.Pylori ??
- Biopsy.

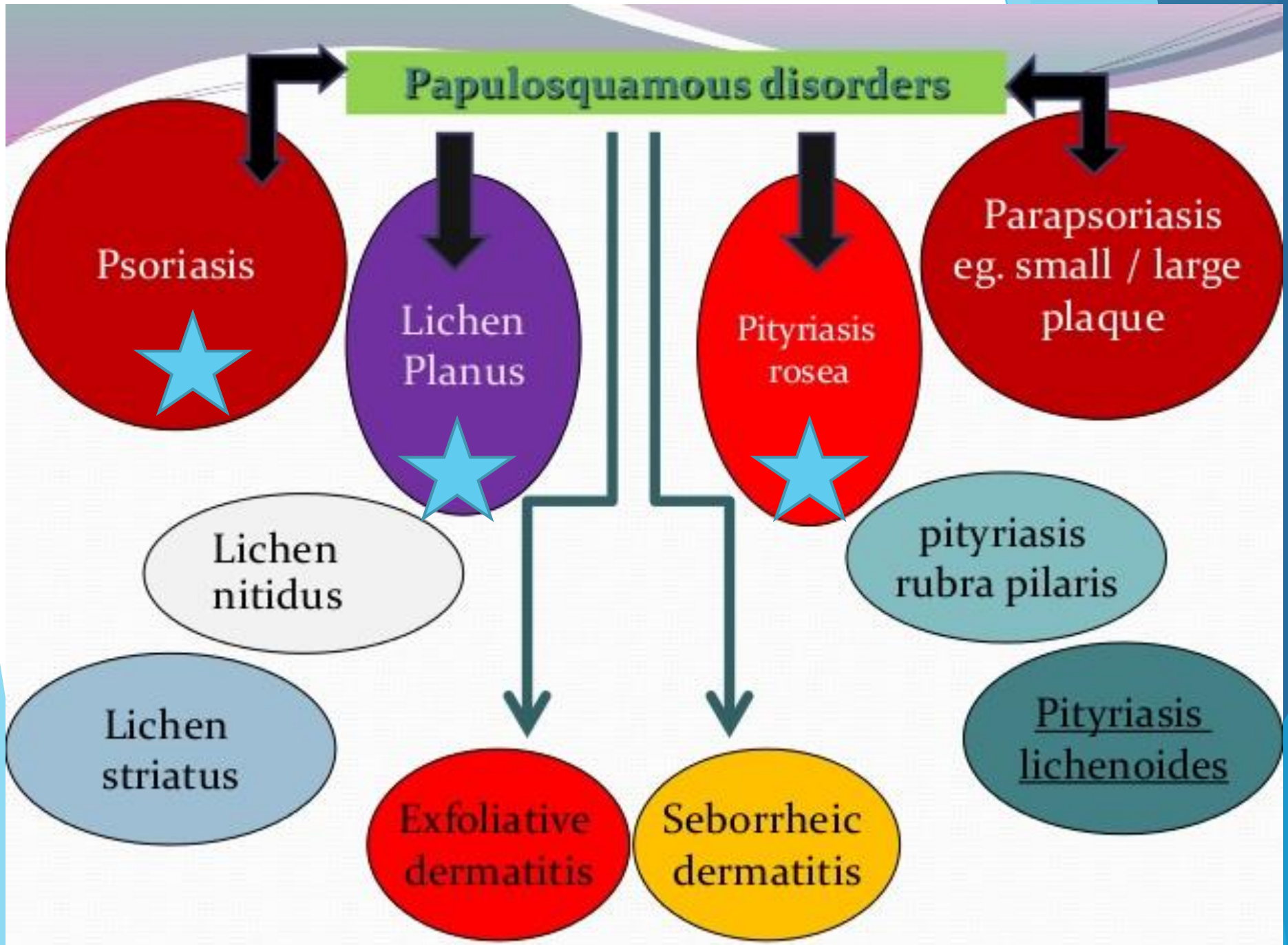
Treatment

- Get rid of triggers.
- Treat underlying factors.
- Site specific approach.

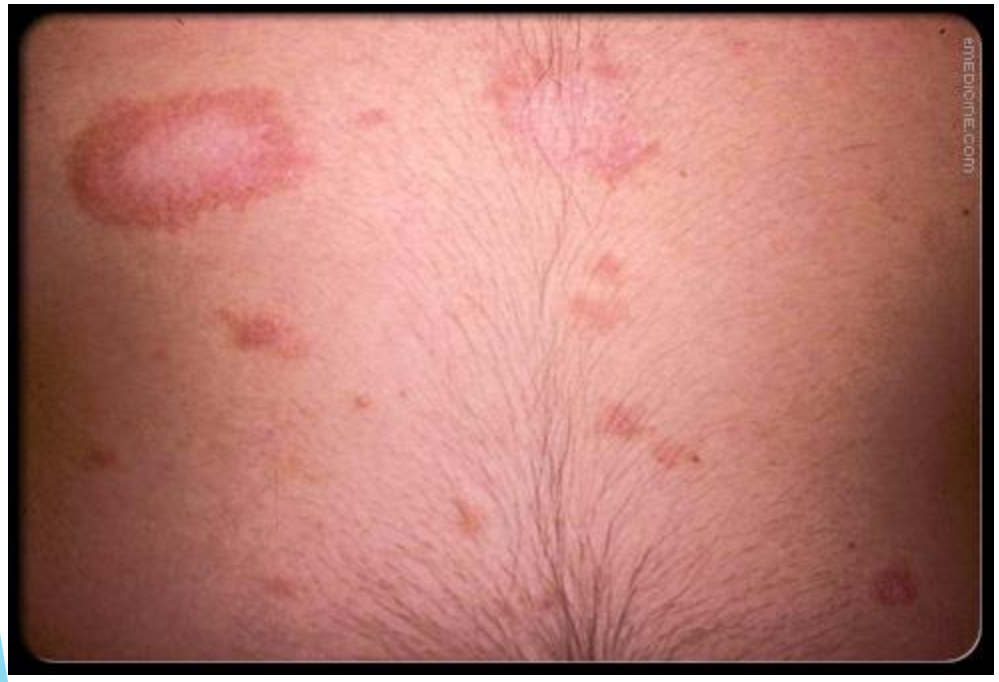
Classical LP treatment

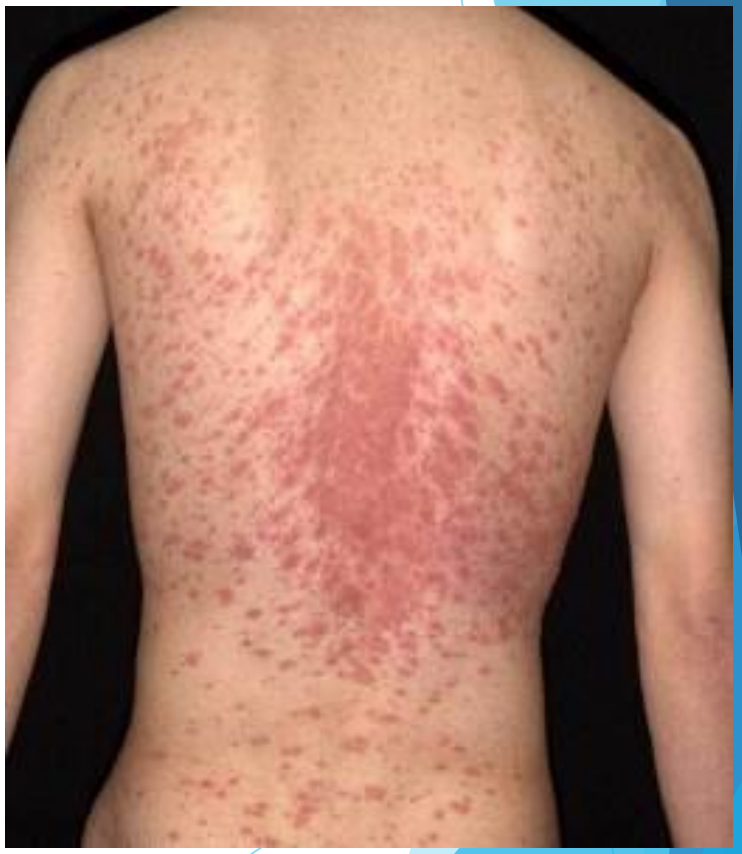
- Topical steroid.
- Topical imunemoulators.
- Phototherpay. (NBUVB, PUVA).
- Systemic treatment :

1. Methotrexate.
2. Cyclosporin.
3. Neotagazone.
4. Dapsone/colchicine.
5. Metronidazole.
6. Chloroquine.
7. Biologics??


Papulosquamous disorders
Psoriasis
Lichen Planus
Pityriasis rosea
Parapsoriasis eg. small / large plaque
Lichen nitidus
pityriasis rubra pilaris
Lichen striatus
Pityriasis lichenoides
Exfoliative dermatitis
Seborrheic dermatitis

Pityriasis Rosea





Pityriasis rosea

- Papulosquamous rash.
- May be associated with proceeding viral infection.

Causes

- Viral ??
- 1-2 weeks post URTI.

TABLE 1		
Human herpes virus 1	Herpes simplex type 1 (HSV-1)	Alpha
Human herpes virus 2	Herpes simplex type 2 (HSV-2)	Alpha
Human herpes virus 3	Varicella-zoster (VZV)	Alpha
Human herpes virus 4	Epstein-Barr (EBV)	Gamma
Human herpes virus 5	Cytomegalovirus (CMV)	Beta
Human herpes virus 6/7	Exanthum subitum Roseola infantum	Beta

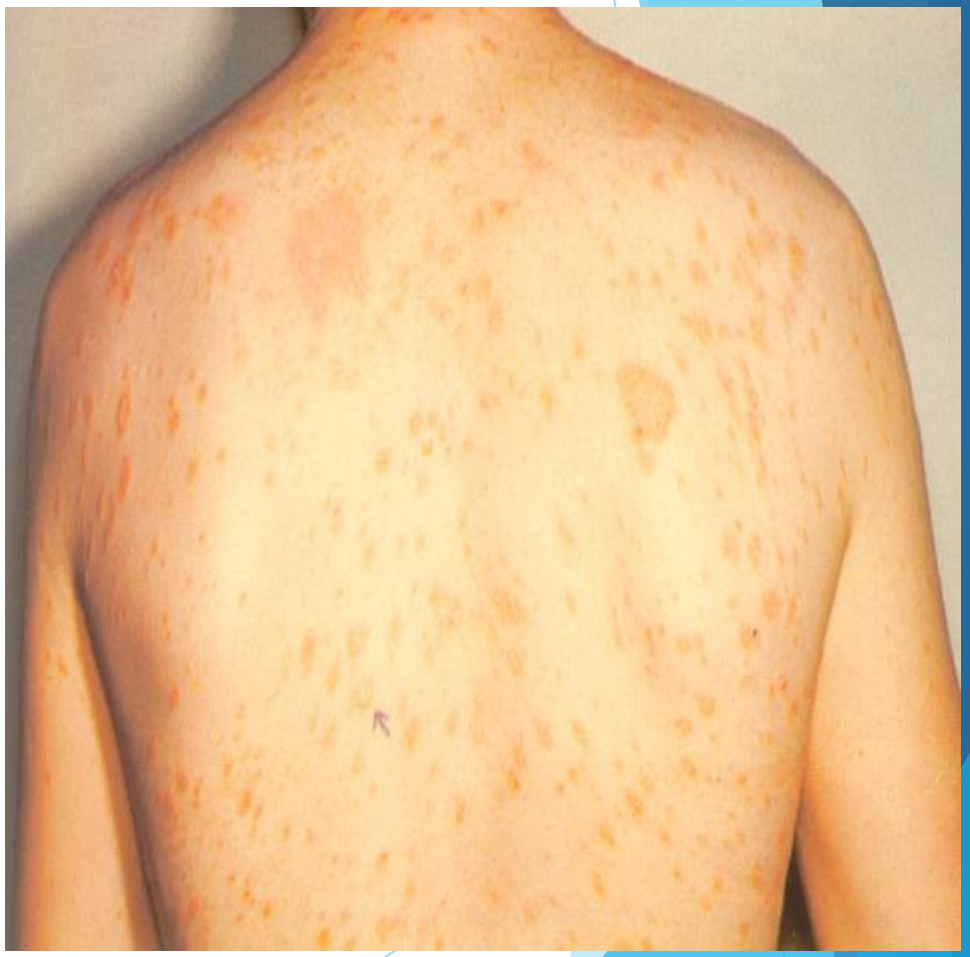
Causes

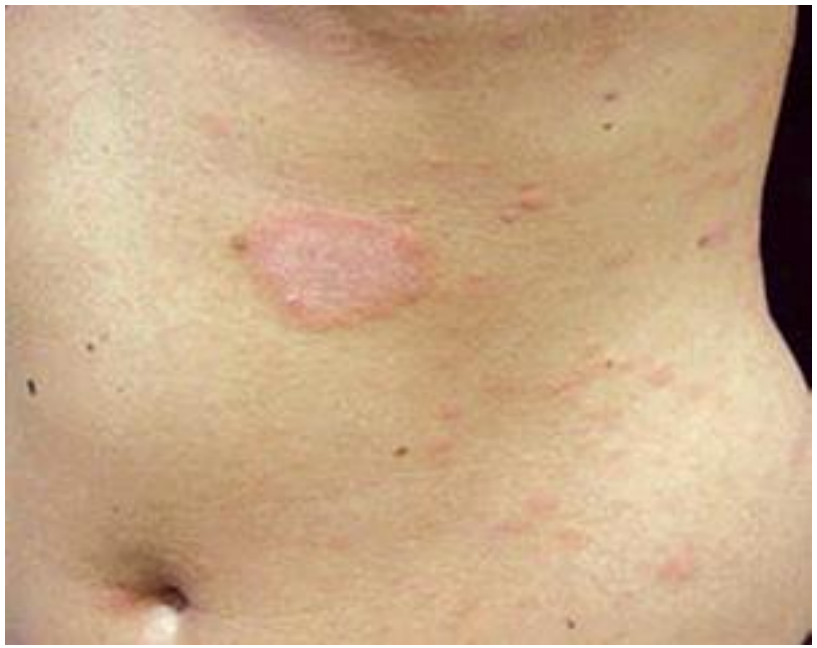
- Drugs ??

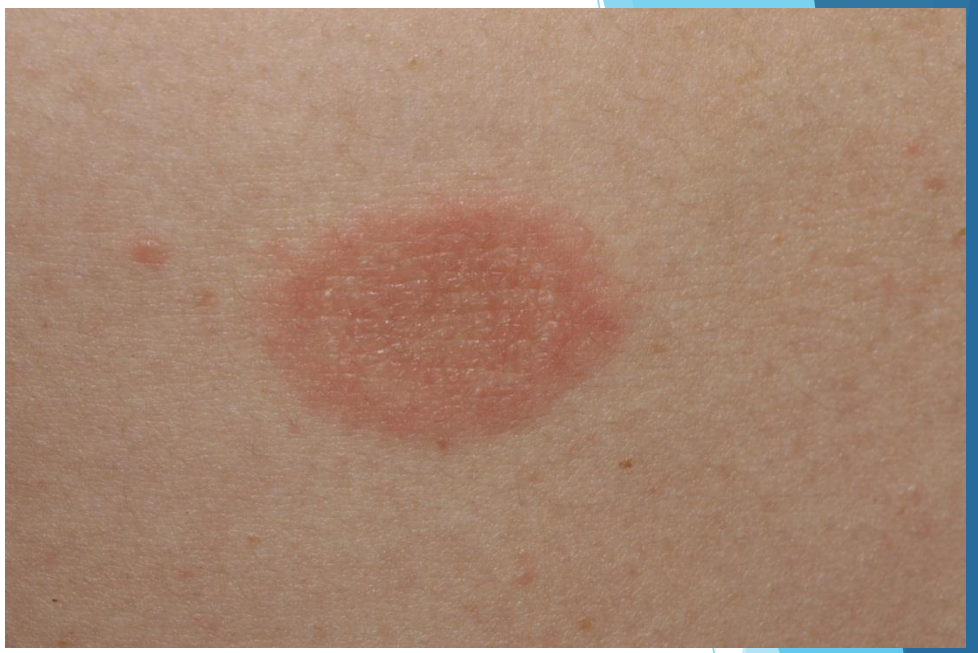
1. Gold.
2. ACEI.
3. NSAID.
4. hydrochlorothiazide.
5. metronidazole.
6. Terbinafine.

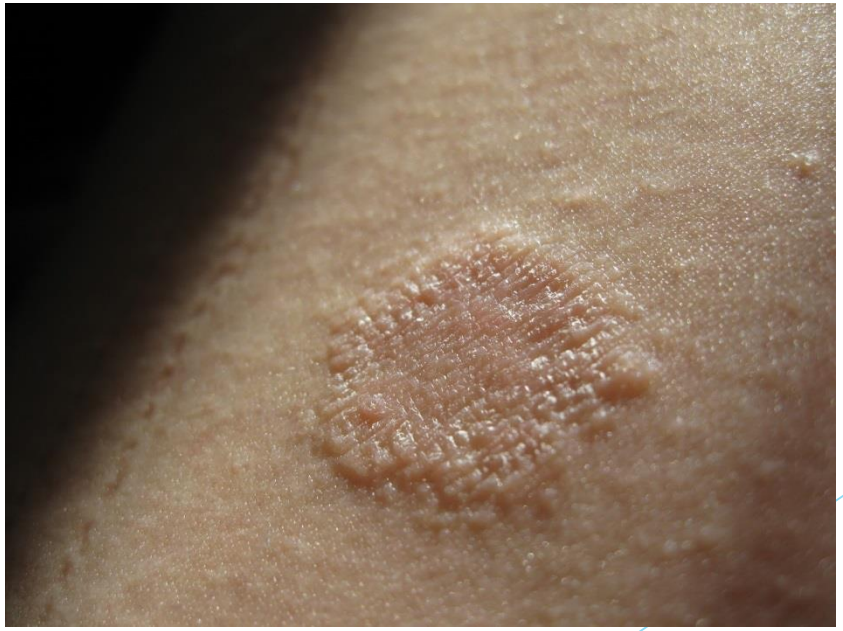
Clinical coaurse

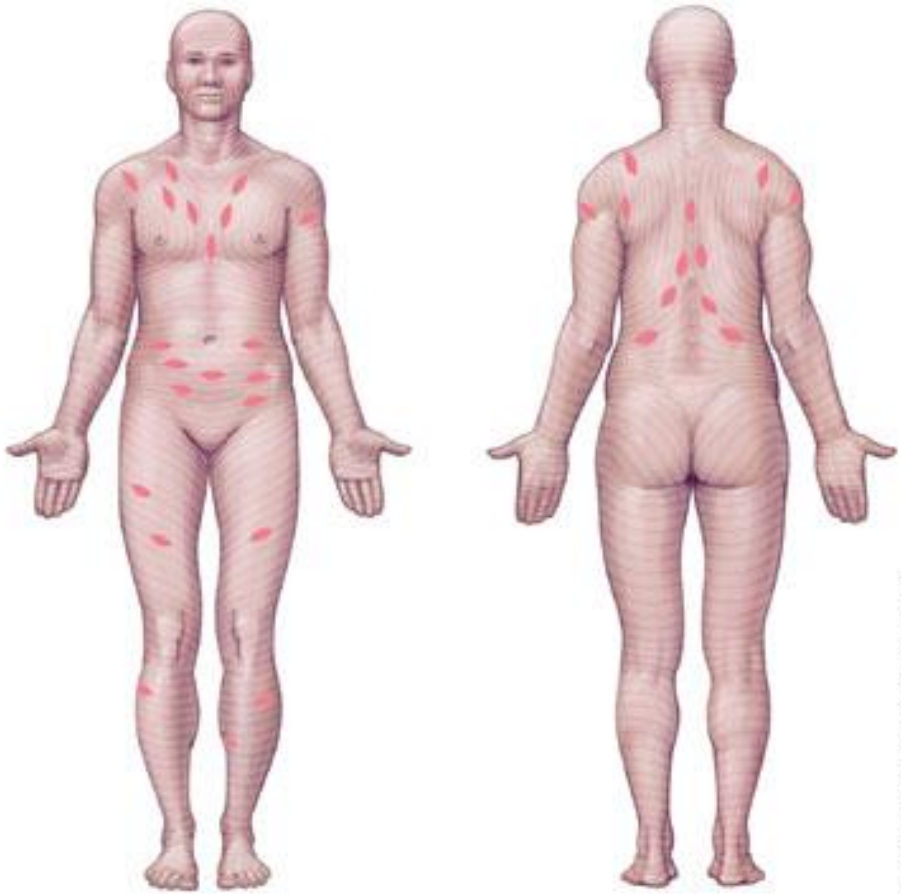
- URTI.
- 1-2 weeks : oval red single herald patch.
- Abortive PR.
- Calsscial PR with daughter lesions.
- Christmas tree pattern.







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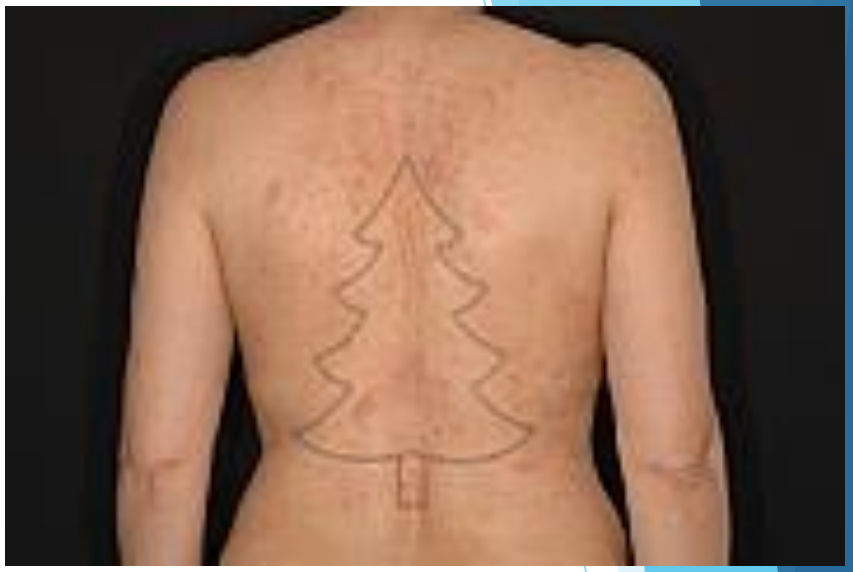
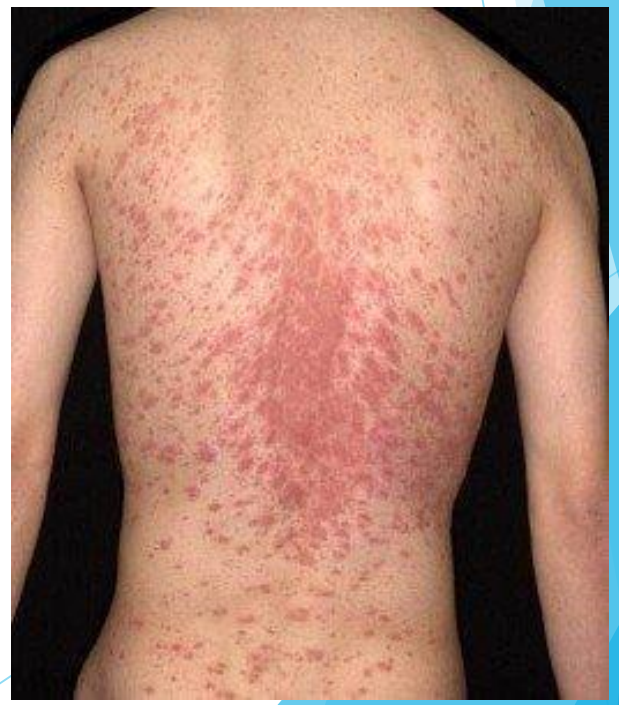
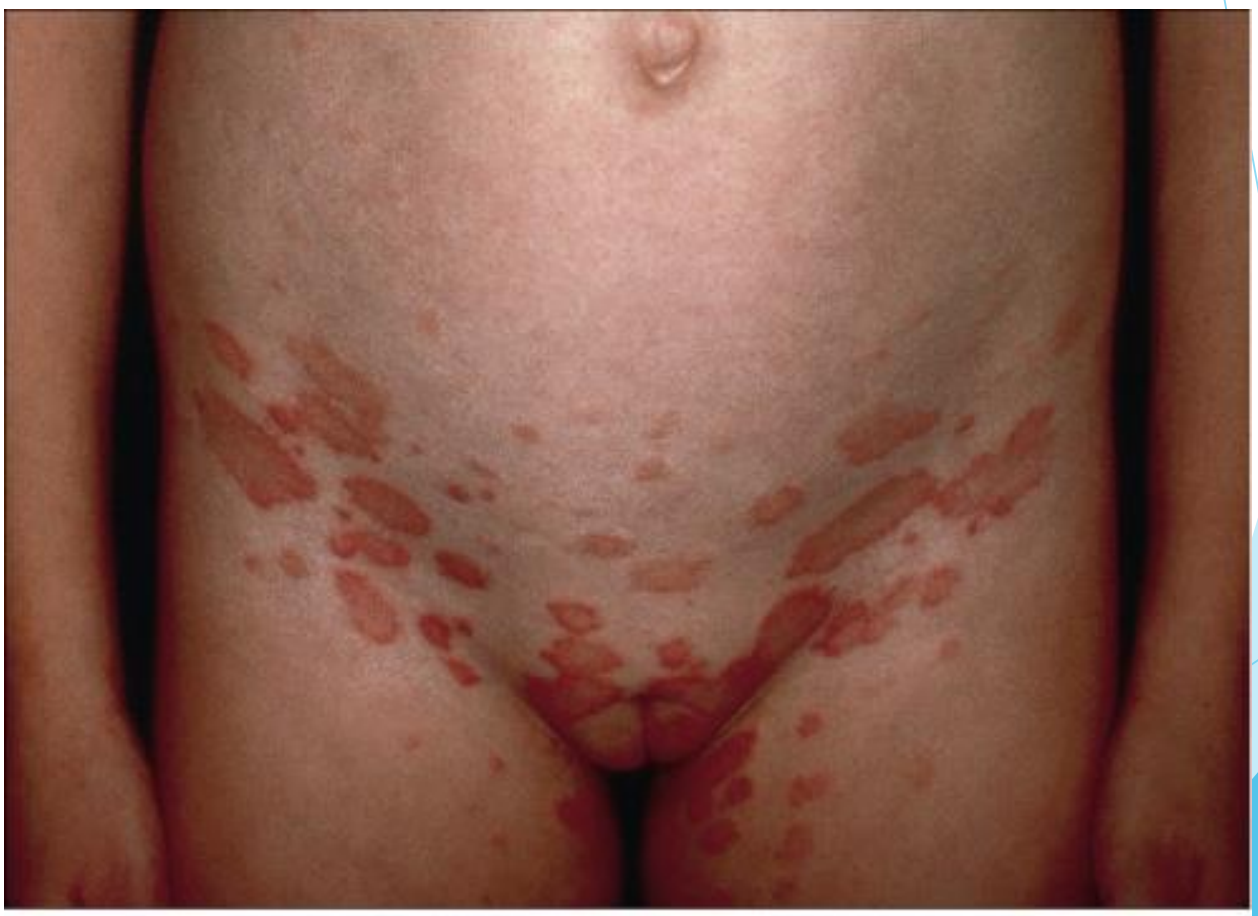




- Inverse PR.



Approach

- Full history.
- Biopsy.
- Serology ??
- Single lesion : always scrap.

Treatment

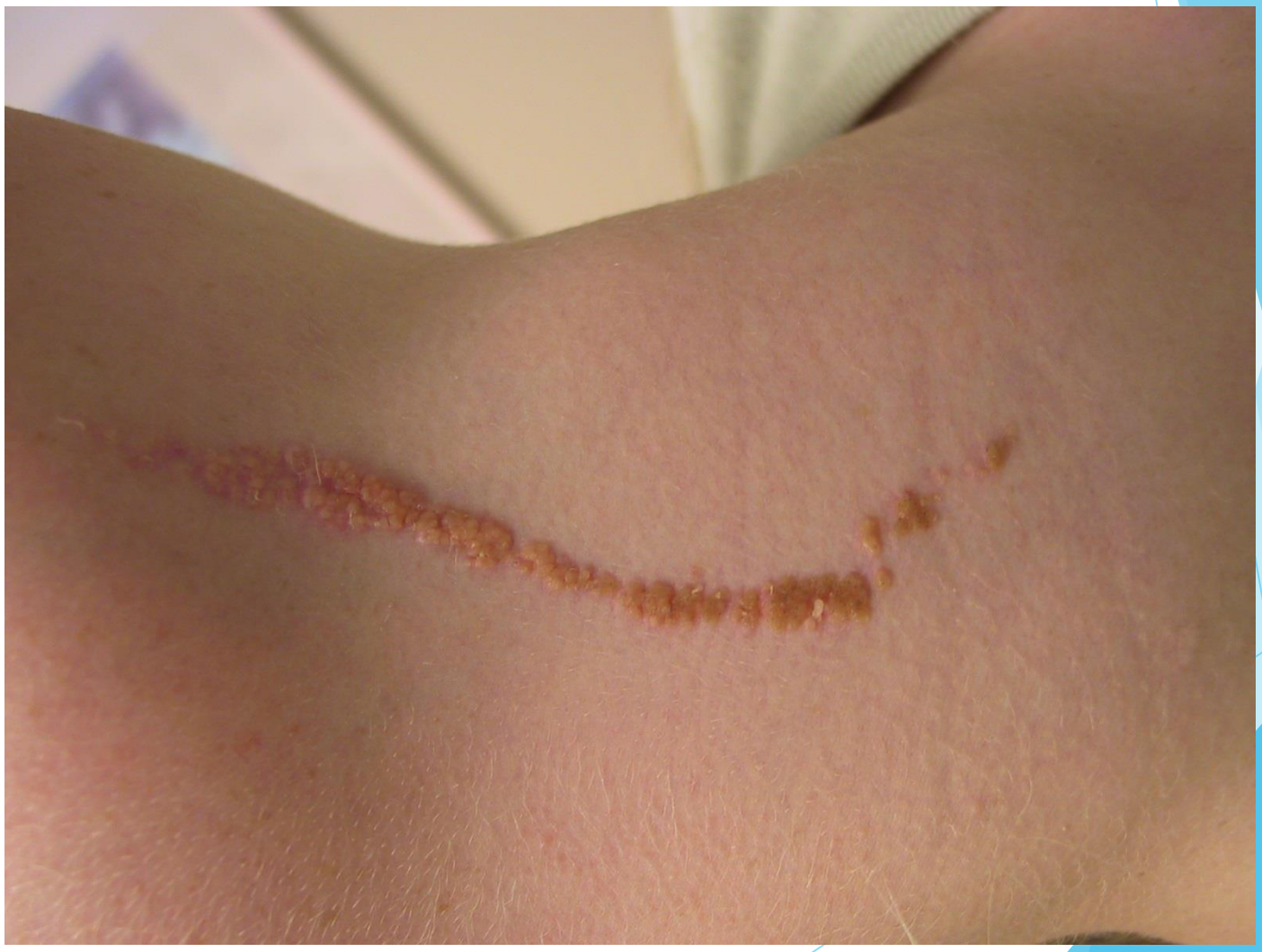
- Conservative.
- Antihistamine.
- Topical streoids ?
- NBUVB.
- Systemic treatment like psoriasis for resistant cases.

Prognosis

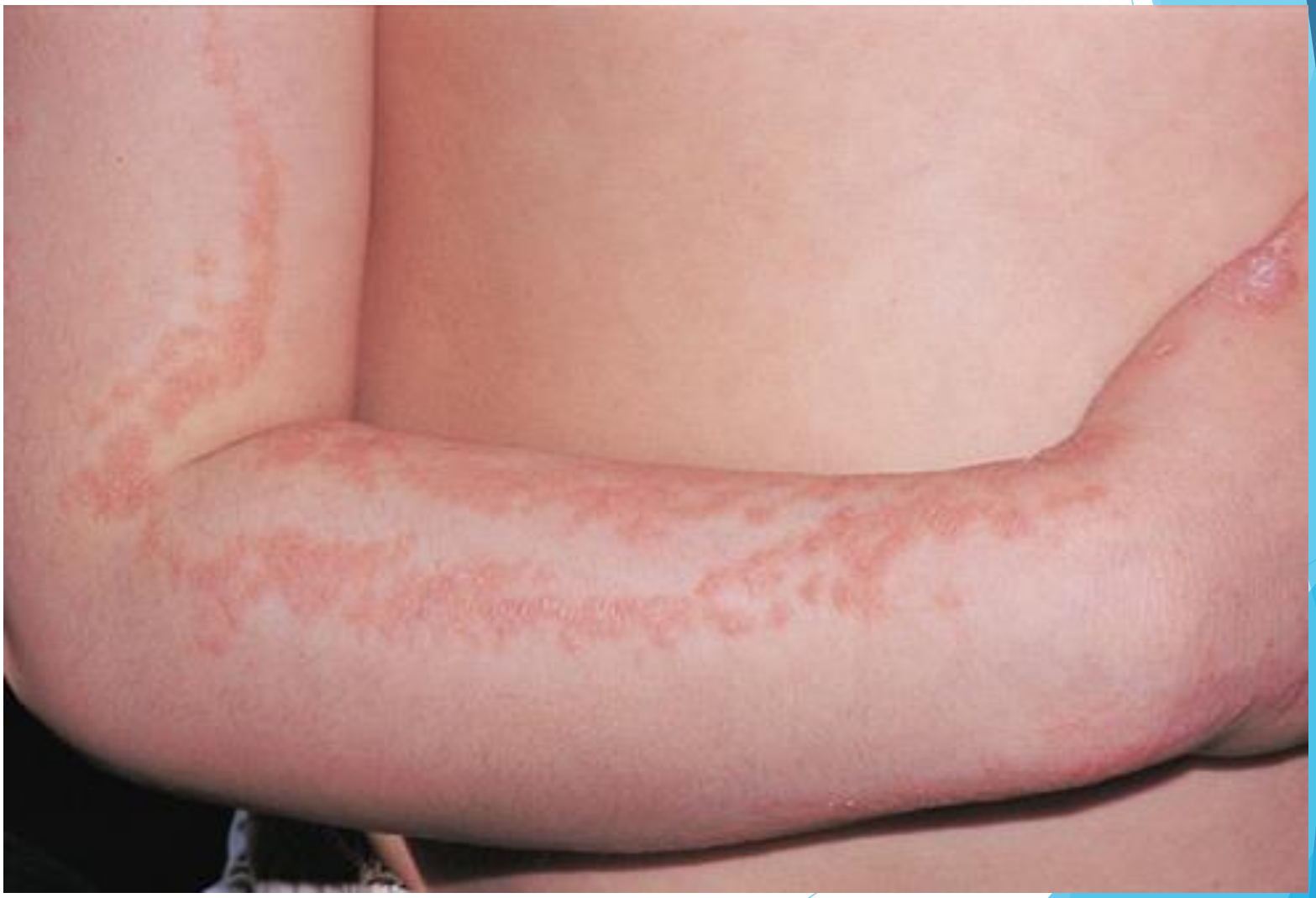
- Most cases resolve spont. Withing 6 weeks.
- Minority go to a chronic phrase.
- Full explanation.

Lets spice it up !

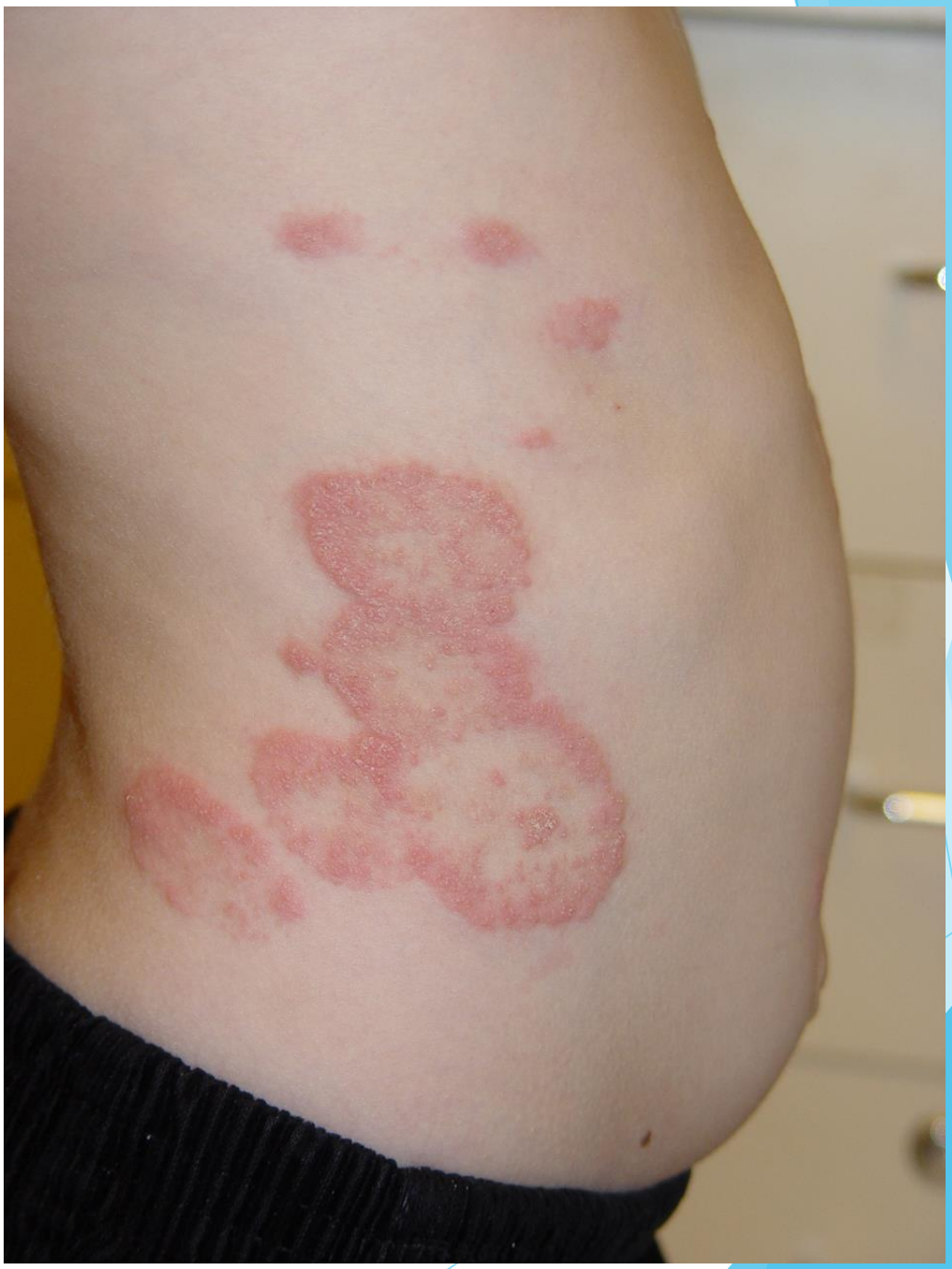
ILVEN



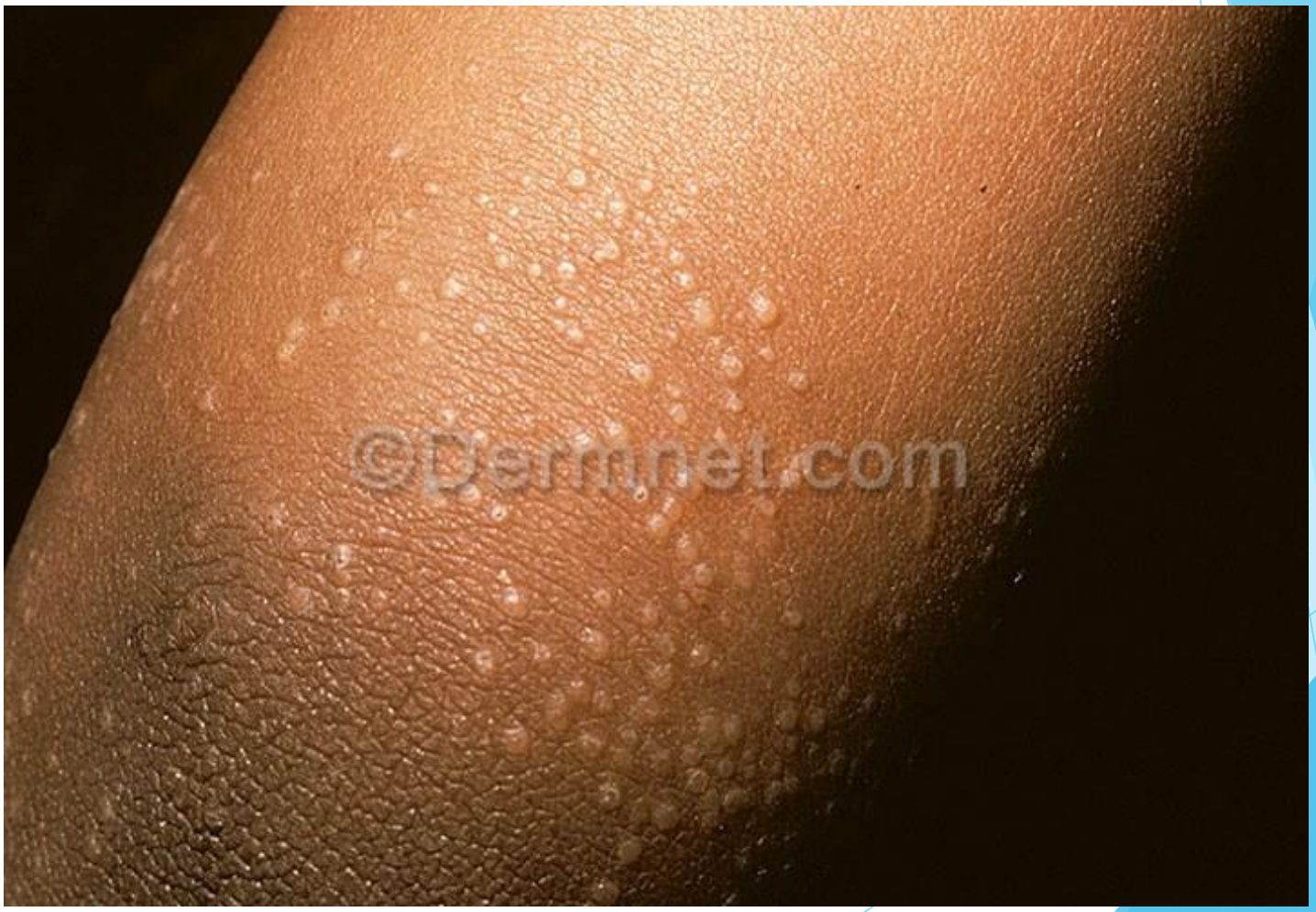
Lichen striatus



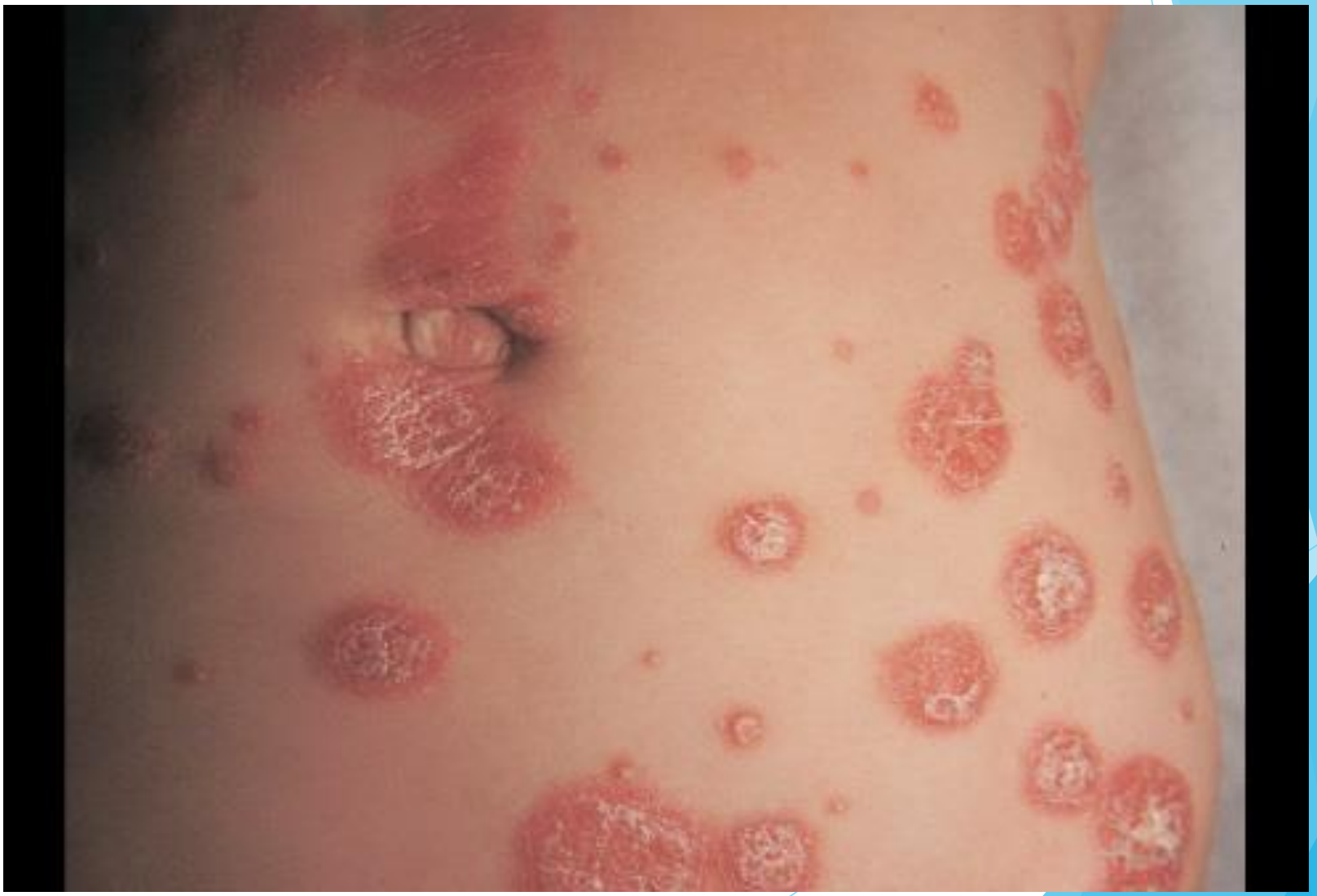
Tinea corporis



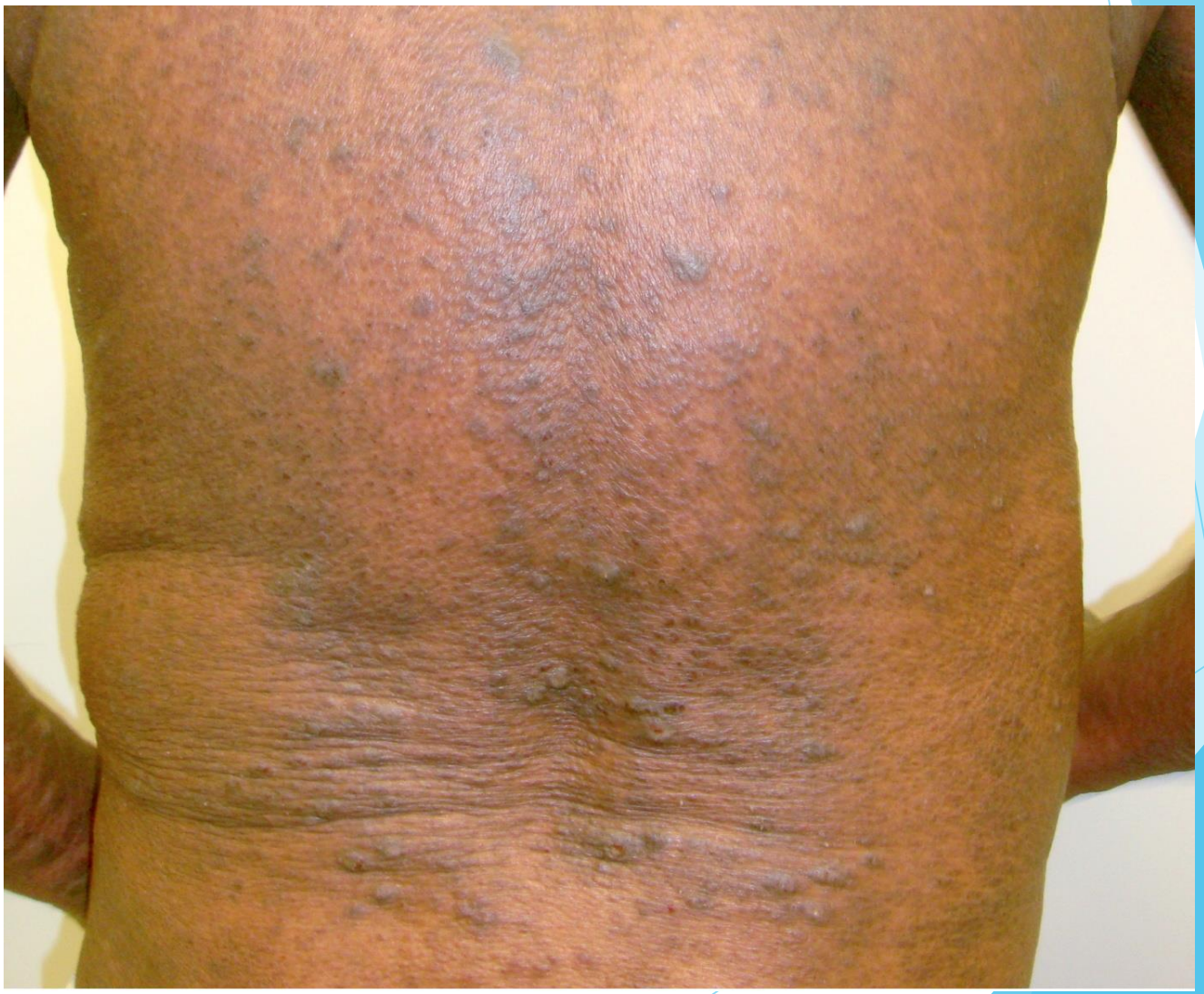
Lichen nitidus

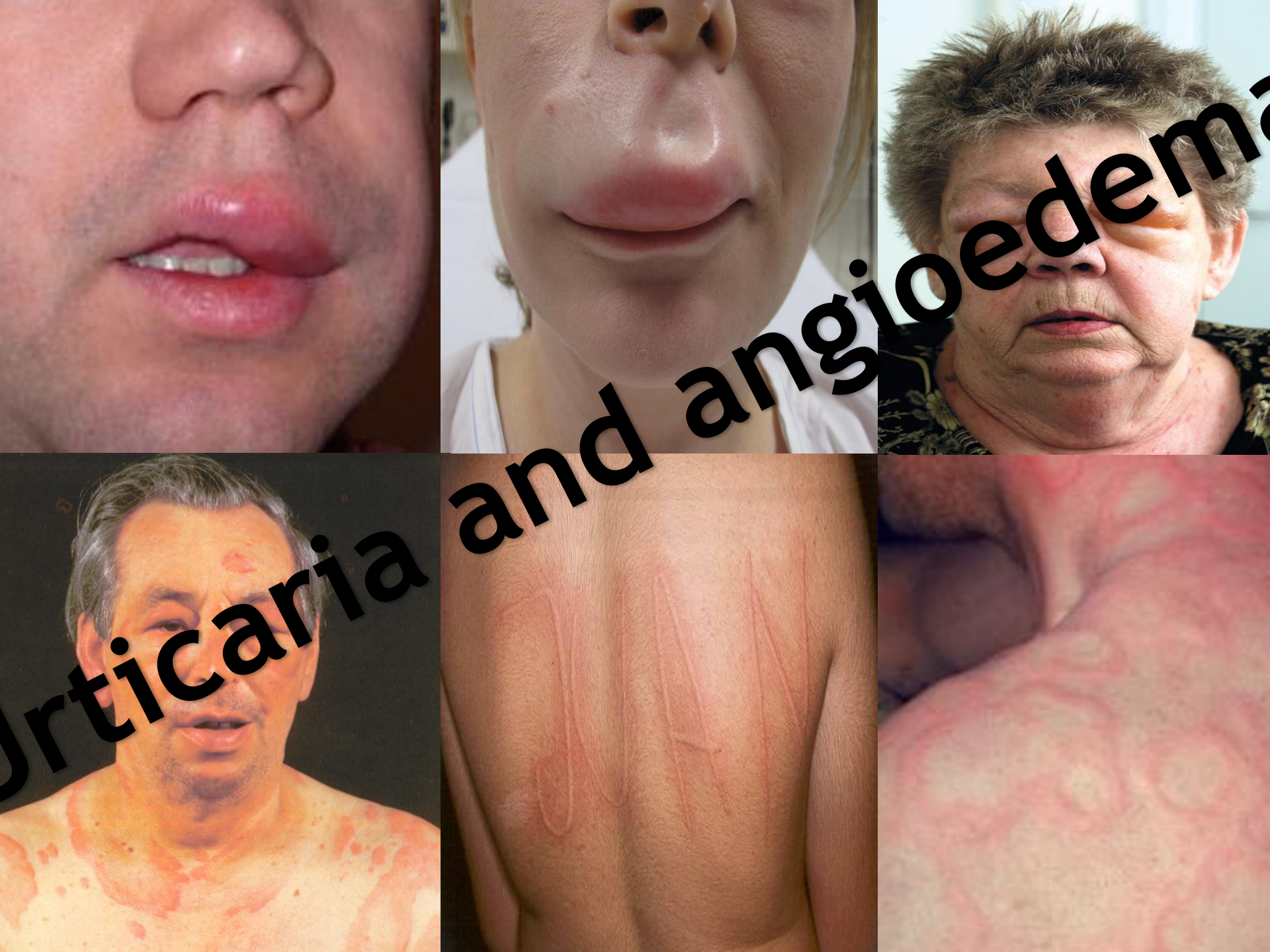


psoriasis

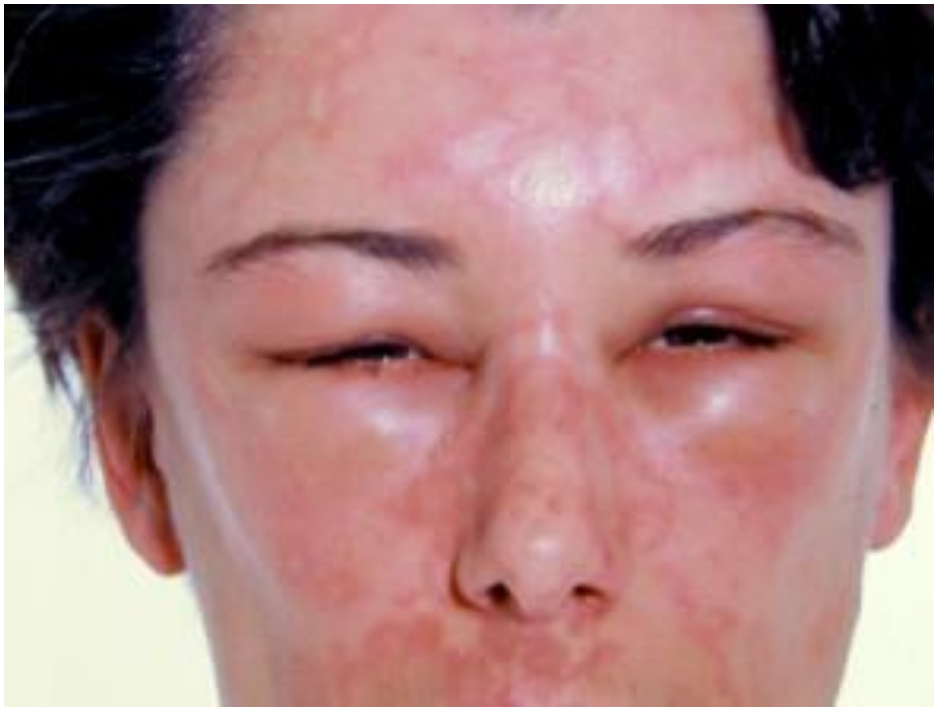


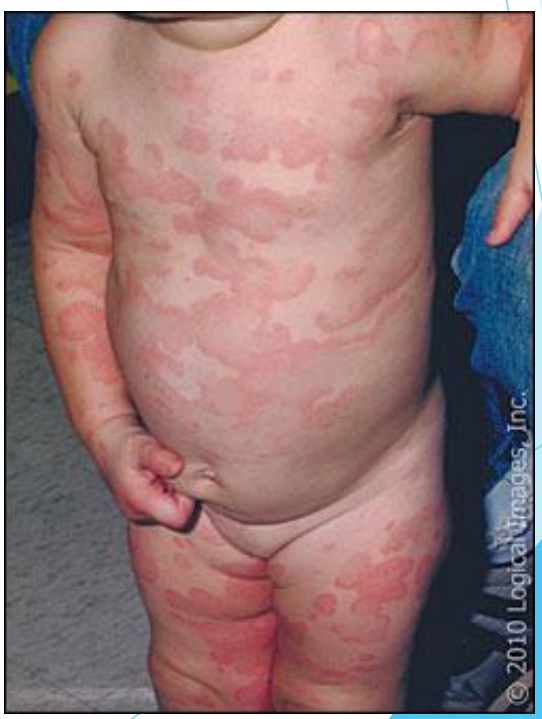
Lichen planus




Urticaria and angioedema

- Erythhematous, pruritic, raised skin lesion.
- Vascular reaction of the upper dermis.
- Deeper form : angioedema.





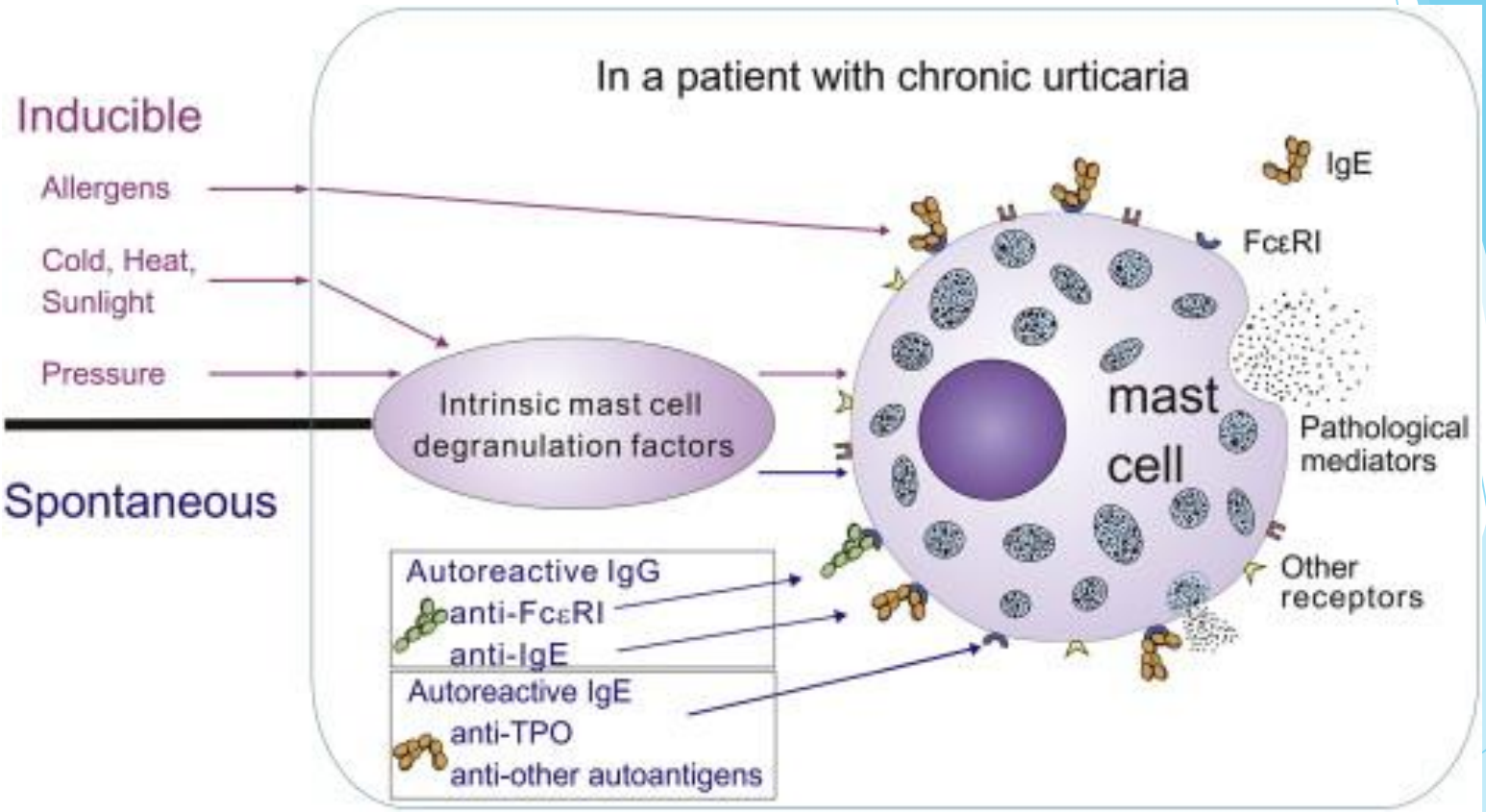
Classification

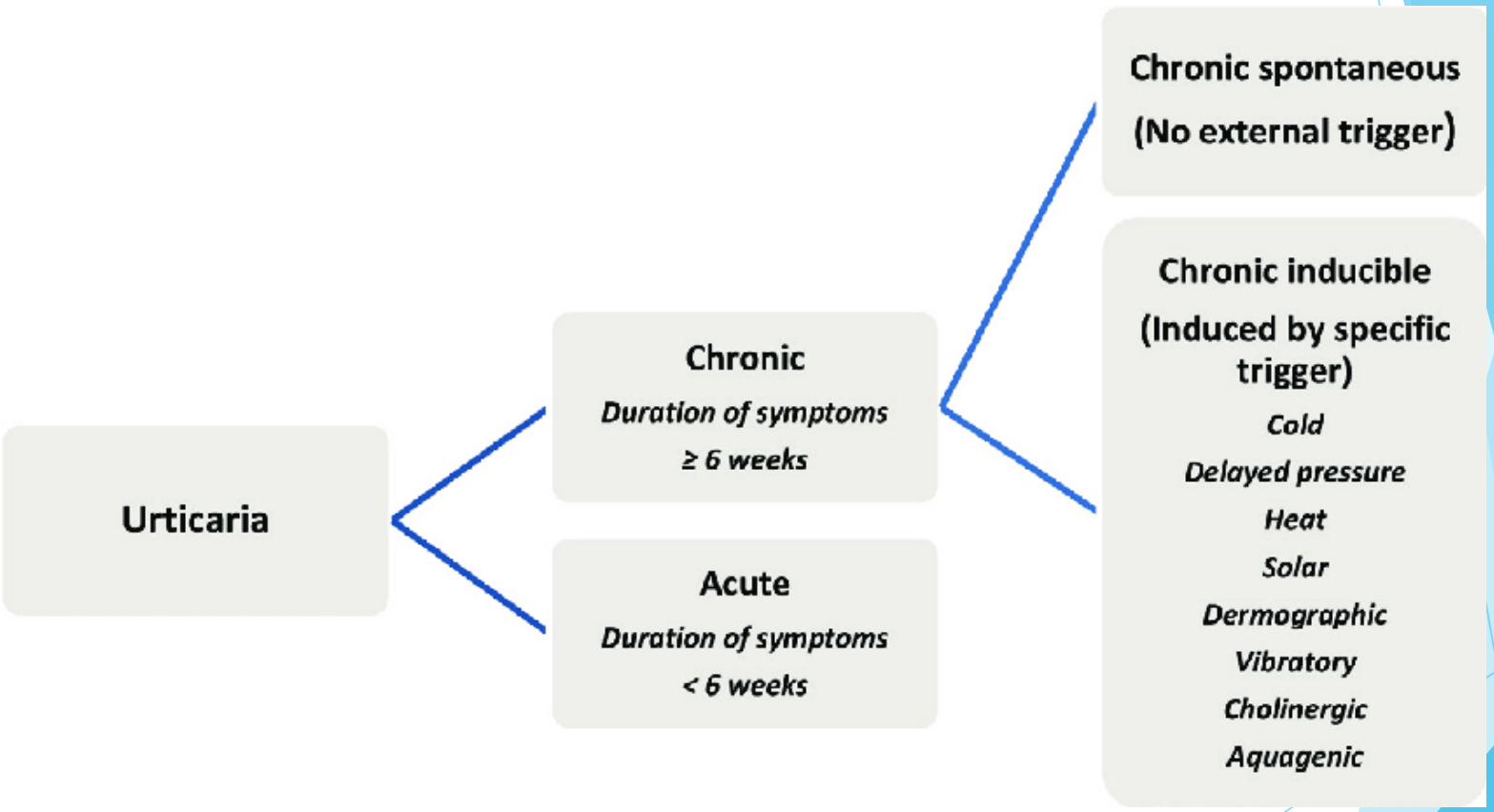
- Chronicity.
- Etiology.
- Immunogenecity.

Warning !

- Always take good history to rule out ANAPHYLAXIS:

1. GI symptom: abd pain, diarrhea.
2. Dyspnea.
3. Symptoms of hypotension : rapid pulse, dizziness.


In a patient with chronic urticaria
Inducible
Allergens
Cold, Heat, Sunlight
Pressure
Spontaneous
Intrinsic mast cell degranulation factors
IgE
FcεRI
mast cell
Pathological mediators
Other receptors
Autoreactive IgG
anti-FcεRI
anti-IgE
Autoreactive IgE
anti-TPO
anti-other autoantigens


Urticaria
Chronic
Duration of symptoms
≥ 6 weeks
Acute
Duration of symptoms
< 6 weeks
Chronic spontaneous
(No external trigger)
Chronic inducible
(Induced by specific trigger)
Cold
Delayed pressure
Heat
Solar
Dermographic
Vibratory
Cholinergic
Aquagenic

Acute urticaria (<6 weeks)

- Idiopathic
- Infectious
- Medication
- Food
- Hymenoptera

Chronic urticaria (>6 weeks)

- Inducible
  - Dermatographism
  - Delayed-pressure
  - Cold-induced
  - Heat-induced
  - Cholinergic
  - Exercised-induced
  - Aquagenic
  - Solar
  - Vibratory
- **Associated underlying disorder**
  - Infection
  - Malignancy
  - Thyroid Disease
  - Connective Tissue Disease
  - Allergy
  - Mastocytosis
  - Pregnancy
- **Chronic idiopathic urticaria (chronic spontaneous urticaria)**

SORT: KEY RECOMMENDATIONS FOR PRACTICE

Clinical recommendation	*Evidence rating*	*References*	*Comments*
An extensive workup is not recommended for diagnosing a cause of chronic urticaria. Additional testing can be done if presentation suggests underlying disease or specific causes requiring confirmation.	C	1, 7, 9, 15	A complete blood count with differential and measurement of erythrocyte sedimentation rate or C-reactive protein level are recommended to rule out systemic disease. Various sources recommend urinalysis, measurement of thyroid-stimulating hormone level, and liver function testing to look for other causes.
Nonsedating antihistamines are the first-line treatment of urticaria and may be titrated to two to four times their normal dose, if necessary.	C	1, 7, 16	These are recommended over older antihistamines because of their adverse effect profiles. All histamine H_1 blockers appear to be effective. There are few head-to-head effectiveness data.
The addition of a histamine H_2 blocker to an H_1 blocker may help in refractory cases of urticaria.	B	1, 7, 16, 18	Several studies have found at least a modest benefit, although the mechanism of this benefit is unclear.
Leukotriene receptor antagonists may be most useful in patients with cold urticaria or intolerance to nonsteroidal anti-inflammatory drugs.	B	21	Several trials have shown benefit to using these medications with or without antihistamines, especially in the subpopulations listed.

A = consistent, good-quality patient-oriented evidence; B = inconsistent or limited-quality patient-oriented evidence; C = consensus, disease-oriented evidence, usual practice, expert opinion, or case series. For information about the SORT evidence rating system, go to http://www.aafp.org/afpsort.xml.

New Rx ?

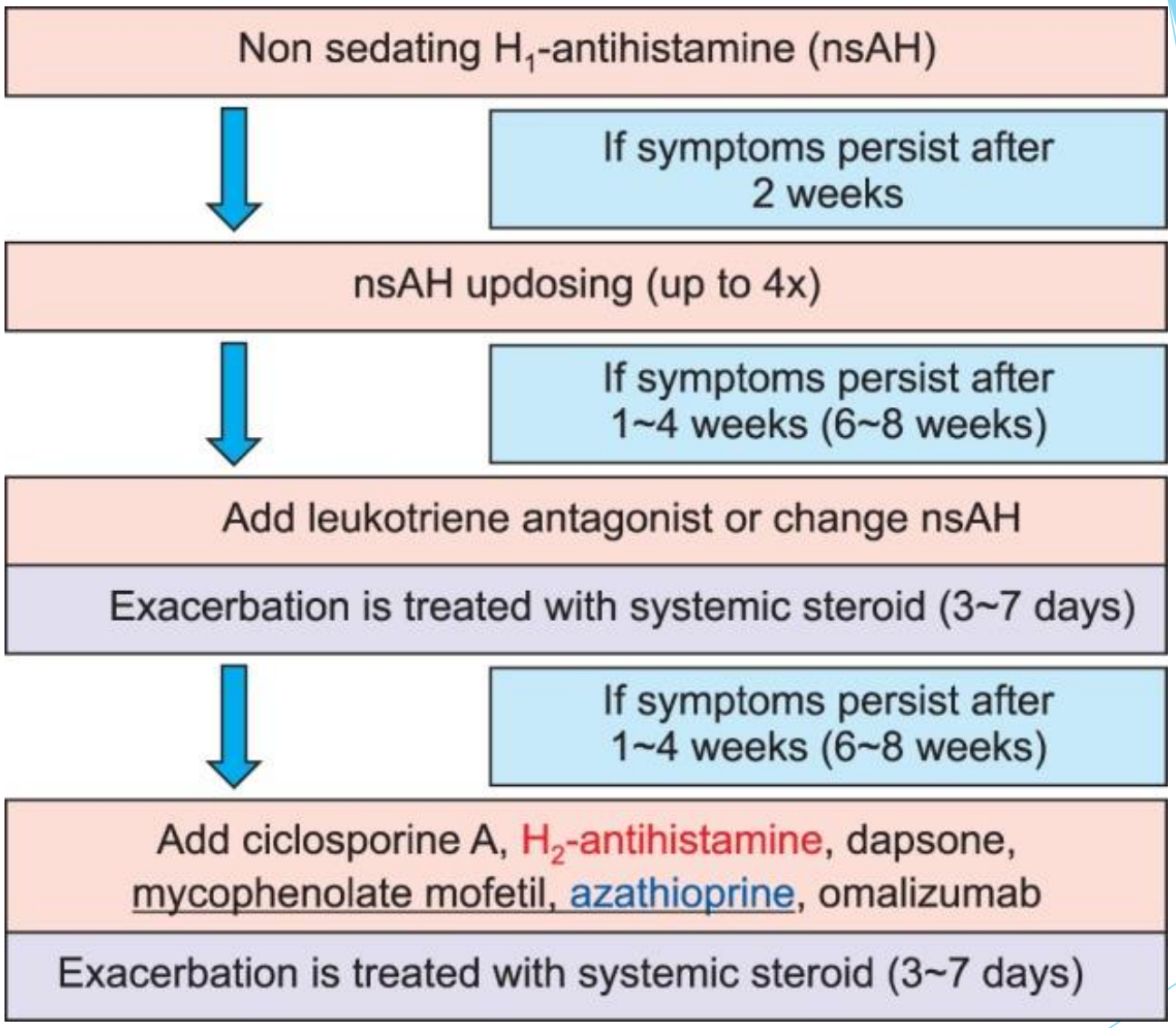

Xolair
Omalizumab
FOR SUBCUTANEOUS USE
Genentech, Inc., So. San Francisco
US License No.: 1048


NDC 50242-040-62
LIST NO. 13013
SINGLE-USE VIAL
150 mg
Xolair
Omalizumab
FOR SUBCUTANEOUS USE
KEEP REFRIGERATED. DO NOT FREEZE.
Genentech
NOVARTIS

XOLAIR® (omalizumab)

- Monoclonal antibody that blocks IgE Receptors.
- FDA app. 2003.
- chronic idiopathic urticaria in adults and adolescents 12 years of age and older.
- **150 to 375 mg is SC injection every 2 or 4 weeks.**

- AE:
- **headache**
- **tired feeling**
- **joint or muscle pain**
- **dizziness**
- **ear pain**
- **hair loss**
- **sore throat**
- **cold symptoms**
- **itching or skin rash**
- **injection site reactions**
- **Anaphylaxis!!!**

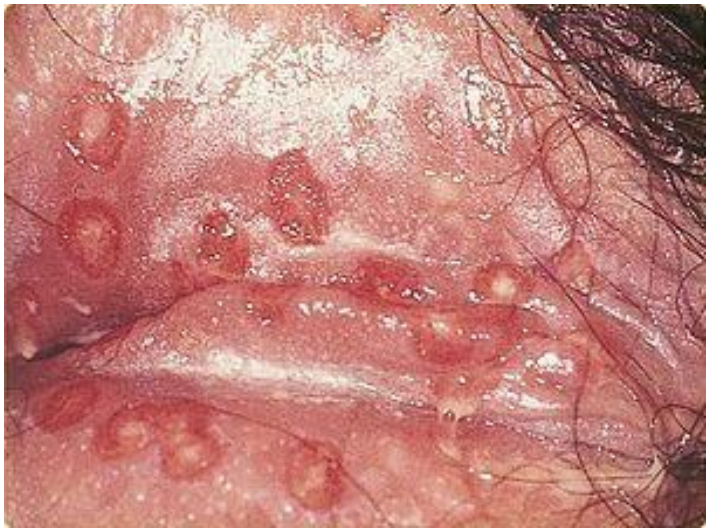


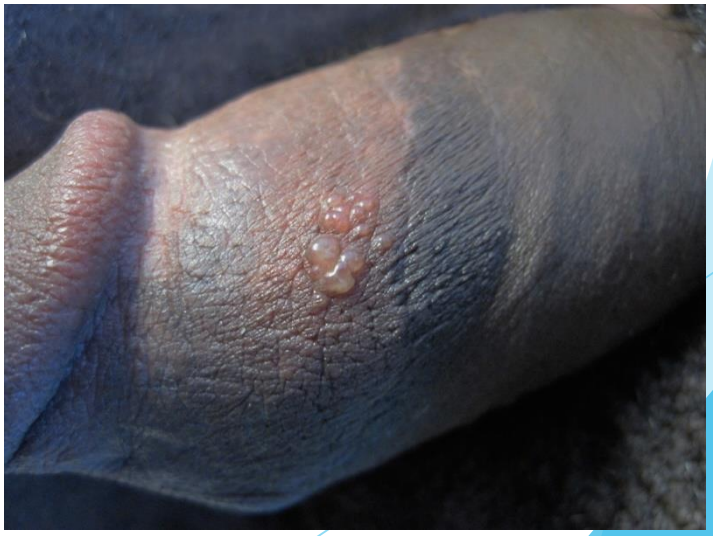
The treatment algorithm for urticaria adapted from the European Academy of Allergy and Clinical Immunology/Global Allergy and Asthma European network/European Dermatology Forum/World Allergy Organization (EAACI/GA2LEN/EDF/WAO) guidelines.

Infection

- Viral.
- Bacterial .
- Fungal.
- Parasitic.

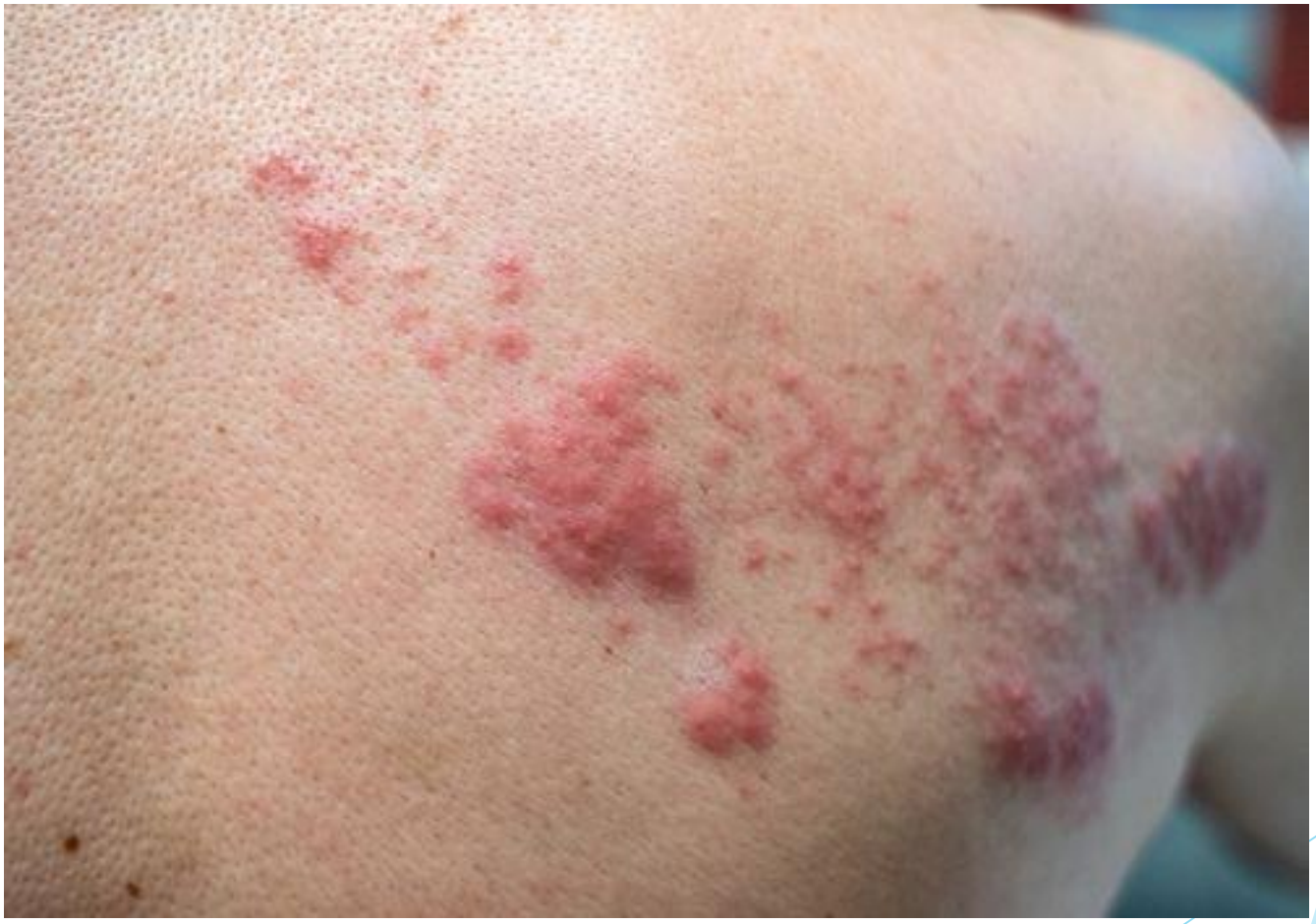
Viral

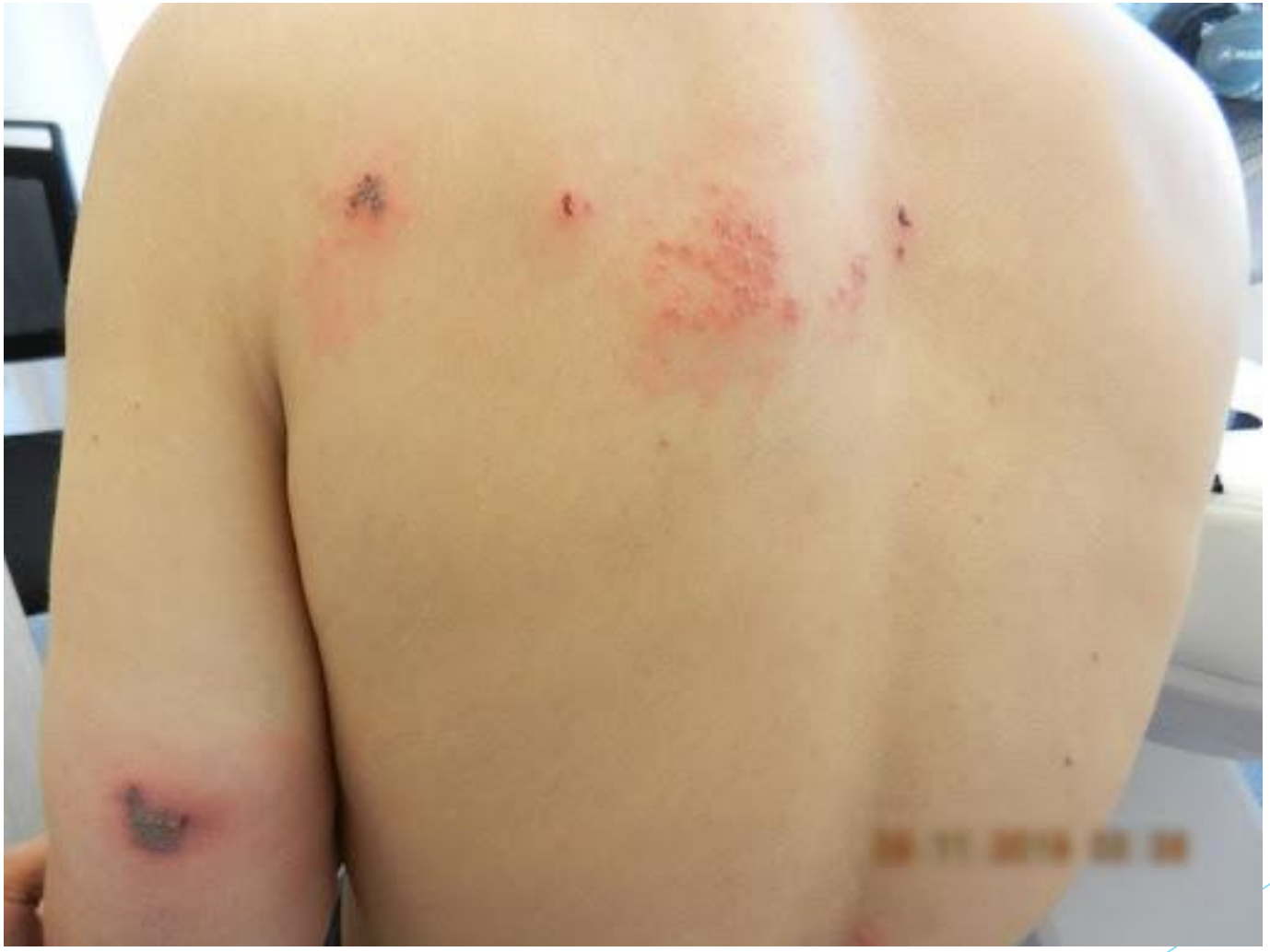


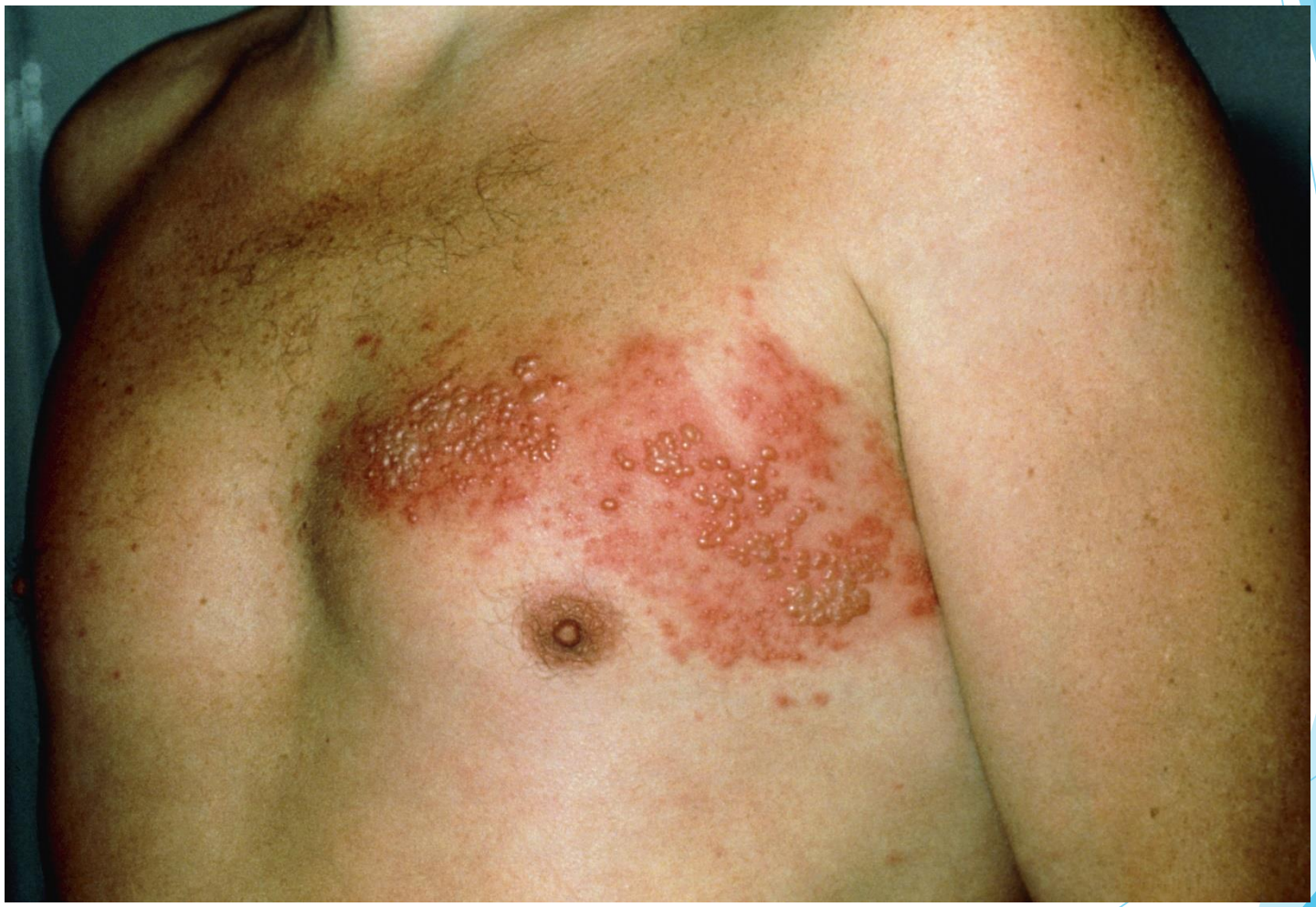


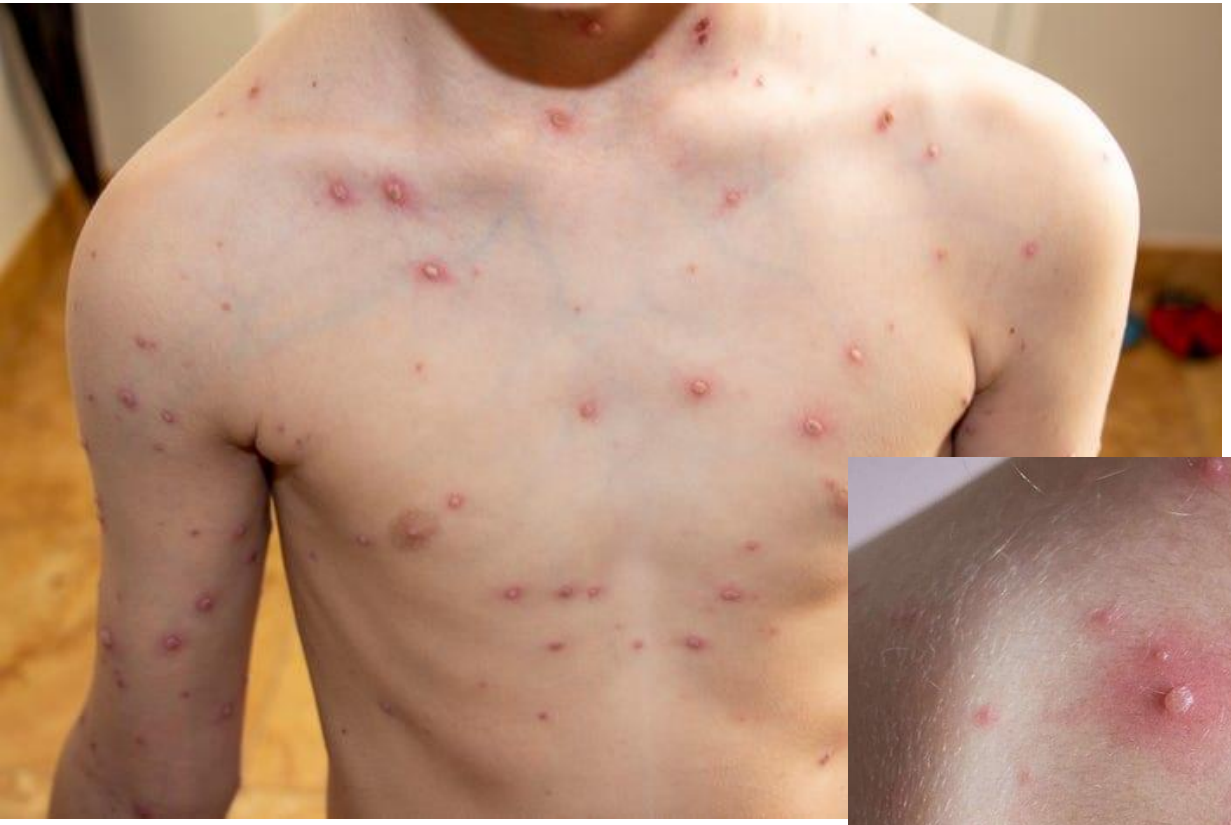
- STD.
- Herpes simplex type I and II.

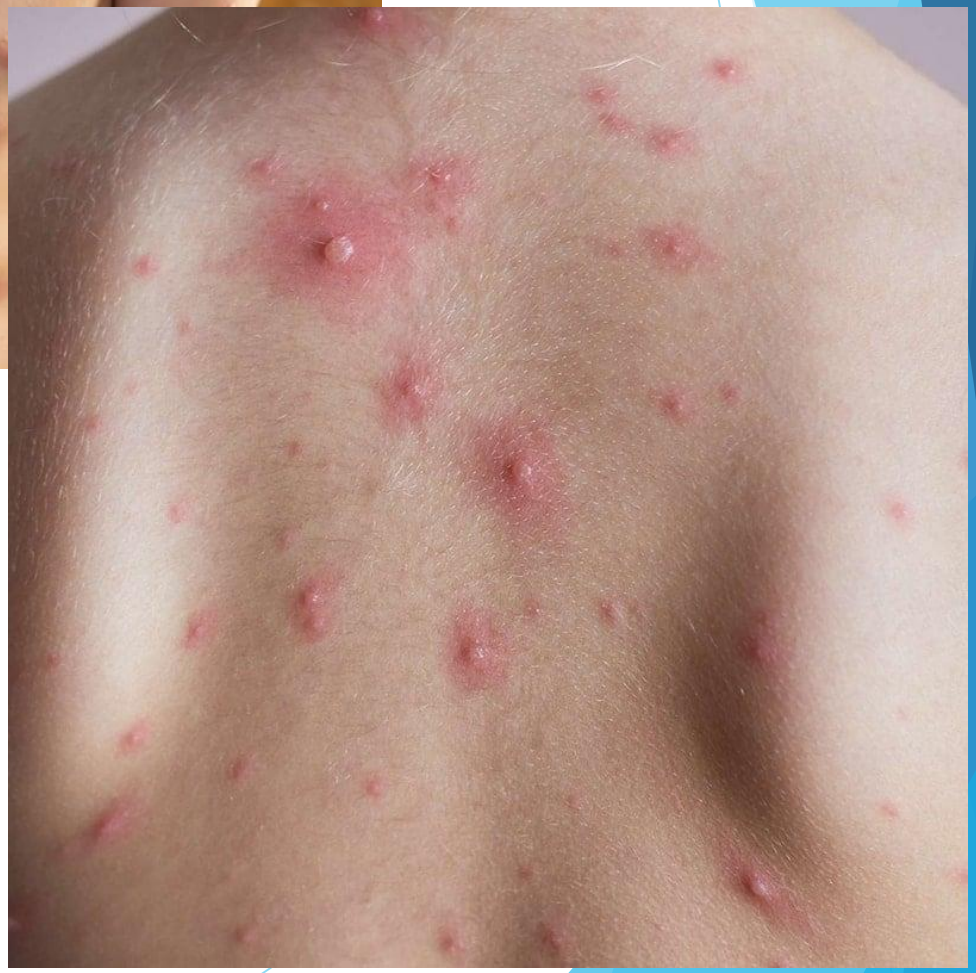
	Antiviral medication	Comments
First episode	Valaciclovir 500mg twice daily x 5 days Aciclovir 400mg three times daily x 5 days Aciclovir 200mg five times per day x 5 days	
	Famciclovir 250mg three times daily x 5 days	These medications can be used in pregnancy where there is a clear clinical need. Aciclovir is less expensive than valaciclovir and famciclovir
Recurrent episode	Valaciclovir 500mgs twice daily x 3 days Aciclovir 400mg three times daily x 3 days famciclovir 1gram twice daily x 1 day	









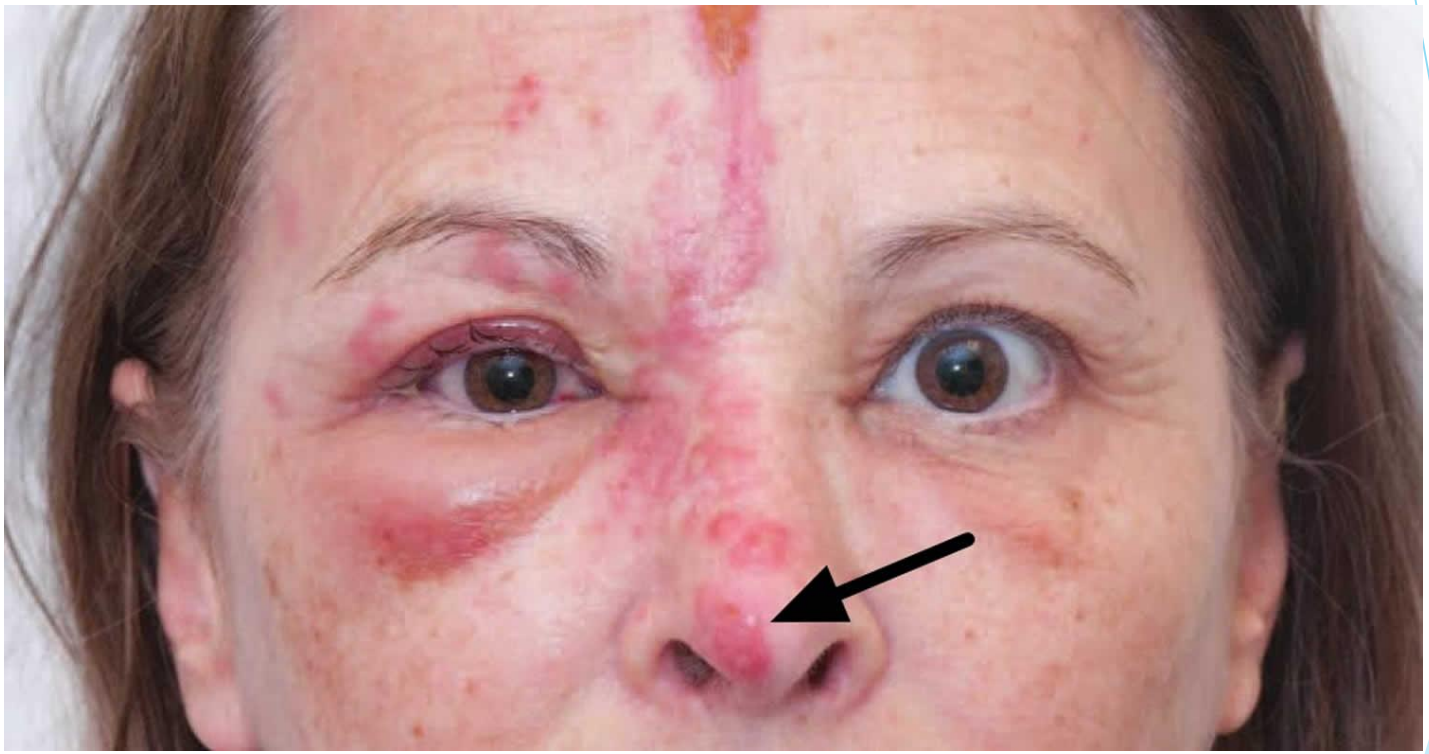


Herpes zoster

- Shingles.
- Herpes virus type 3.
- Pain, burning, numbness or tingling
- Sensitivity to touch
- A red rash that begins a few days after the pain
- Fluid-filled blisters that break open and crust over
- Itching
- Some people also experience:
- Fever
- Headache
- Sensitivity to light
- Fatigue

Complications

- **Postherpetic neuralgia.**
- **Vision loss :**(ophthalmic shingles)
- **Neurological problems.** Depending on which nerves are affected, shingles can cause an inflammation of the brain (encephalitis), facial paralysis, or hearing or balance problems.
- **Skin infections.** If shingles blisters aren't properly treated, bacterial skin infections may develop.



Treatment

- 1000 milligrams (mg) three times a day for seven days.
- Pain control.
- Topical antiseptic and fucidic acid.
- Topical xylocaine gel.

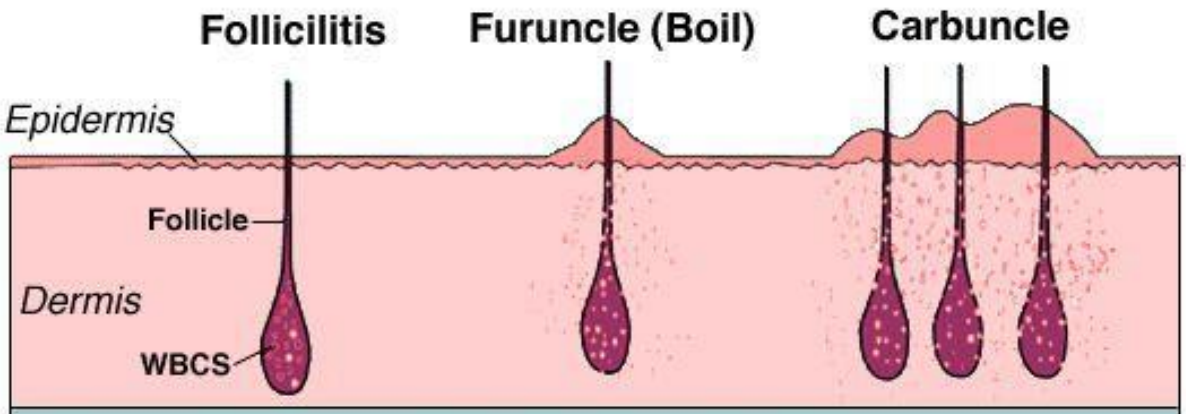
Bacterial

Table 1 **Therapeutic approach to common bacterial skin infections**

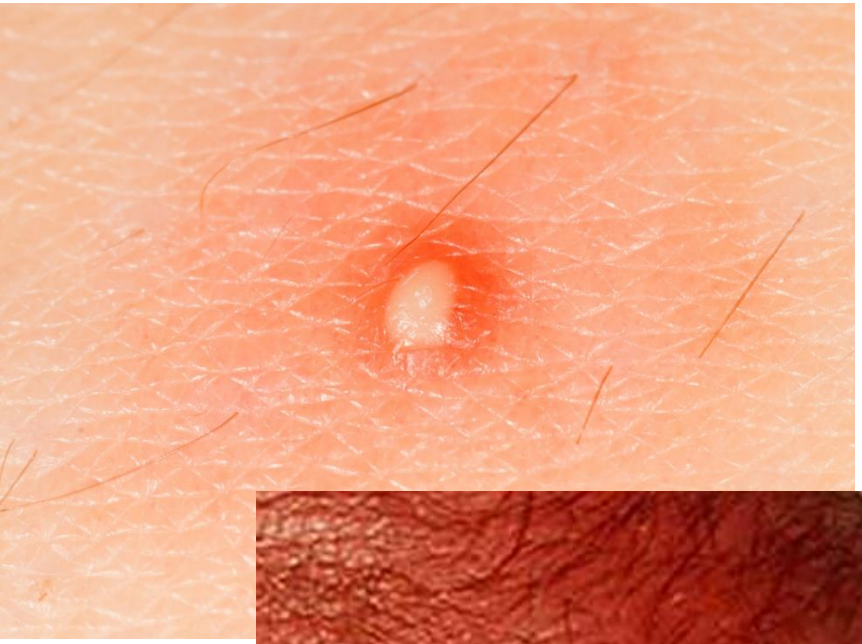
Infection	Likely pathogens	Management
Impetigo	*Staphylococcus aureus* *Streptococcus pyogenes*	Mild or localised disease: • wash crusts • topical mupirocin Multiple lesions or recurrent disease: • cultures to guide treatment • oral antibiotics (dicloxacillin/cephalexin/trimethoprim plus sulfamethoxazole) for up to 10 days • intravenous antibiotics if no improvement • for recurrent infection due to *S. aureus* consider decolonisation Advice and education of household members to reduce transmission: • avoid contact with lesions • wash hands regularly, particularly after touching lesions
Boils and carbuncles	*S. aureus* *S. pyogenes*	Incision and drainage most important step in management: • culture and susceptibility testing for lesions • antibiotics if spreading cellulitis or systemic symptoms – oral dicloxacillin/cephalexin for 5 days – oral clindamycin, or trimethoprim plus sulfamethoxazole for community-acquired-MRSA for 5 days
Folliculitis	*S. aureus* *S. pyogenes* *Pseudomonas aeruginosa*	Treatment usually supportive Warm compresses or topical mupirocin In severe infection treat as per impetigo
Cellulitis and erysipelas	*S. aureus* Beta-haemolytic streptococci	Examine for predisposing factors Consider unusual exposures (see Table 2) – broaden antibiotic therapy if this is the case Culture and susceptibility testing for lesions, tissue or blood Elevate limb Treat underlying predisposing skin infection e.g. tinea Mild disease: • oral dicloxacillin/cephalexin/clindamycin for 5–10 days • oral phenoxymethylpenicillin if culture is positive or clinical presentation of *S. pyogenes* Severe disease or systemic features: • intravenous flucloxacillin/cephazolin/vancomycin Consider decolonisation or prophylactic antibiotics with recurrent disease
Periorbital cellulitis	*S. aureus* *Streptococcus* species *Haemophilus influenzae* type b (in unvaccinated patients)	Mild disease: • oral dicloxacillin/cephalexin/clindamycin for 7 days If suspect *H. influenzae* type b infection (unvaccinated, < 5yrs old): • oral amoxycillin plus clavulanate, or cefuroxime for 7 days Severe disease or systemic features: • treat as orbital cellulitis
Orbital cellulitis	*S. aureus* *Streptococcus* species *H. influenzae* type b (in unvaccinated patients) Anaerobic bacteria	Inpatient hospital management with urgent surgical opinion Blood cultures and CT scan of orbits Intravenous antibiotics
Necrotising fasciitis	*S. aureus* *S. pyogenes* Gram negatives, *Clostridium* species Anaerobic bacteria	Inpatient hospital management with urgent surgical debridement Culture and susceptibility testing of tissue Broad-spectrum intravenous antibiotics including clindamycin (antitoxin effect by suppressing synthesis of bacterial endotoxins)

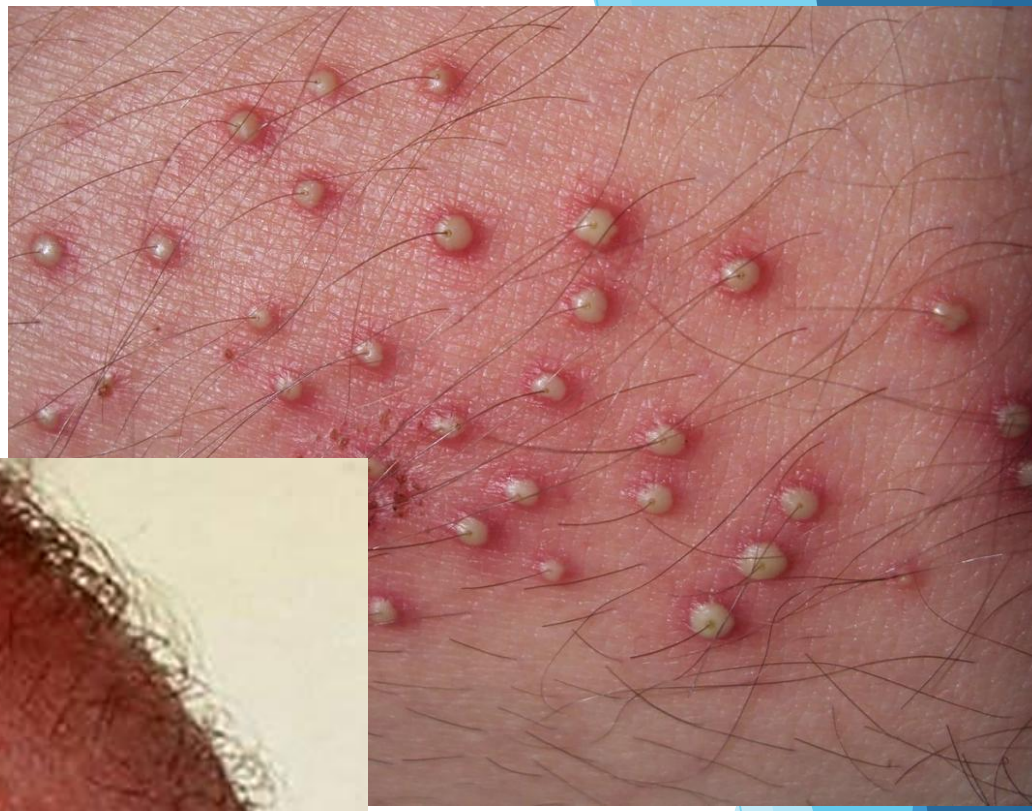
Bacterial infection

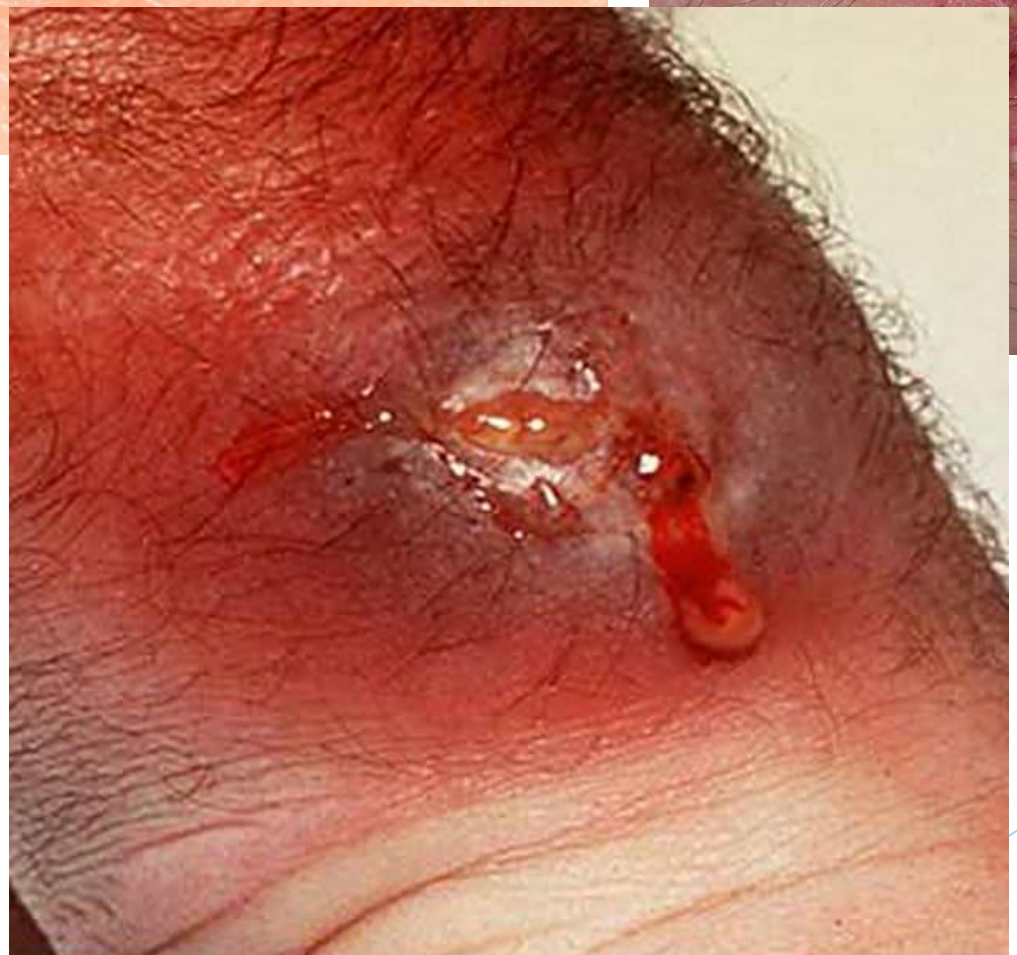
- S. aureus.
- Beta hemolytic streptococcus.
- Pseudomonas aeruginosa.
- Influenzas.



Follicilitis	Furuncle (Boil)	Carbuncle
1mm perifollicular red papule or pustule	About 1cm tender red papule or fluctuant nodule	Several cm diam red plaque
Areas of sweat & abrasion	Areas of sweat & abrasion	Nape of neck
Rx: Tetracycline or erythromycin 500 mg 2x/day	1. Incise & curettage. 2. Dicloxicillin 250mg 4x/d for 10 days, or Augmentin 500mg 2x/day for 10+ days	1. Incise and curettage or excise 2. Dicloxicillin 250mg 4x/day for 10+ days or rampin 300mg 2x/day for 10+ days (Orange body fluids)



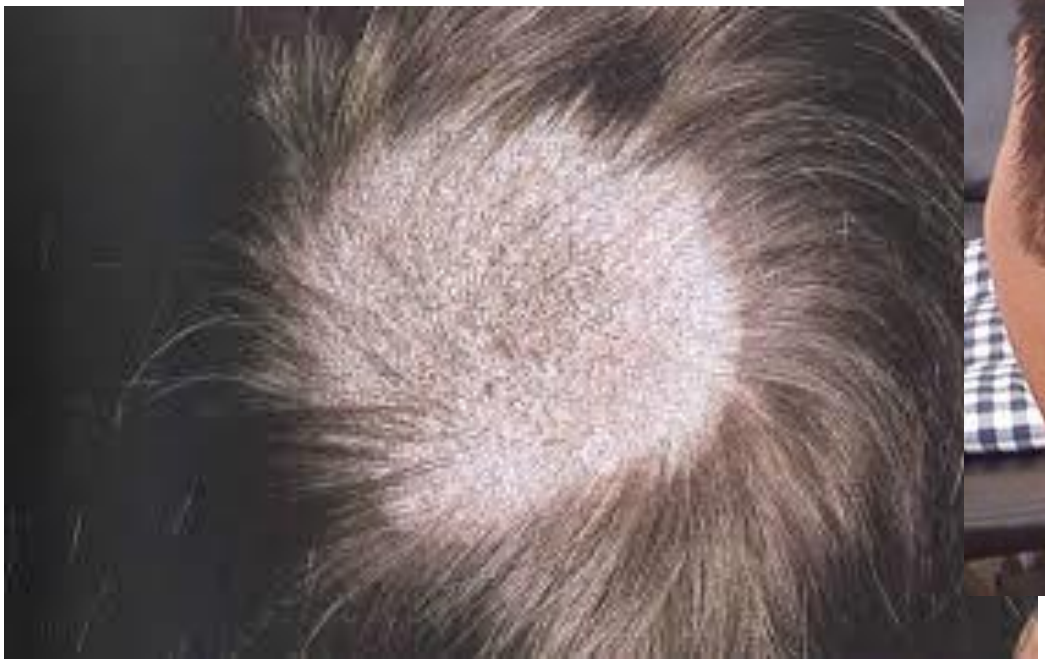




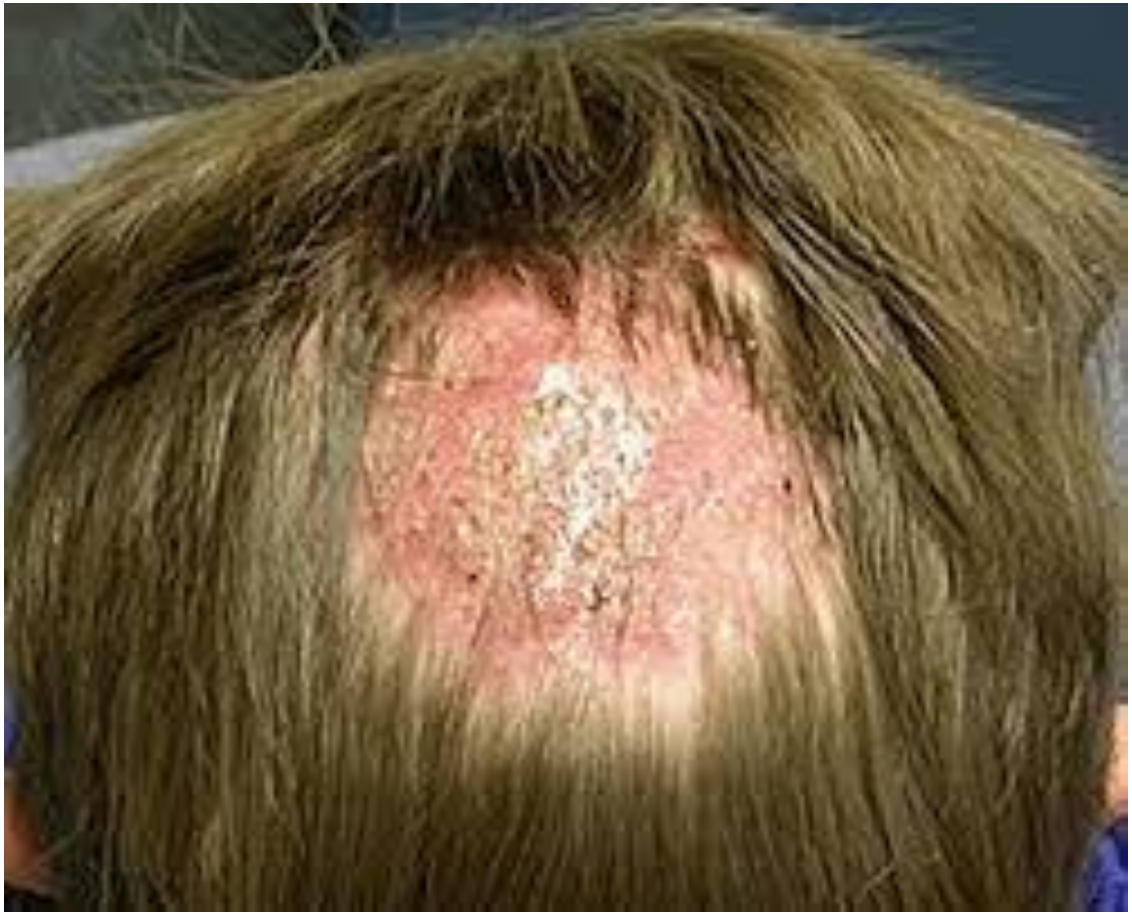
Treatment

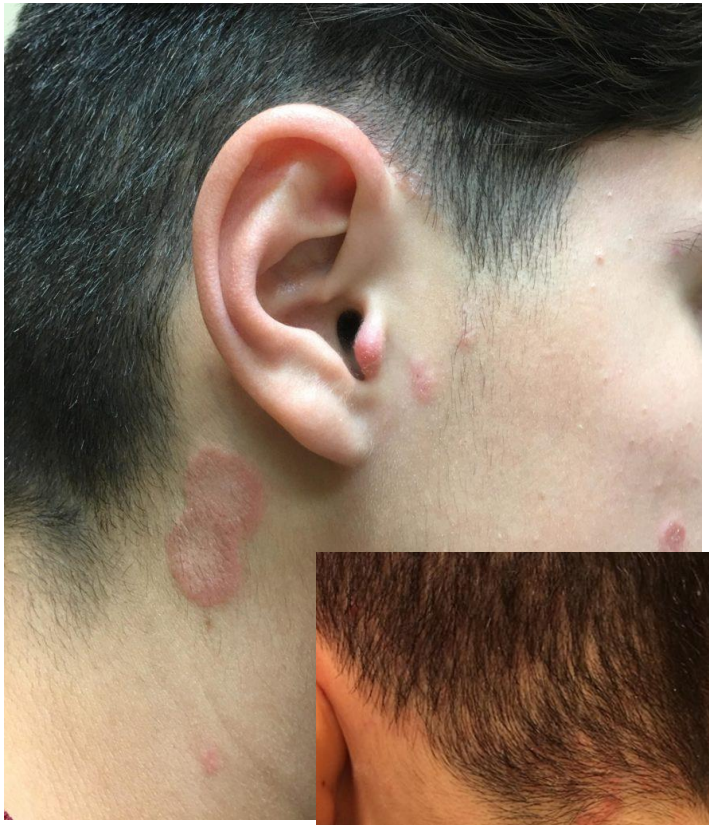
- Any oozy lesion : Swab : GS and CX.
- Topical antiseptic.
- Systemic antbiotic.

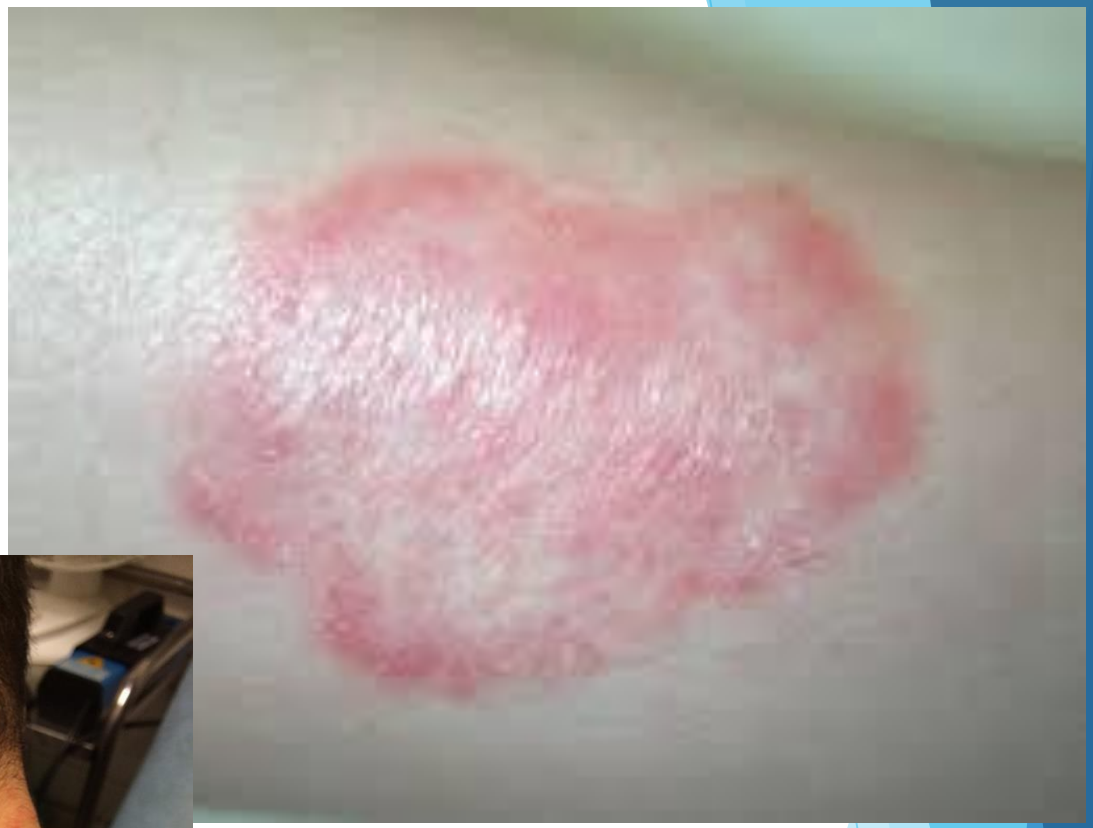
Fungal

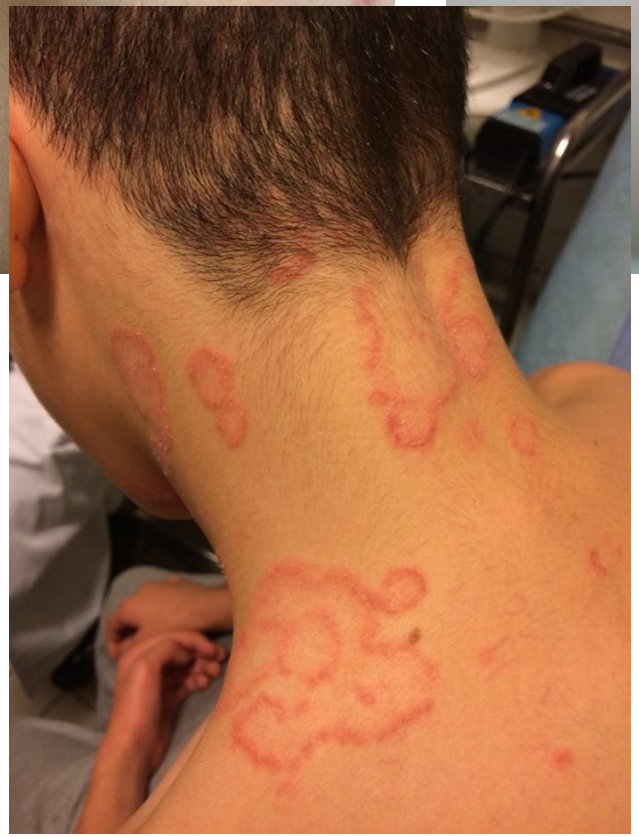


Tinea capitis









Tinea corporis

Lets keep it simple !

- Scrab the scales for GS, KOH, GS.
- Ask simple source questions : pets? Other siblings? Topicals ?

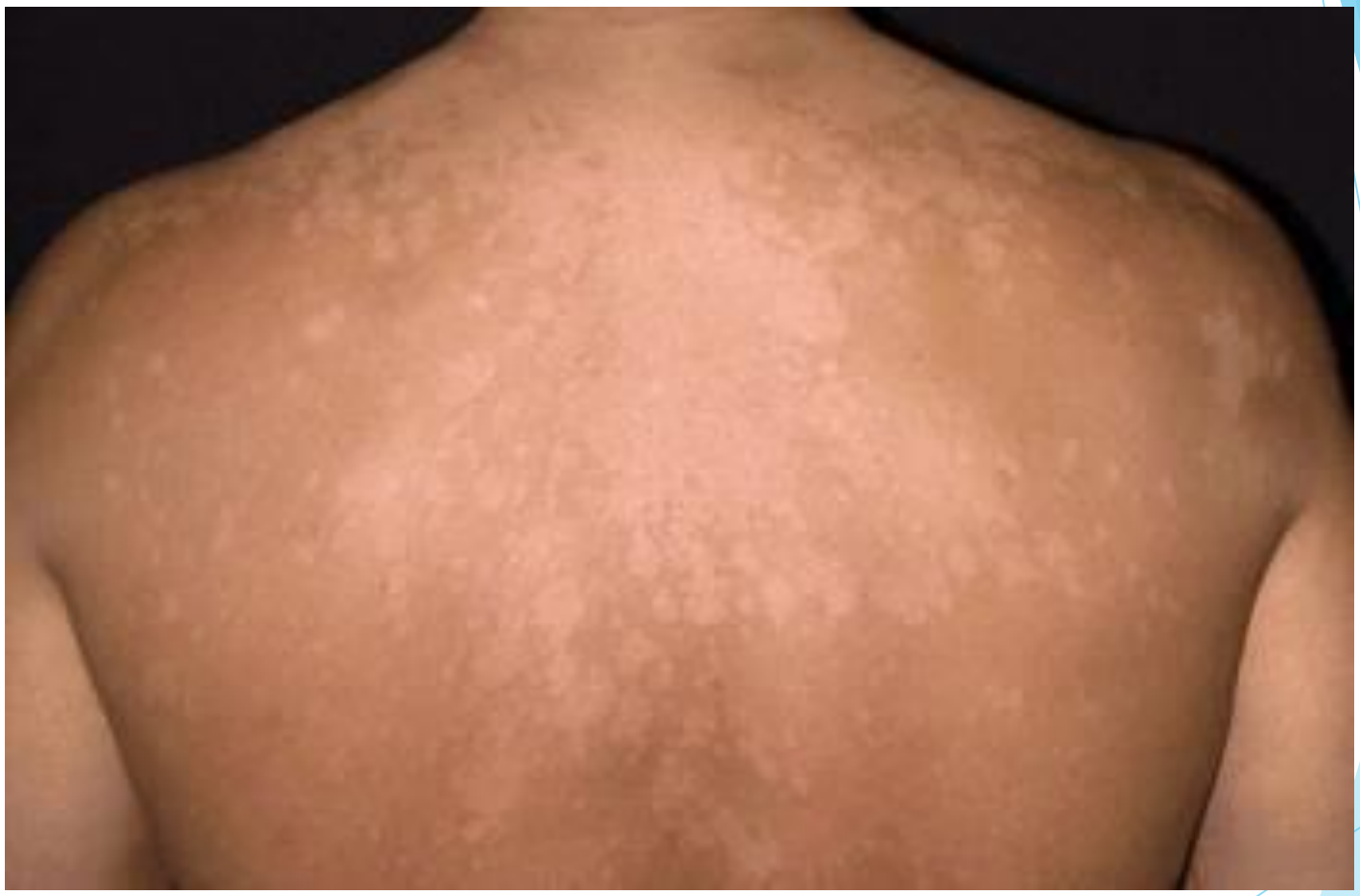
Traetment

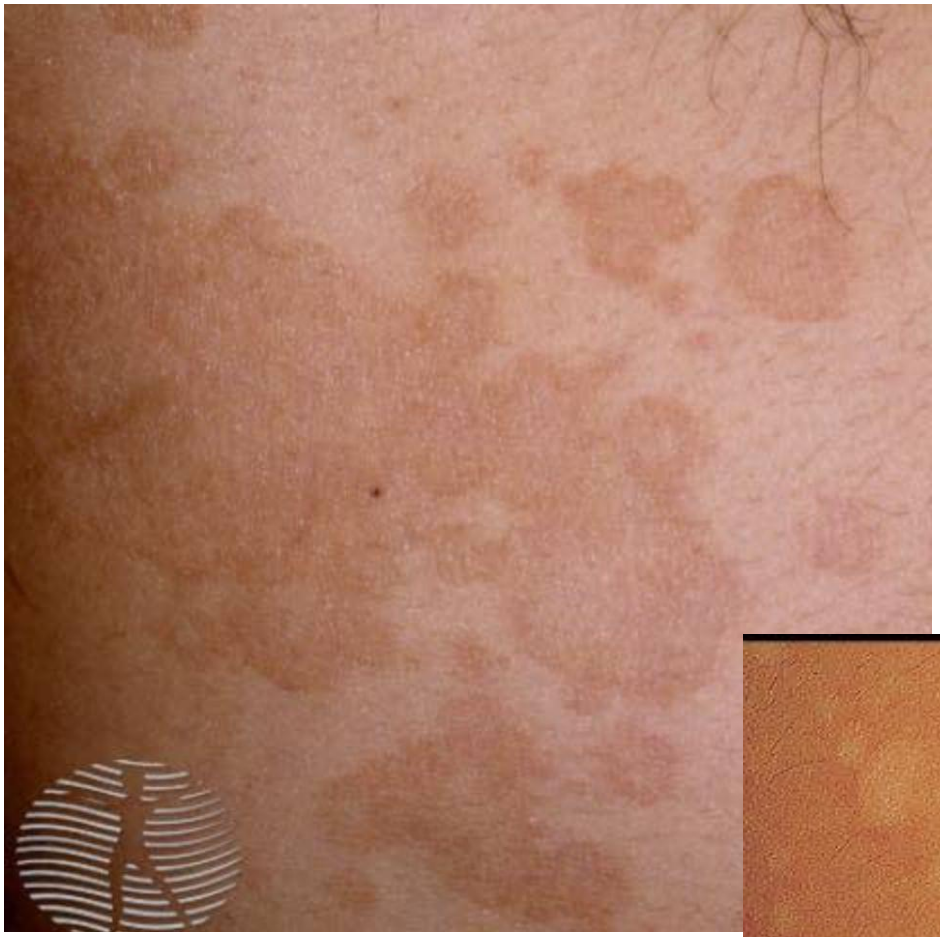
- Treat the source.
- Topical antiseptic solution : betadine or ketoconazole shampoo.
- Topical antifungal cream.
- Systemic antifungals : for severe cases.

1. Extensive lesions.
2. Better to measure LFT.
3. Avoid in case of other multiple medications.
4. Choice: terbinafine, ketoconazole, itrokonazole.
5. Kids: grisofulvin syrup.

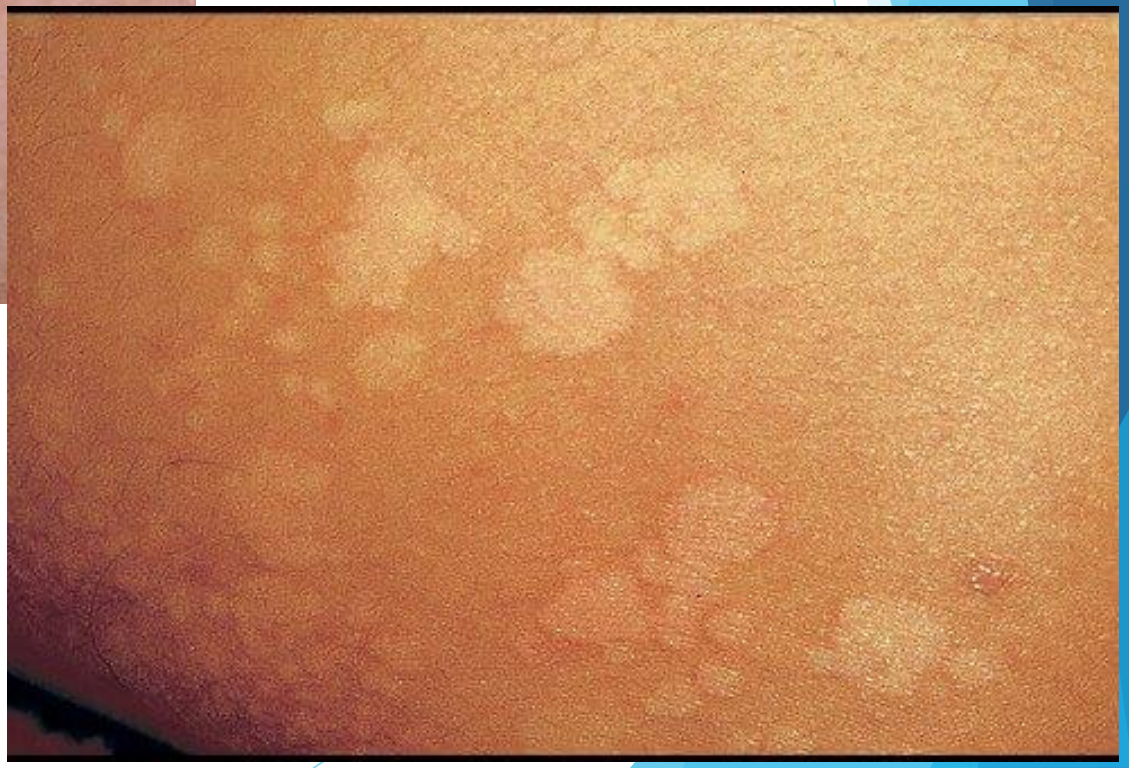
- Think outside the box: ? Pred?? Antihistamine?

Attention!



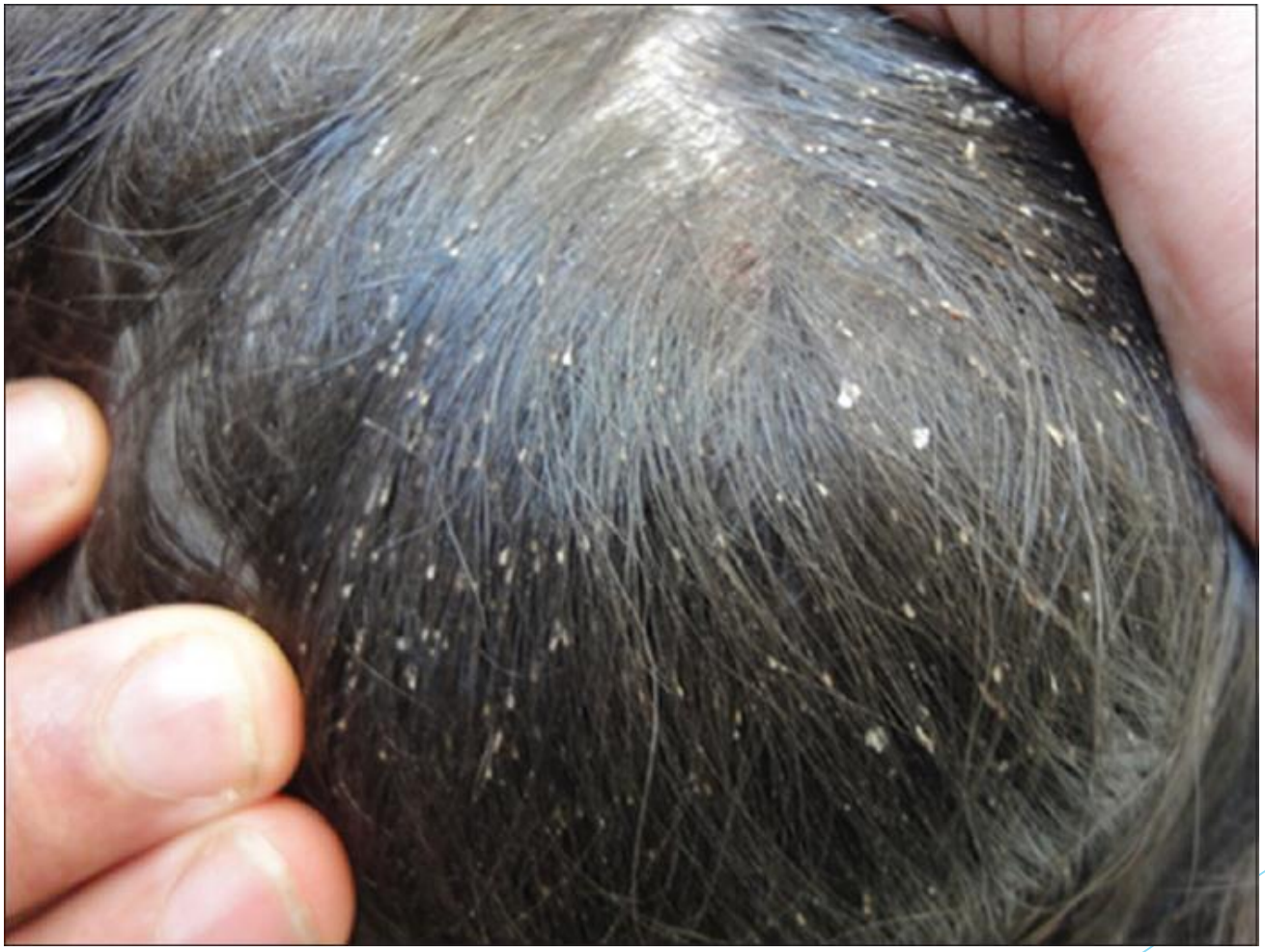


Pityriasis Vericolor

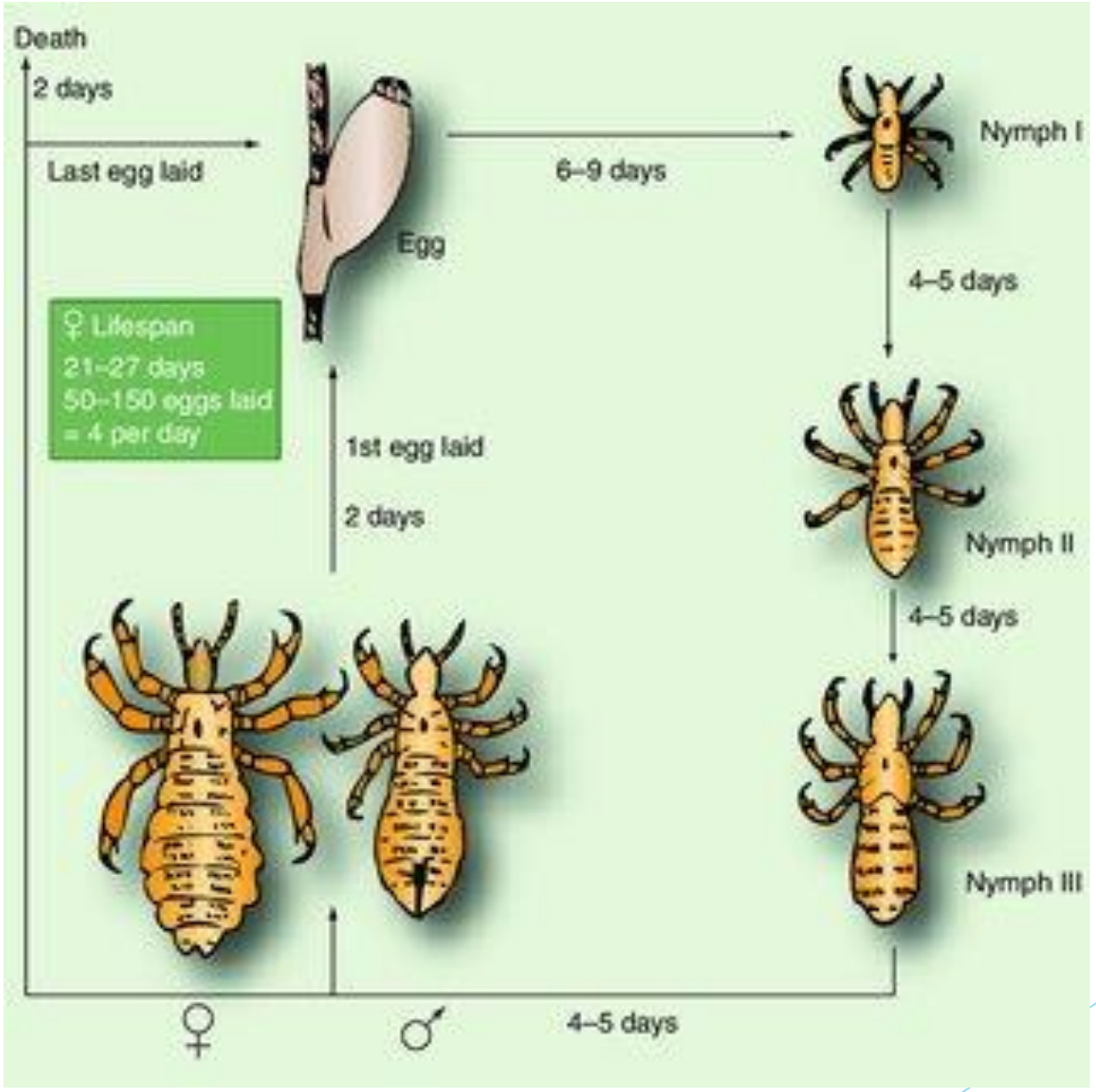


Parasitic infestation

The itchy scalp



Pediculosis capitis


Death
2 days
Last egg laid
Egg
6–9 days
Nymph I
4–5 days
♀ Lifespan
21–27 days
50–150 eggs laid
= 4 per day
1st egg laid
2 days
Nymph II
4–5 days
Nymph III
4–5 days
♀
♂

Treatment basics

- Treat all kids at the same time and all family members.
- Manual removal.
- Repeat the cycle after 1 week.

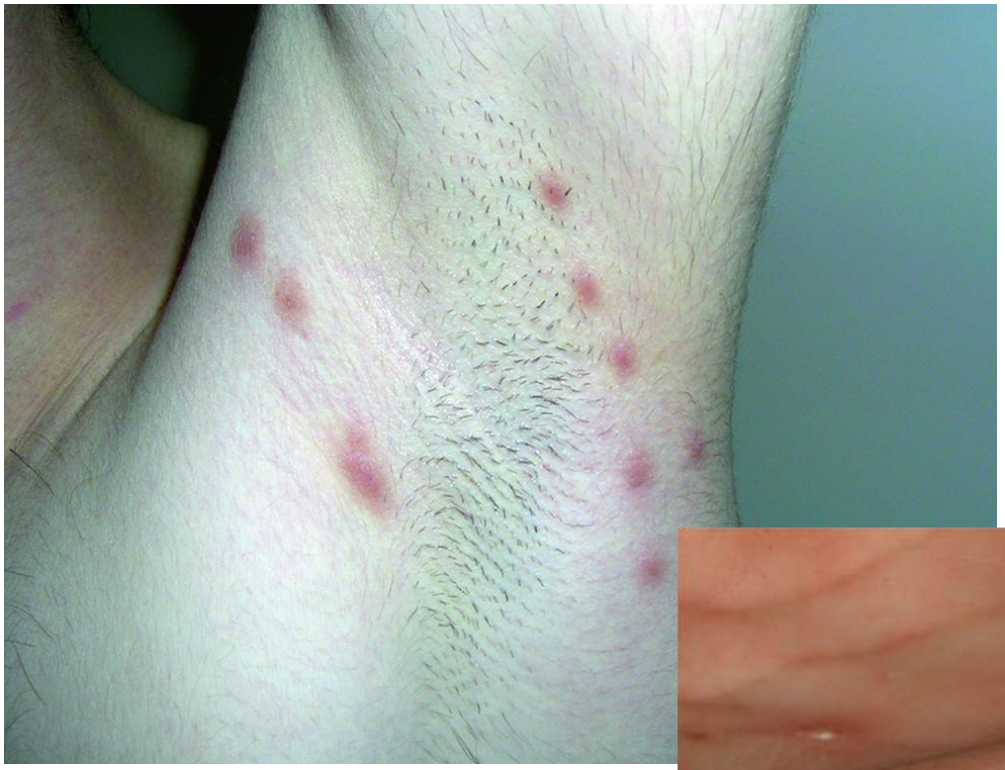
Figure 1:
Nit Comb

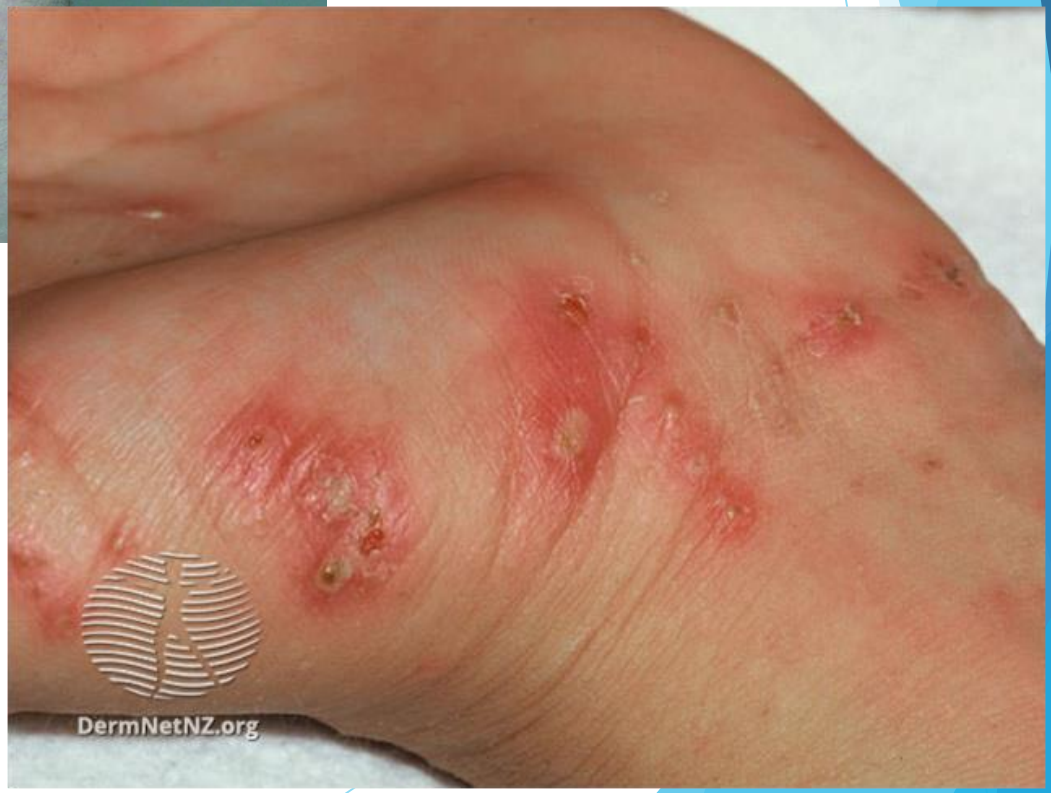
Treatment

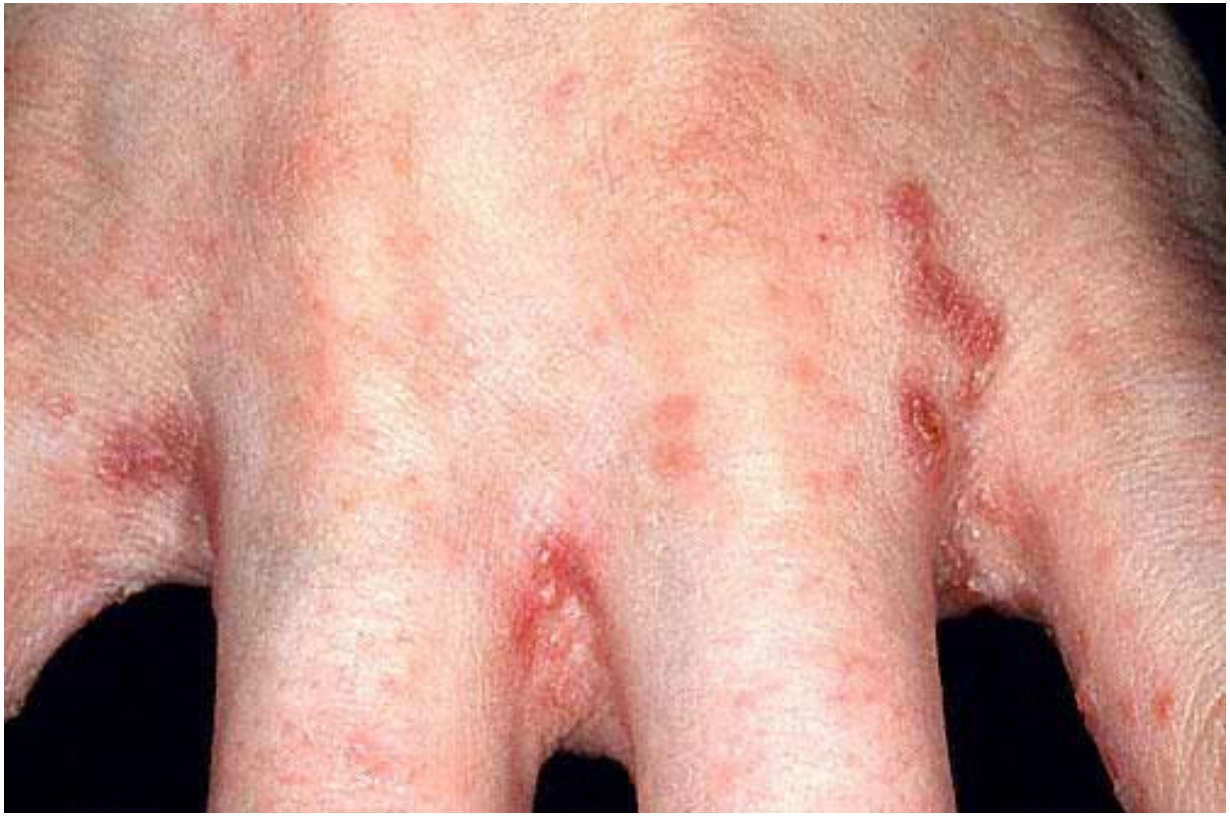
Pharmacologic Treatments for Head Lice

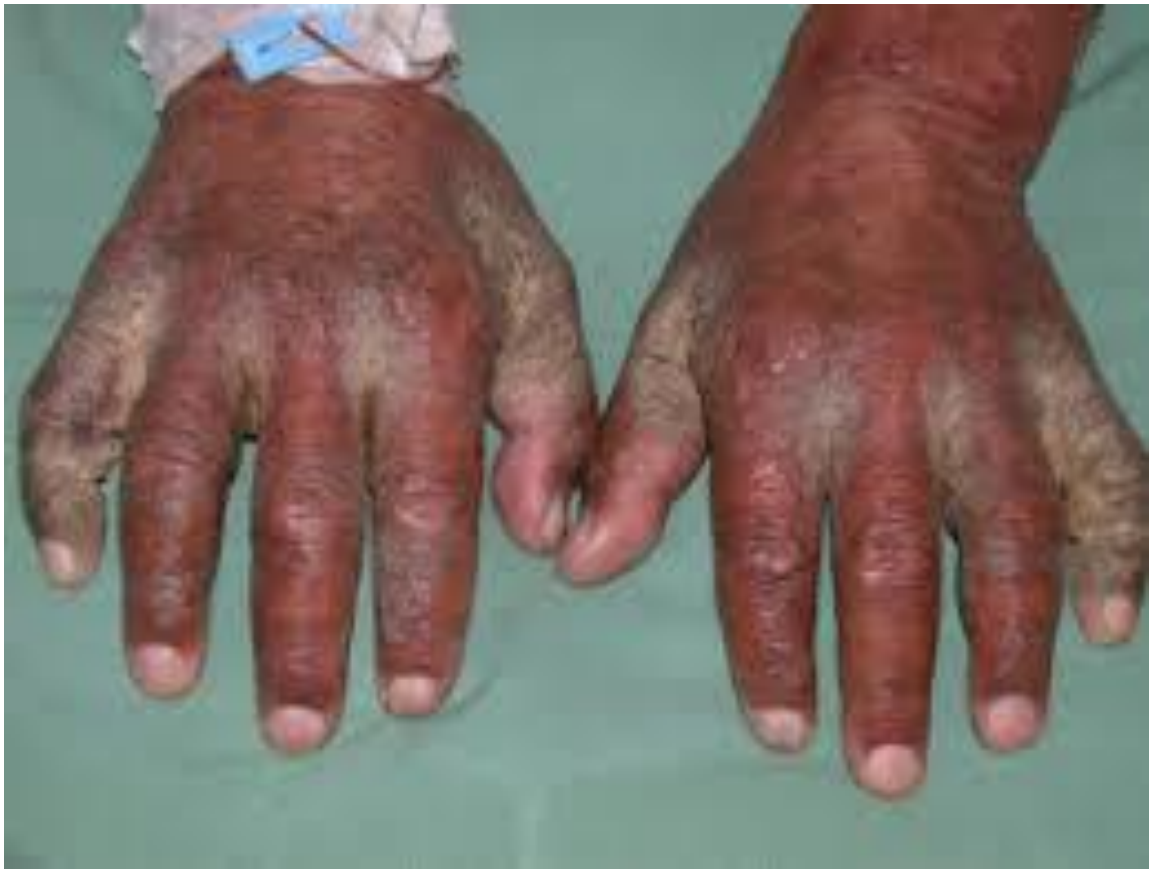
Treatment	Ovicidal
Ivermectin (Stromectol; not FDA-approved for treatment of pediculosis)	Partial
Malathion 0.5% lotion (Ovide)	Partial
Permethrin 1% lotion (Nix)	No
Pyrethrins 0.3%/piperonyl butoxide 4% shampoo or mousse (Rid)	No

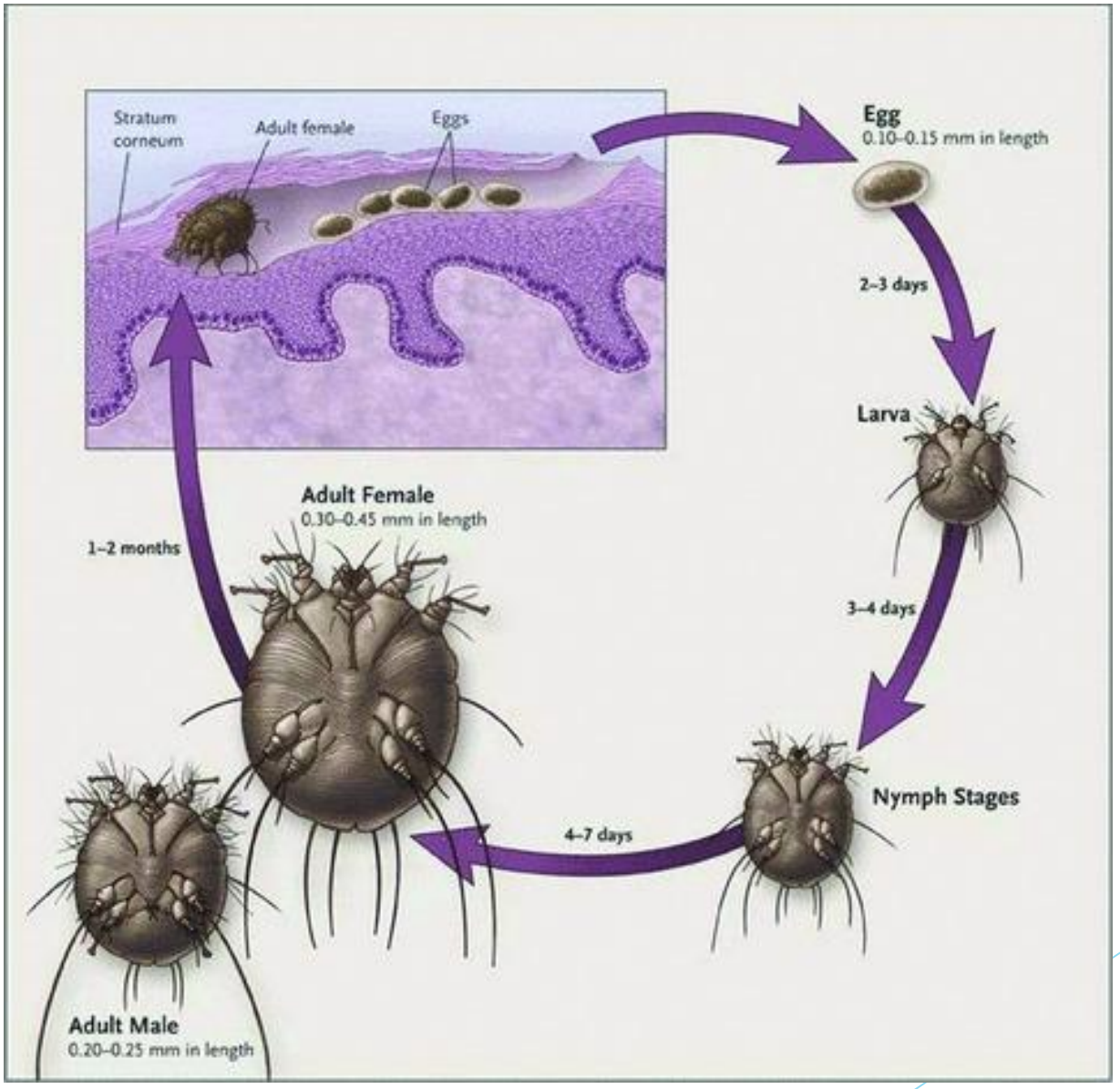
The invisible itch !




DermNetNZ.org






Stratum corneum
Adult female
Eggs
Egg
0.10–0.15 mm in length
2–3 days
Larva
3–4 days
Nymph Stages
4–7 days
Adult Female
0.30–0.45 mm in length
1–2 months
Adult Male
0.20–0.25 mm in length

Common Sites for Scabies

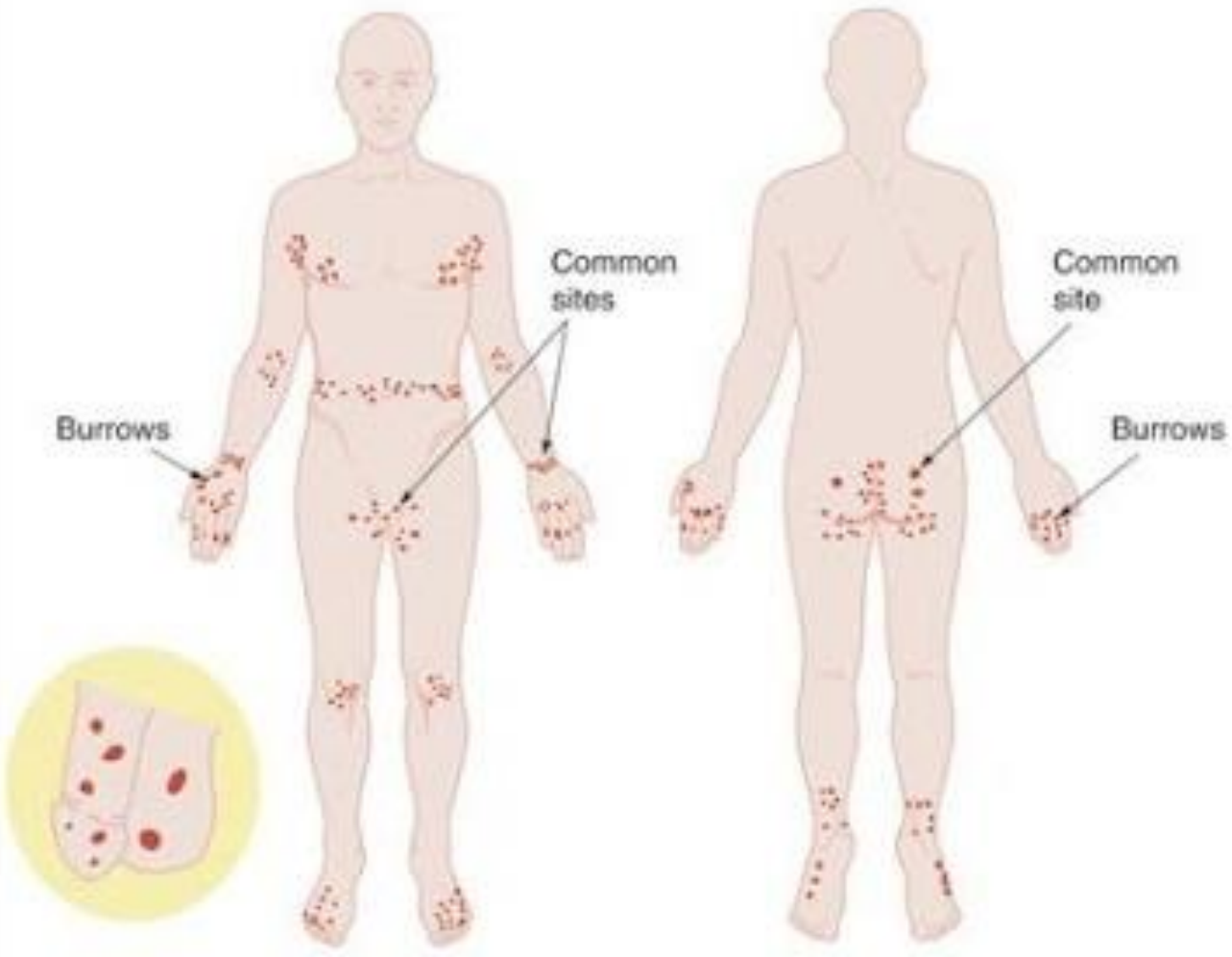


Table 1. Topical Treatment of Scabies Infection

Drug Name	Dose	Major side effects or contraindications	Remarks
Topical treatment			
Permethrin	➢ 5% cream ➢ Rinsed off after 8-14 hrs (4,16,17)	➢ Itching and stinging on application (4,16) ➢ May be used in infants ≥ 2 months of age, children, pregnant women and nursing mothers (4,7,16,17) ➢ Skin rash, diarrhoea and rarely convulsion and death (3)	➢ Recommended as first line therapy in Western countries (3,4,16)
Benzyl benzoate	➢ 10% or 25% lotion ➢ Rinsed off after 24 hr (several other regimens possible)	➢ Burning and stinging when applied to excoriated skin, pruritic cutaneous xerosis, or eczematous lesions post-treatment (4)	➢ Commonly used in Hong Kong (3) ➢ Not currently available in US Approved in Europe (4) ➢ Not recommended as first line in Western countries (3)
Malathion	➢ 0.5% lotion or cream ➢ Rinsed off after 24 hrs.	➢ Skin irritation but major side effect rare (3,7)	➢ Not contraindicated in pregnancy or breast-feeding
Crotamiton	➢ 10% cream ➢ Applied to nodules for 24 hr, rinsed off and reapplied for an additional 24 hr	➢ Skin rash (3)	➢ Less effective (3,4) ➢ Often used on scabies nodules in children (4) though not approved by FDA (8)

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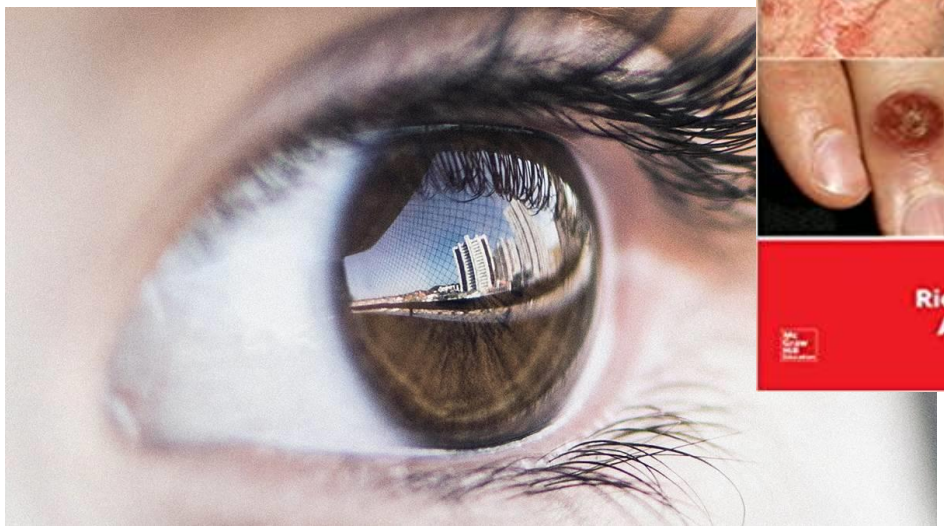
Drug	Instruction for use
Lindane 1% lotion	Apply thinly to the whole body from head to neck down and wash off completely after 8 hours
Permethrin 5% cream	Apply to whole body from the neck down and wash off after 8–14 hours
Ivermectin	200 μg per kg administered orally for two doses at an interval of 2 weeks; this is not a Food and Drug Administration approved indication

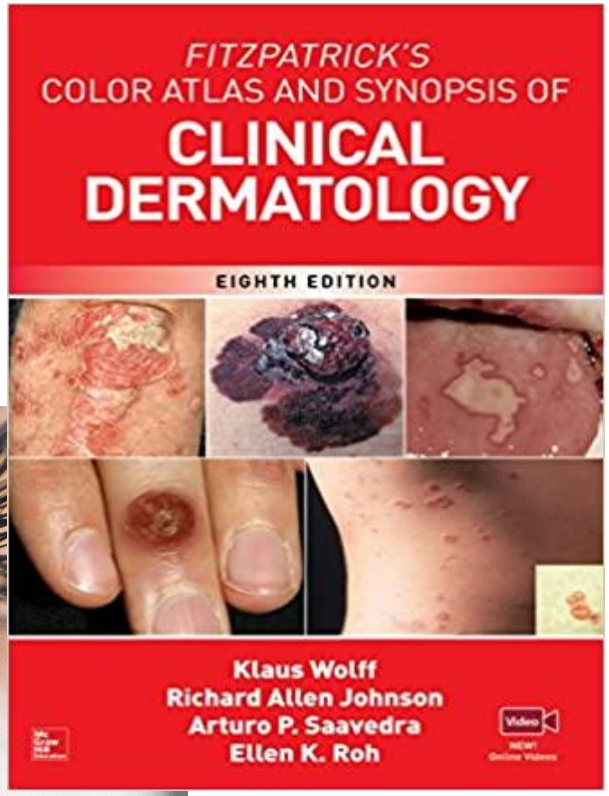
Basics !

- STD.
- Treat all house holds and family members.
- Hygiene.
- Household carpets, sheets, cusions, toys, pillow ahs to be sanitized or cleansed:

CDC:

- **decontaminated by washing in hot water and drying in a hot dryer, by dry-cleaning, or by sealing in a plastic bag for at least 72 hours. Scabies mites generally do not survive more than 2 to 3 days away from human skin.**
- **Use of insecticide sprays and fumigants is not recommended.**





The End

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