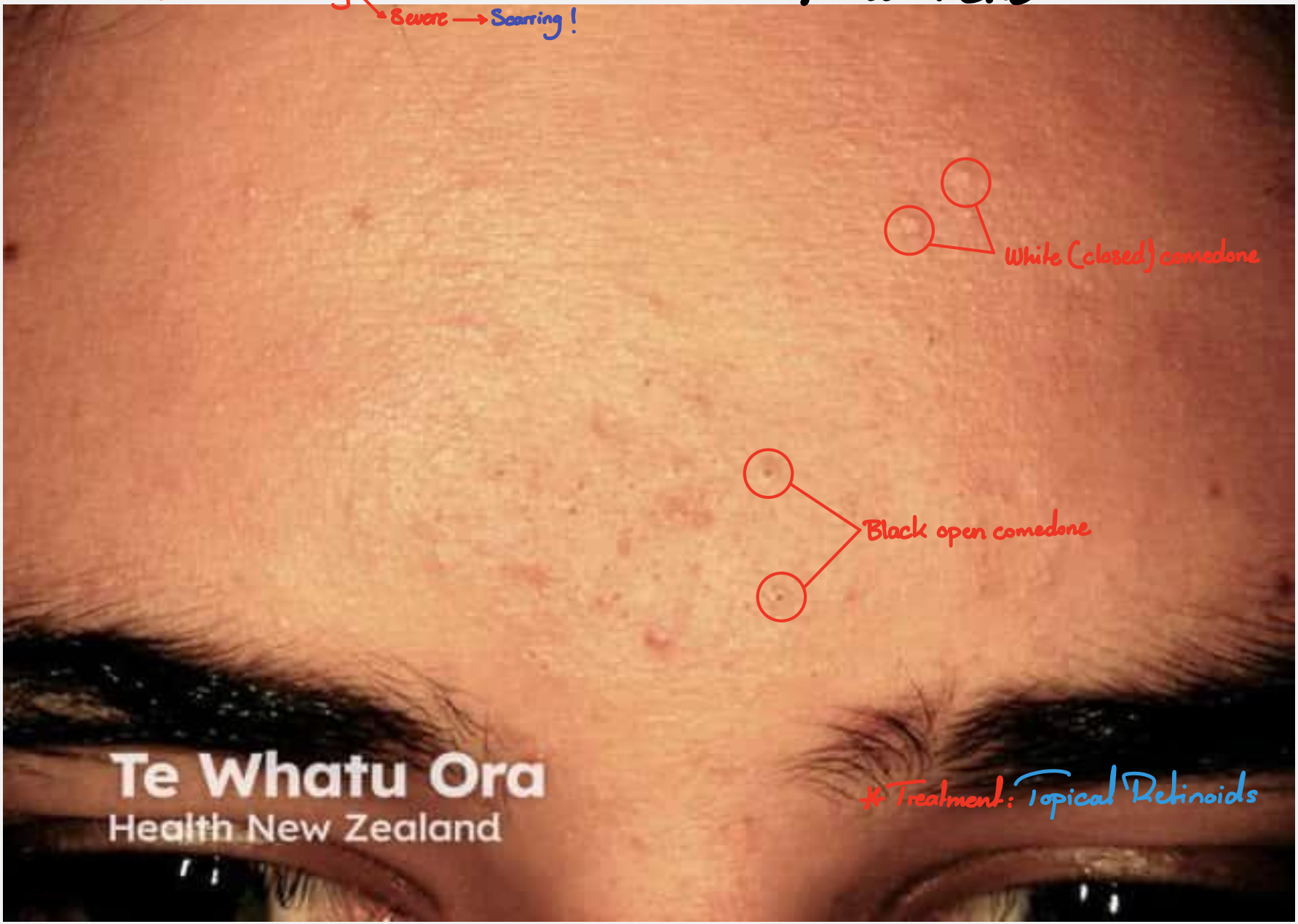
COMMON DERMATOLOGY CASES

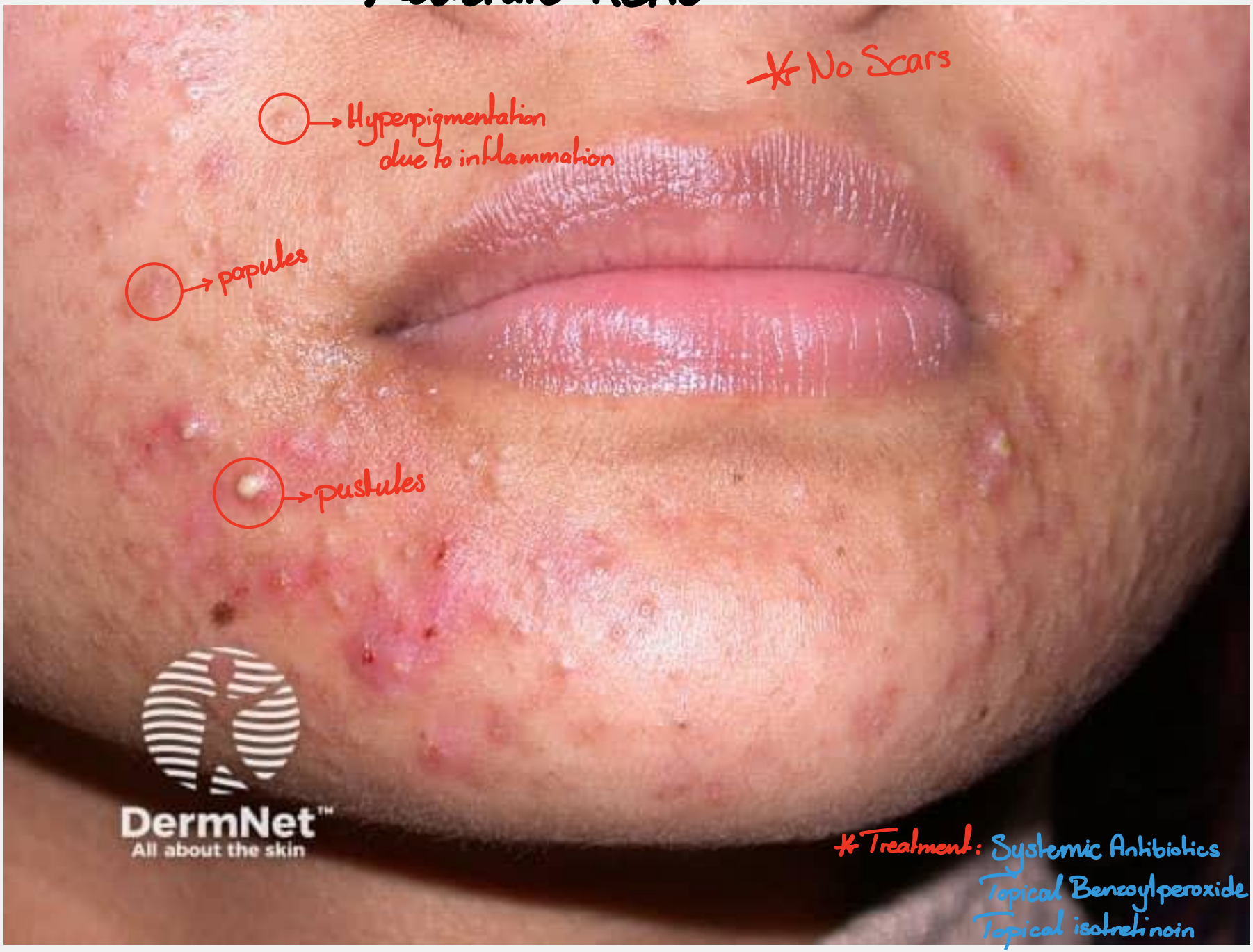
For 5th-Year Medical Students

Mild Acne

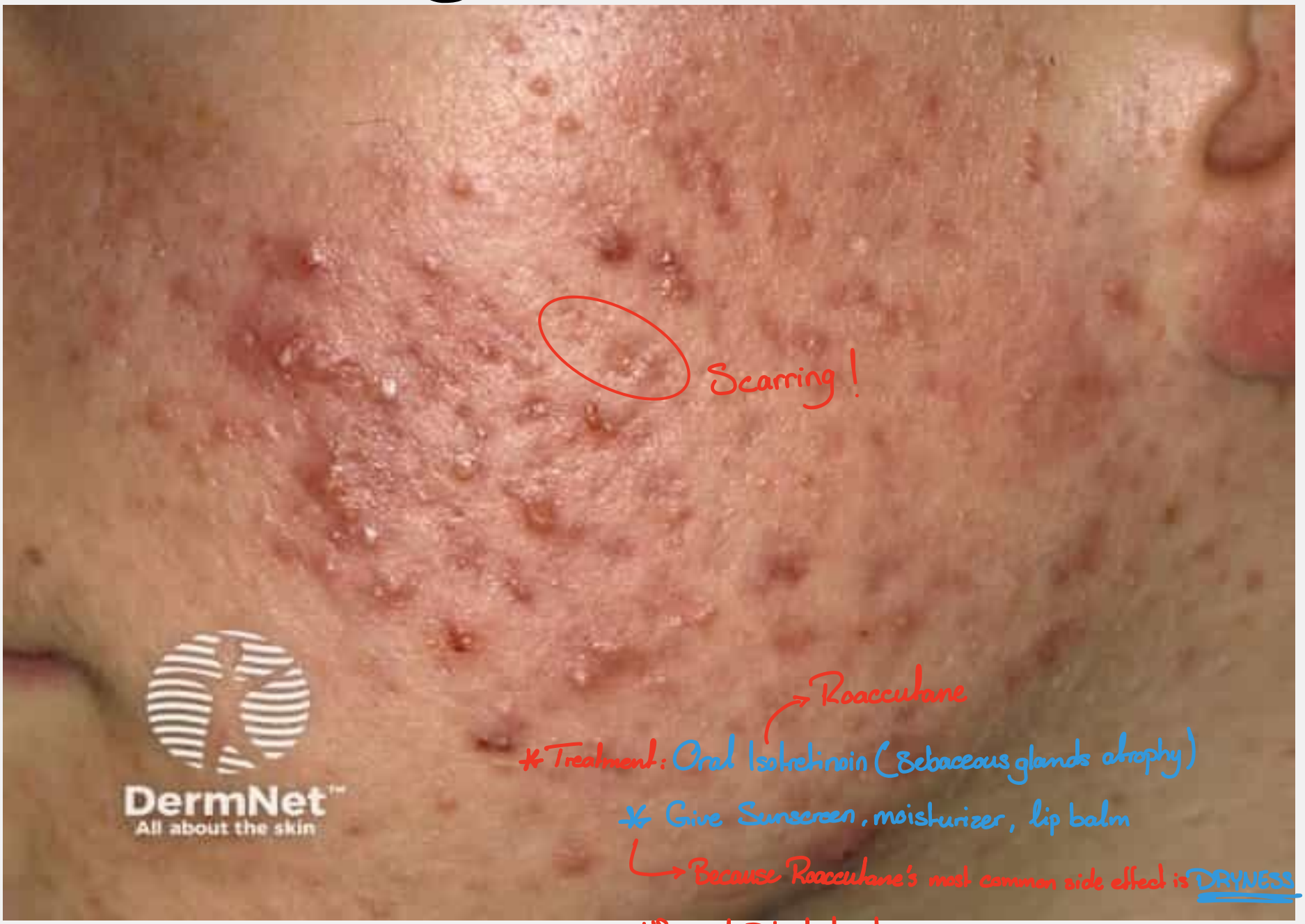
* Comedones → Acne !
* But we must determine the severity → Mild / Moderate → pustule, papule, comedones / Severe → Scarring !



Moderate Acne



Severe Acne


Scarring !
DermNet™
All about the skin
Roaccutane
* Treatment: Oral Isotretinoin (Sebaceous glands atrophy)
* Give Sunscreen, moisturizer, lip balm
Because Roaccutane's most common side effect is DRYNESS
NB not Dehydration !

ACNE VULGARIS

Sure sign of acnes

- A 19-year-old female presents with comedones, papules, and pustules on her face and back.
- Questions:
- 1. What are the treatment options for mild, moderate, and severe acne?
- Answers:

Vit A derivative

- - Mild: Topical retinoids, benzoyl peroxide
- - Moderate: Add oral antibiotics (e.g., doxycycline)

Roaccutane

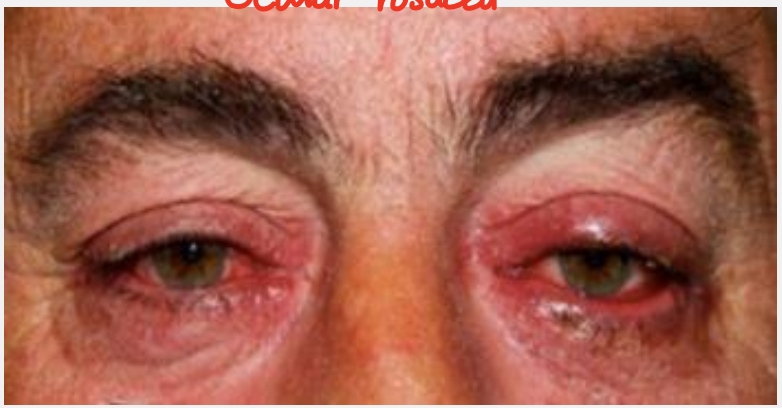
- - Severe: Consider oral isotretinoin. → Sebaceous glands atrophy
  - → Consider giving moisturizer, lip balms, sunscreen

NB: Roaccutane's most common side effect is Dryness not dehydration!

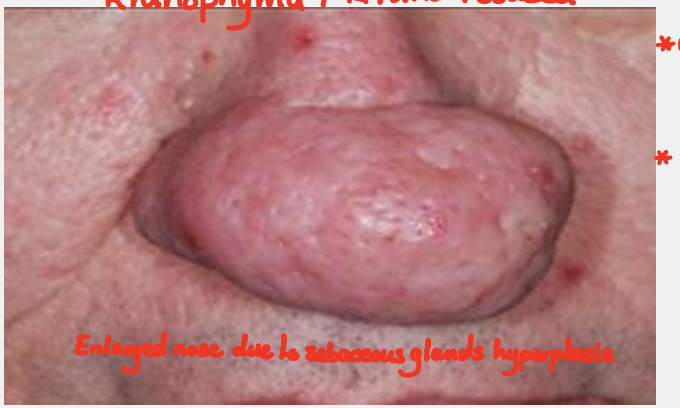
* Roaccutane's most severe side effects are: I. Teratogenic
II. Hepatotoxic → AST ⅄ ALT doubling → decrease to ½ of the dose
→ AST ⅄ ALT tripling → Stop treatment
III. Suicidal ideas

very important : Memorize the names of the 4 Rosacea types !

Ocular rosacea

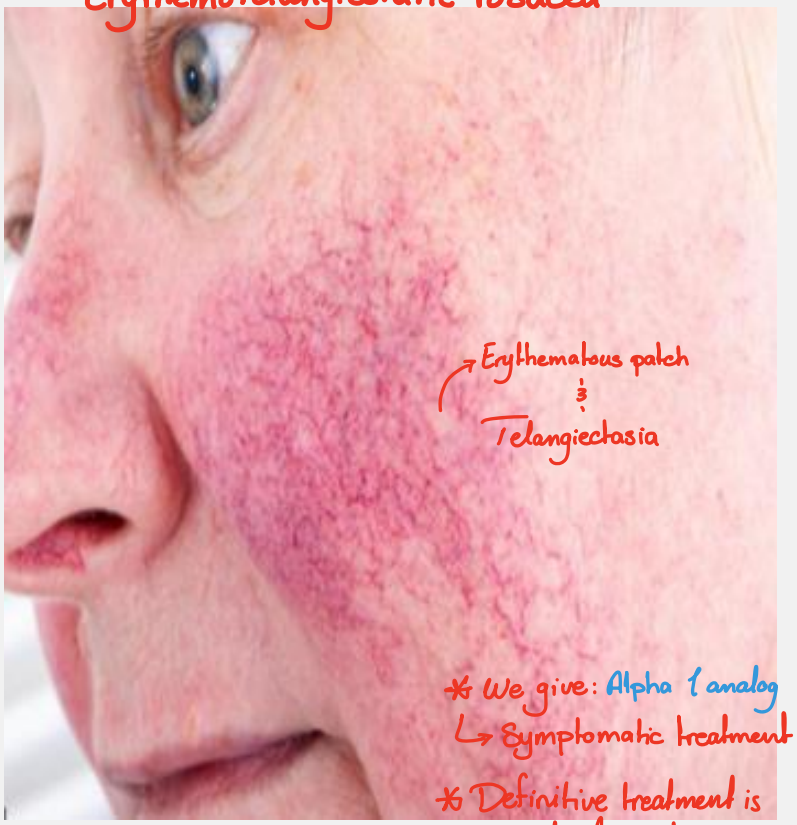


Rhinophyma / Rhino rosacea



* Give Roaccutane because as said before it causes sebaceous glands atrophy
* Can be treated surgically

Erythemotelangiectatic rosacea



* We give: Alpha 1 analog
  ↳ Symptomatic treatment
* Definitive treatment is vascular laser !

papulopustular rosacea

* Ask about alcohol intake

ROSACEA

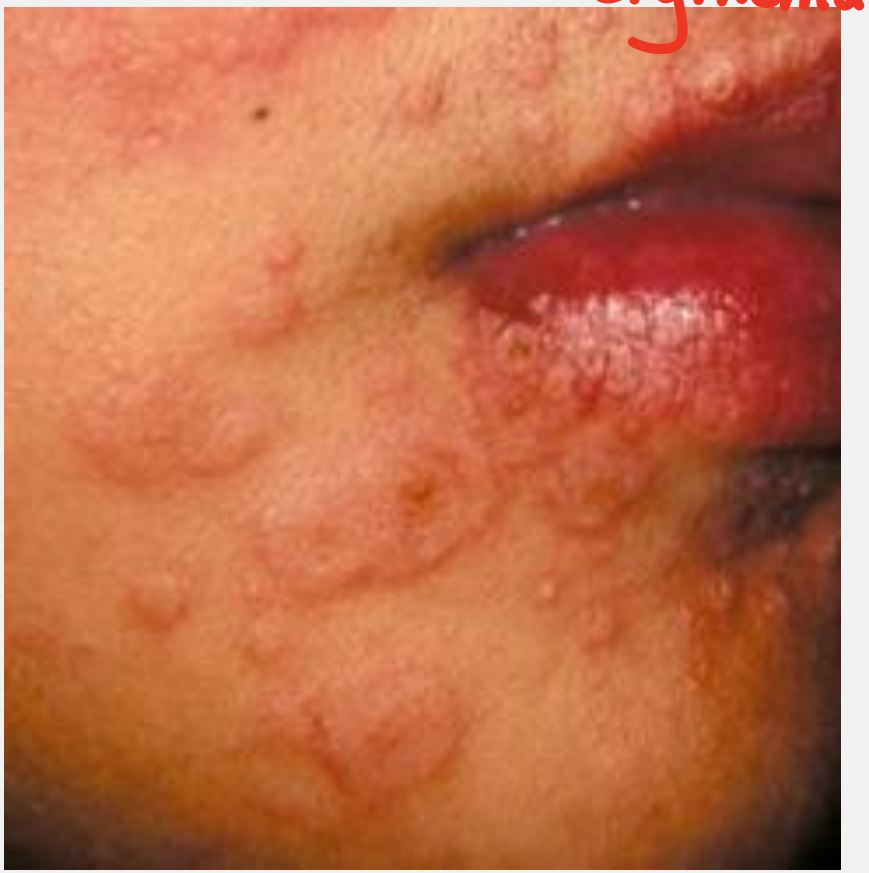
The exact etiology is **unknown**, but these **hereditary (genetics) and environmental, inflammatory, neurological, vascular** factors can act as triggers:

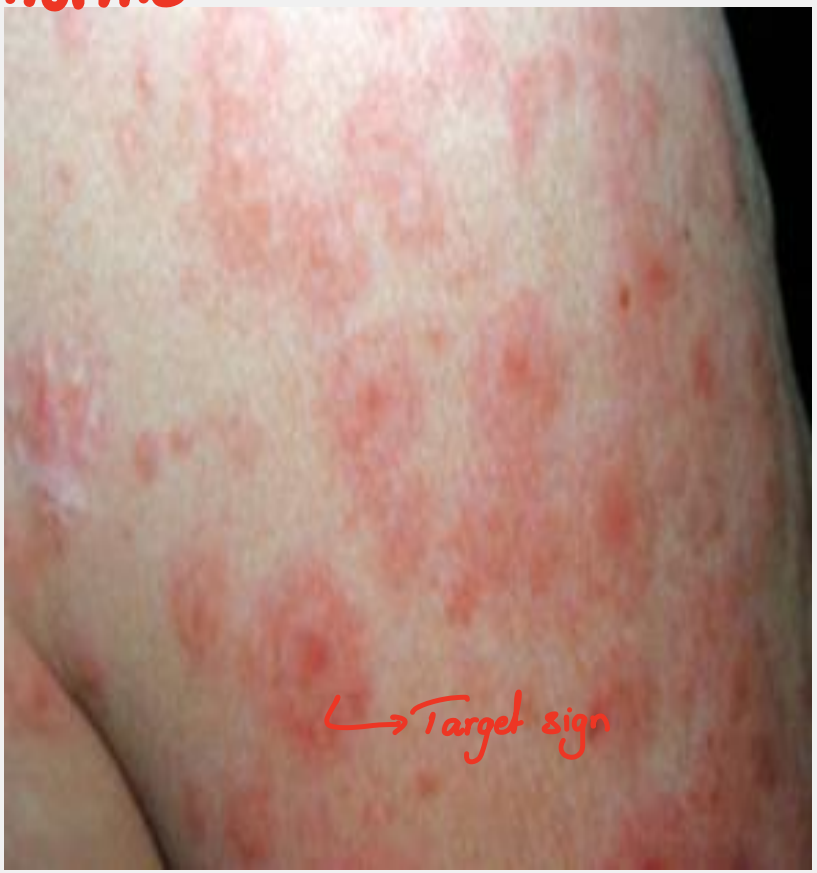
1. Sun exposure/ sunburns/ temperature extremes
2. Stress/ anxiety
3. Alcohol
4. Spicy food
5. Caffeine
6. Cathelicidin: an antimicrobial peptide expressed in high levels in rosacea patients, promoting inflammation.
7. Certain micro-organisms: Demodex mites, H-pylori
8. Certain medications: beta blockers, niacin can cause a flare up

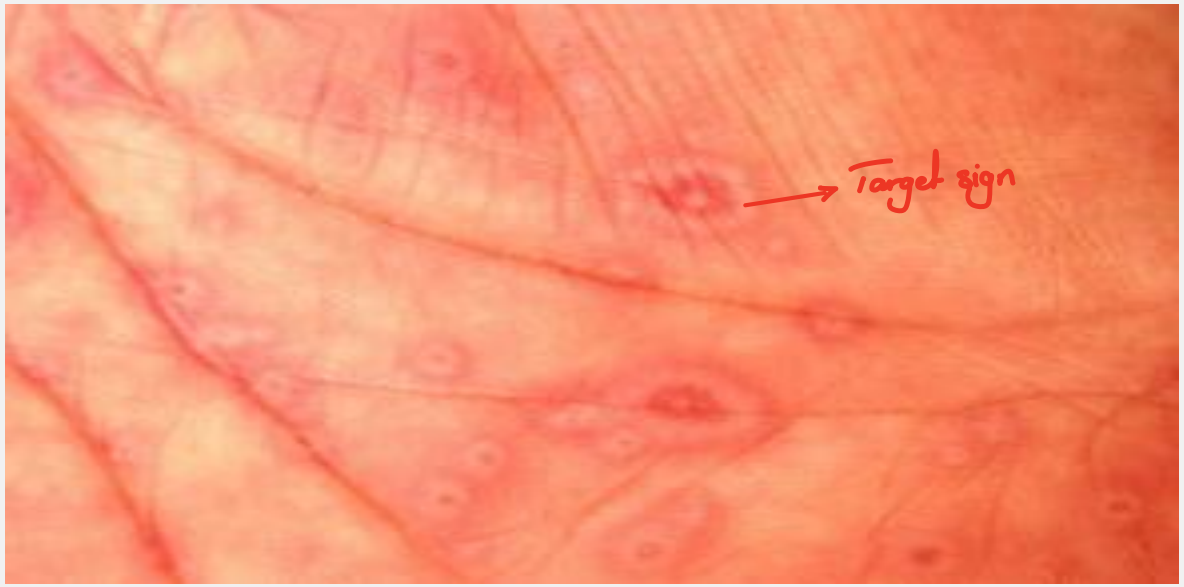
ACNE VS ROSACEA

	Rosacea	Acne
Composition	Erythema and telangiectasia present	No erythema/telengectasia Seborrhea (greasy face)
Distribution	Affects the **central face only** More symmetrical Eye involvement Nodules & scarring are unlikely	Affects face and trunk, upper back, shoulder, neck Nodules and scarring can be seen
Comedones	**Absence** of comedones	Comedones **present**
Seborrhea	**Absent**	**Present**
Affected age group	Appears at a later age (30-50)	Most common in adolescence but can appear/ persistent later on

Erythema multiforme



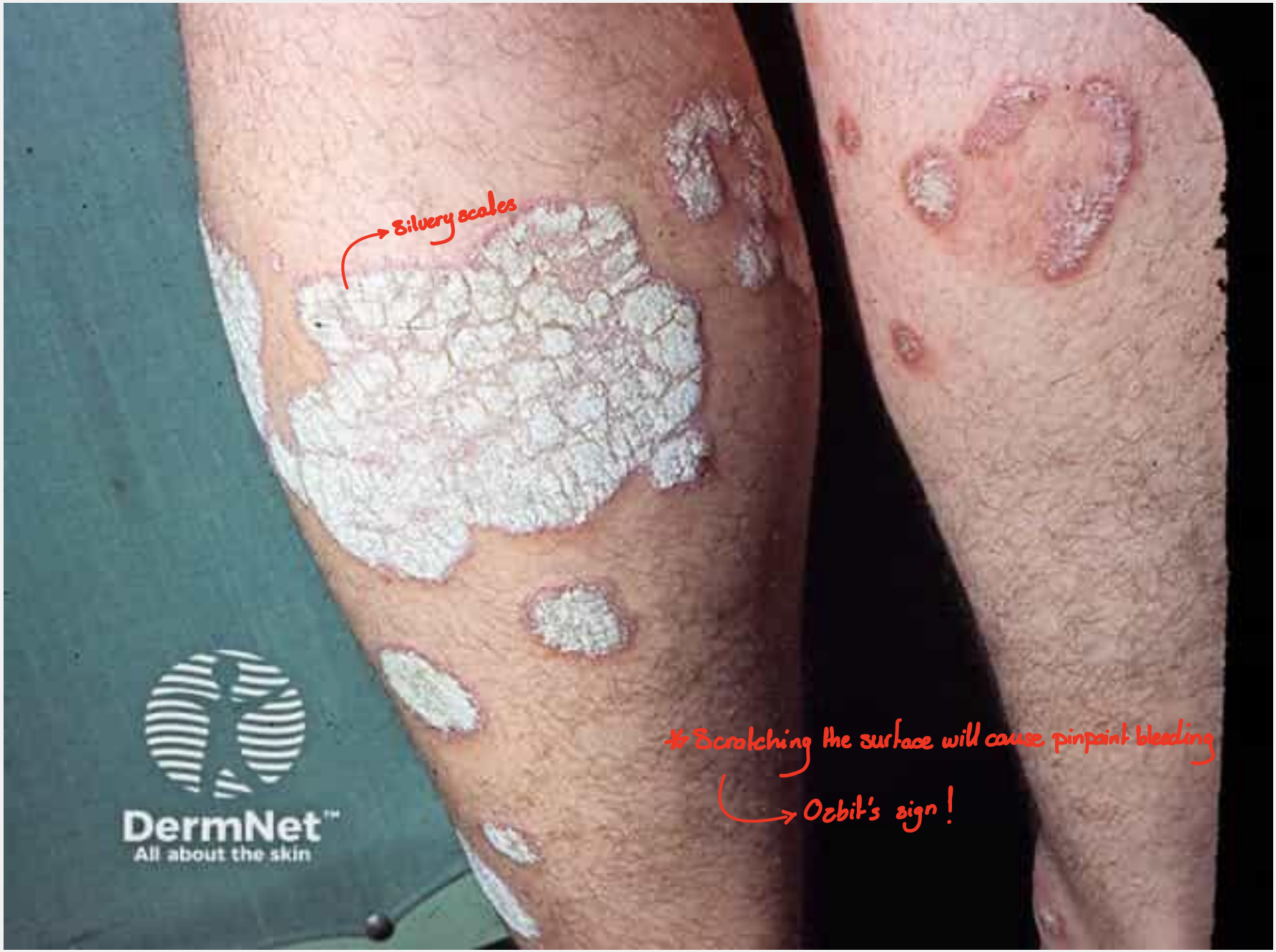




* most common cause :
  1. HSV
  11. Mycoplasma
  111. Malignancy
  IV. Drug intake

ERYTHEMA MULTIFORME

- Preceded by a possible trigger (
- **ACROFACIAL distribution**
- **Type of lesion: targetoid lesion**
- Presents with multiple types of lesions—macules, papules, vesicles, **typical target lesions;** annular erythematous rings with an outer erythematous zone and central blistering and atypical targetoid papules with no central blistering.
- The lesions have a rapid onset and usually increase in number over 4 to 7 days. They can cause general discomfort but are not itchy until they start to heal.
- Typically presents in a symmetrical distribution of lesions over the dorsal surfaces of the extensor extremities with minimal mucous membrane involvement.
- The lesions heal within **1-2** without scarring.
- Most cases of EM can be diagnosed by history and clinical examination alone, and no further investigations are needed. If uncertain biopsy can be carried out though not routine.


Silvery scales
* Scratching the surface will cause pinpoint bleeding
Ozbit's sign !
DermNet™
All about the skin

PSORIASIS

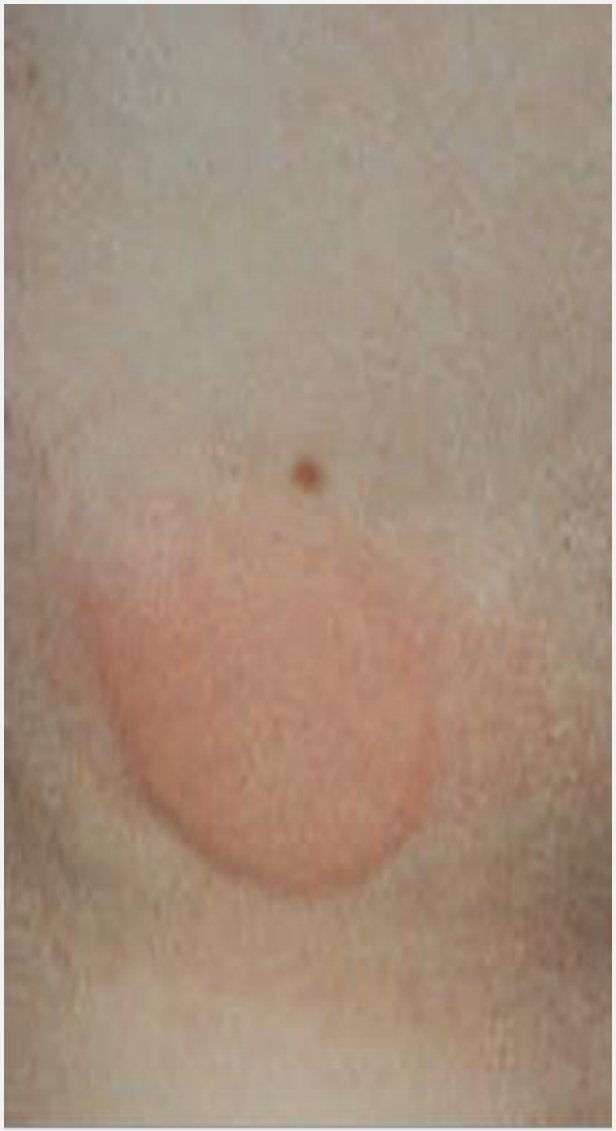
- A 32-year-old male presents with well-demarcated, erythematous plaques covered with silvery scales,
- primarily on the extensor surfaces.
- Questions:
- 1. What are the hallmark features of psoriasis?
- 2. How is it managed?
- Answers:
- - Hallmarks: Plaques with silvery scales, Auspitz sign, Koebner phenomenon.
- - Management: Topical corticosteroids, phototherapy, systemic agents (e.g., methotrexate).

Eczema

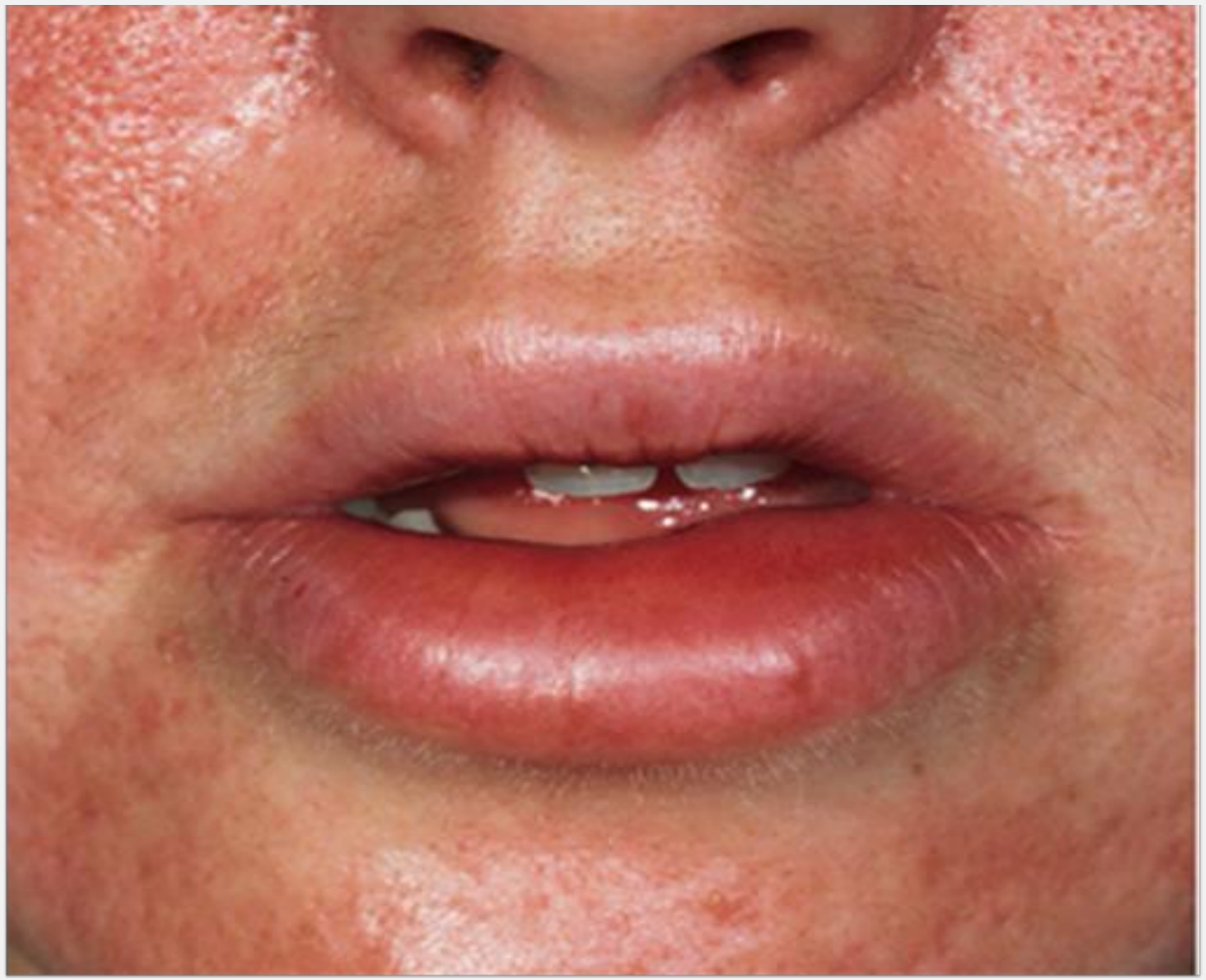

Lichenifaction ⟶ Eczema
* Thickened skin
* Exaggerated skin marking
* Erythematous
DermNet™
All about the skin

ATOPIC DERMATITIS (ECZEMA)

- A 5-year-old boy presents with pruritic, erythematous, scaly patches on the flexural areas of the arms and legs.
- Questions:
- 1. What are common triggers?
- 2. What is the first-line treatment?
- Answers:
- - Triggers: Allergens, irritants, dry skin, stress.
- - Treatment: Emollients, topical corticosteroids, antihistamines. ع Vit D



A classic wheal.



Angioedema is a deeper, larger hive

* Angioedema is Bradykinin mediated
not Histamine mediated

* it wont respond to antihistamine & Steroids
so give Bradykinin receptor antagonist

URTICARIA (HIVES)

- A 30-year-old female presents with transient, pruritic, erythematous wheals triggered by certain foods.
- Questions:
- 1. What is the underlying mechanism?
- 2. How is it managed?
- Answers:
- - Mechanism: Histamine release due to mast cell activation.
- - Management: Oral antihistamines, corticosteroids, epinephrine for anaphylaxis.

URTICARIA CONTINUED..

- It is a common reaction pattern in which **pink**, **itchy** or **burning swelling (wheal)** can occur anywhere in the body.

- Lesions are evanescent (individual lesions do not last for longer than 24h) – a rash that comes and goes-

Distribution: Generalized

Type of lesion: Wheals

- Divided into : according to duration of eruption

1- Acute (if the duration < 6 week)

2- Chronic (if the duration > 6 week)

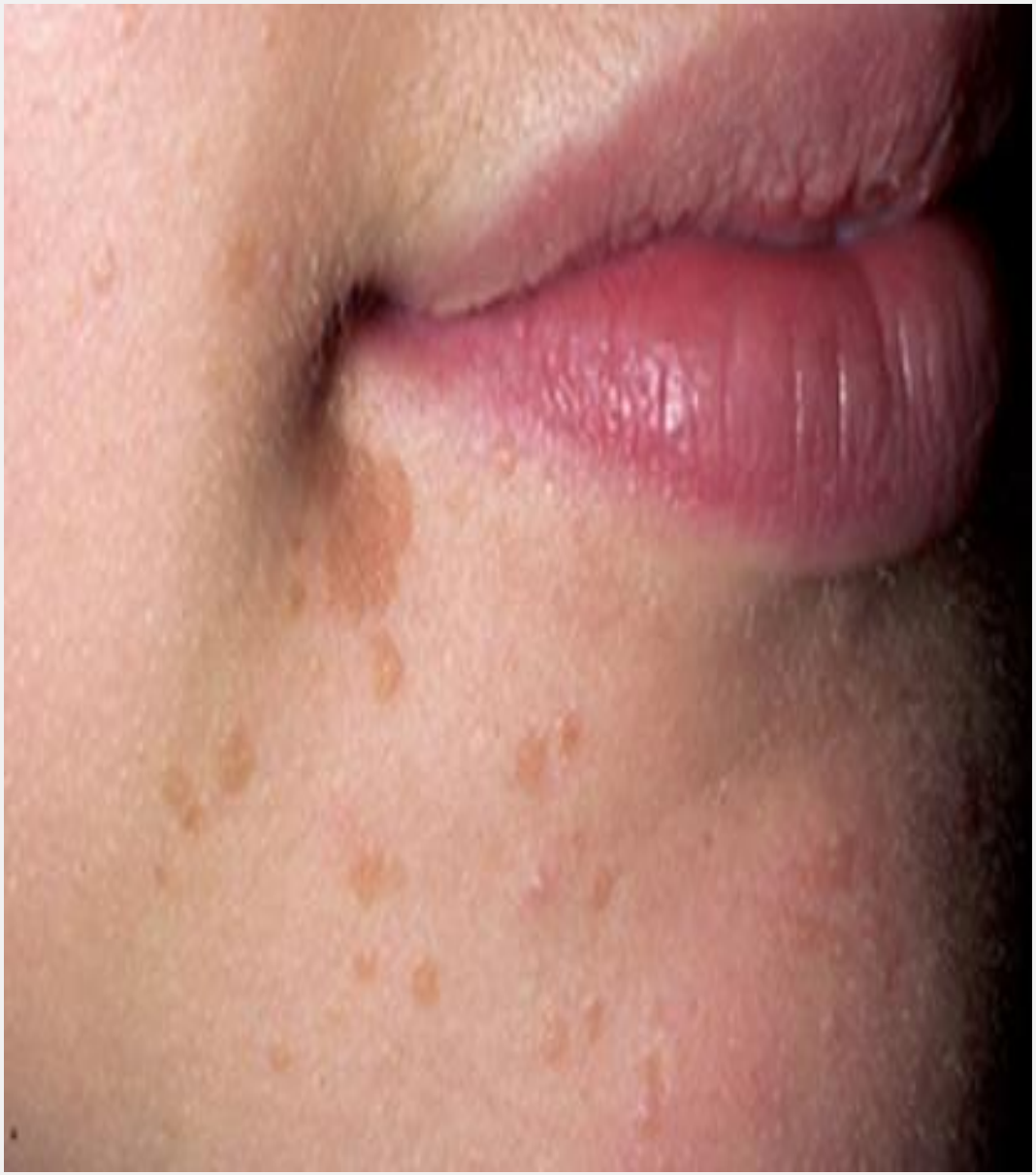
Warts

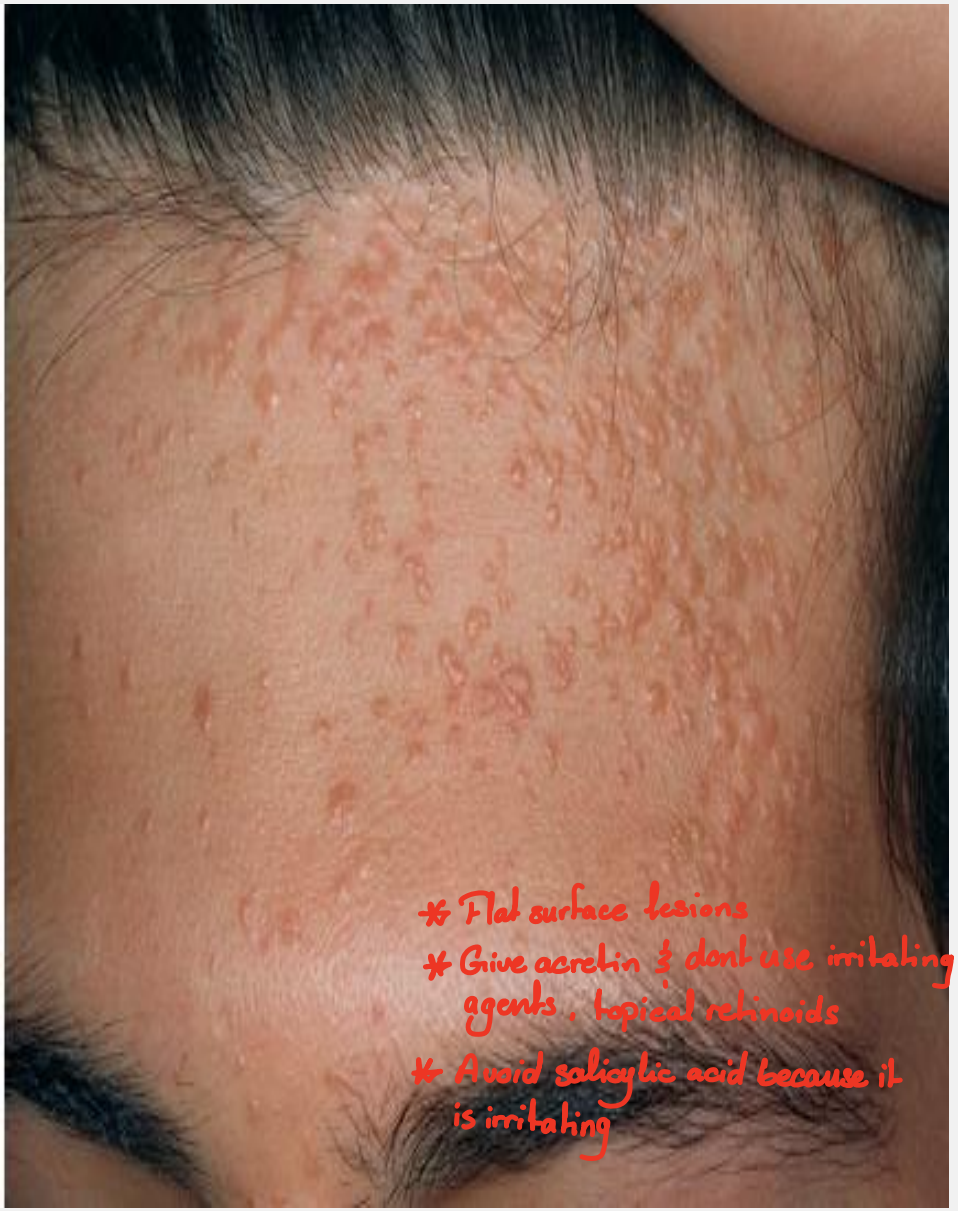
* most common cause is HPV
  - ↳ Black dots → thrombosed capillaries
* Surface is rough ⅓ verucious
* First line therapy is: Topical salicylic acid
* Second line : Cryotherapy

- new, mini warts
- Black dots so 100% warts

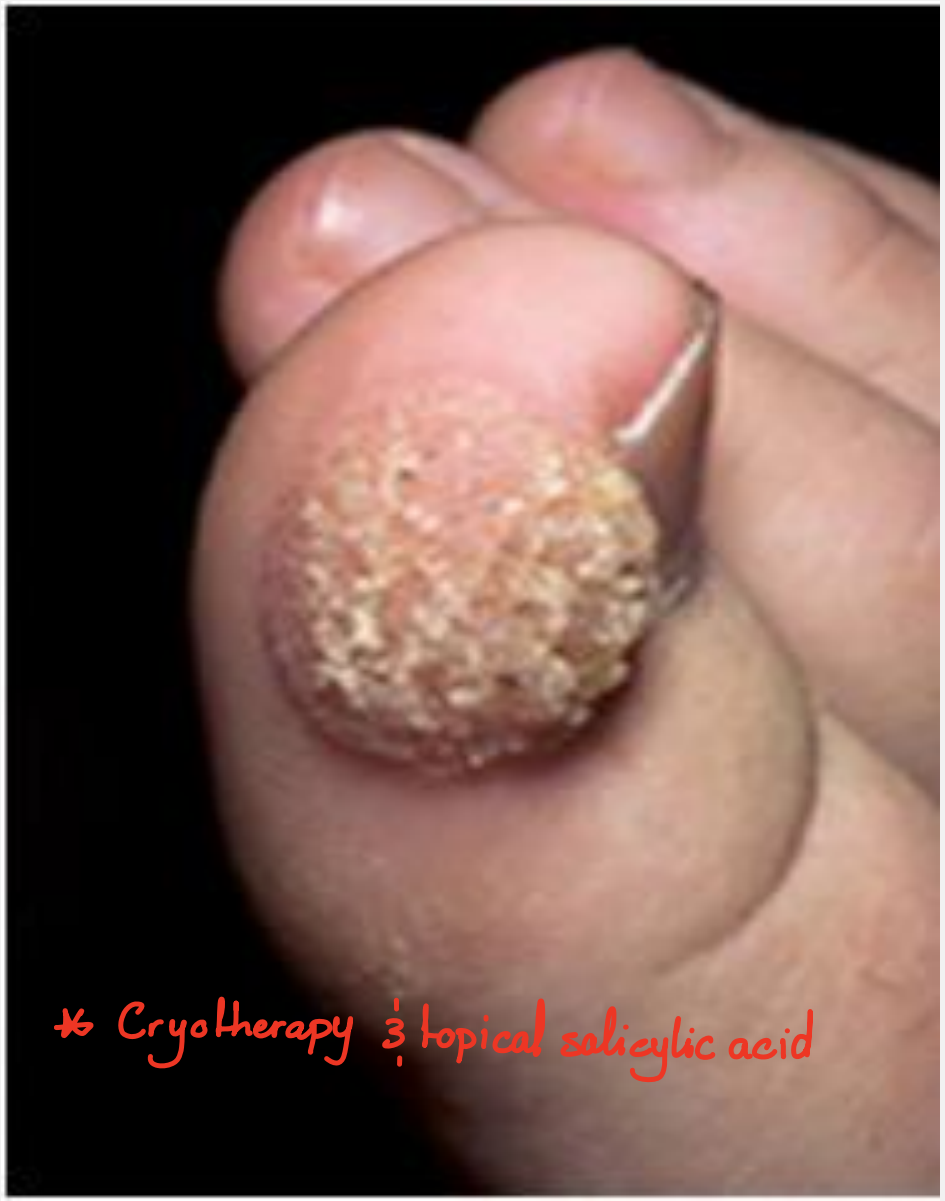
NB * pseudokoebner phenomenon
↳ new lesion on a newley injured skin

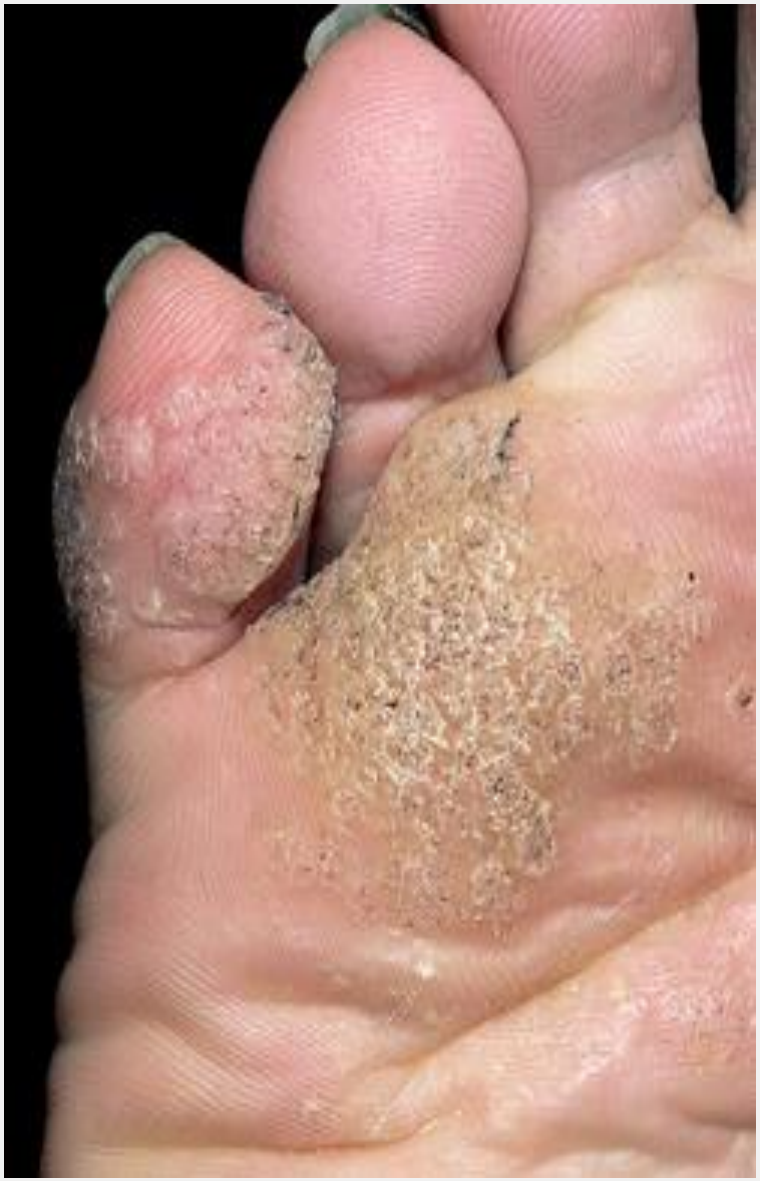
Warts




* Flat surface lesions
* Give acretin & dont use irritating agents, topical retinoids
* Avoid salicylic acid because it is irritating

Plantar warts

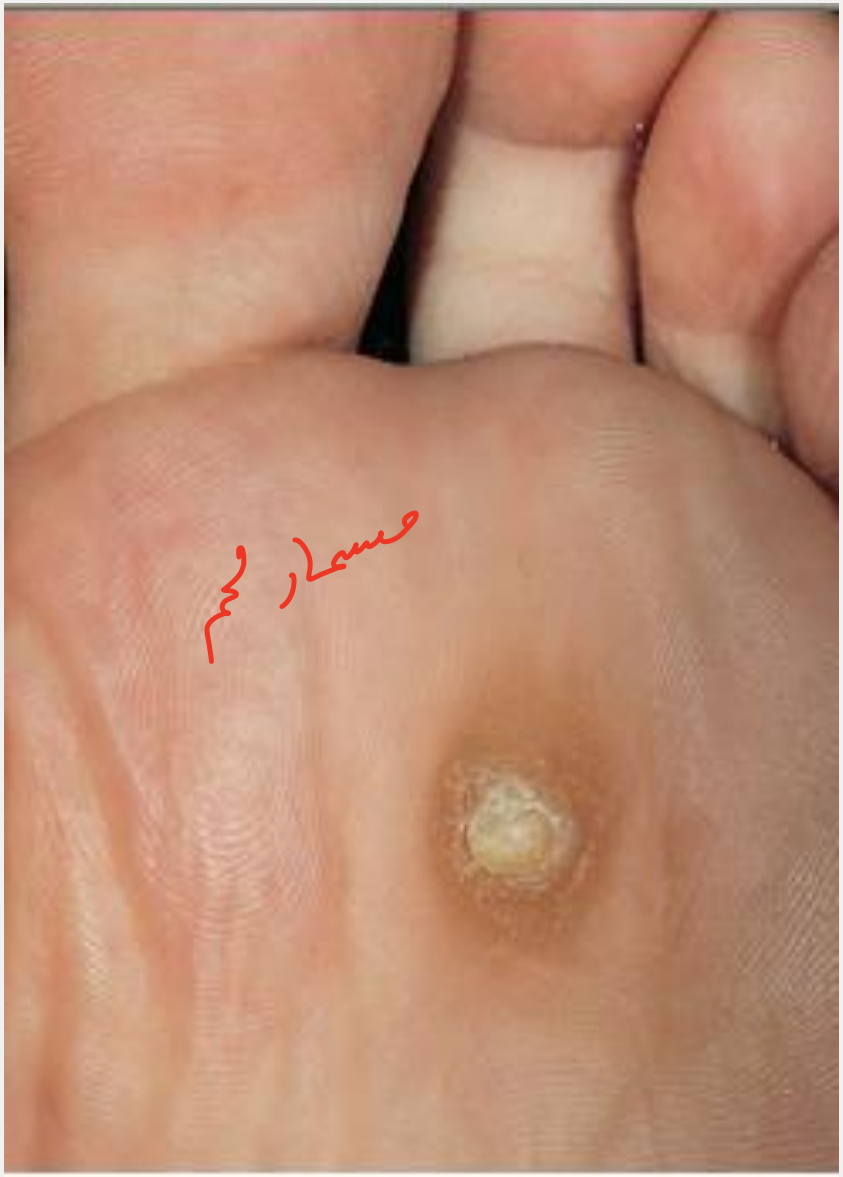




VIRAL WARTS

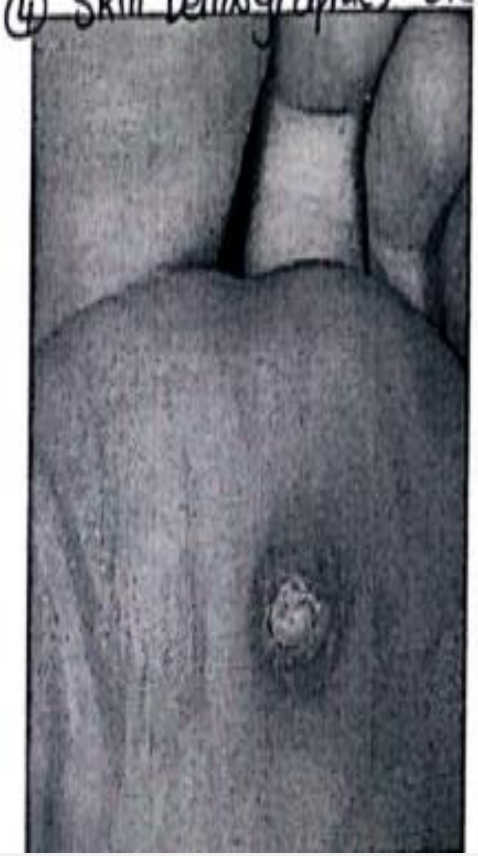
- What is the causative agent of common viral warts ?
- HPV 1,2,4,7, 27 , 57
- HPV for flat warts ?
- HPV 3,10
- HPV for genital warts ?
- HPV 6,11,16,18

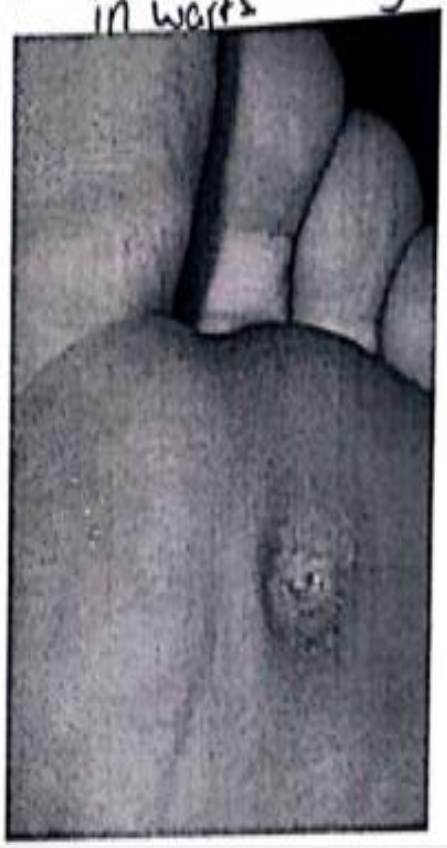
Corns



*preserved skin markings
* present on pressure sites
*Treatment: Topical salicylic acid

(1) due to pressure and friction, not infection
(2) No verrocas Surface here
Corns
(3) No black dots like warts. (bcz of bleeding (capillaries))
(4) Skin Dermographics are intact here, but destroyed in warts





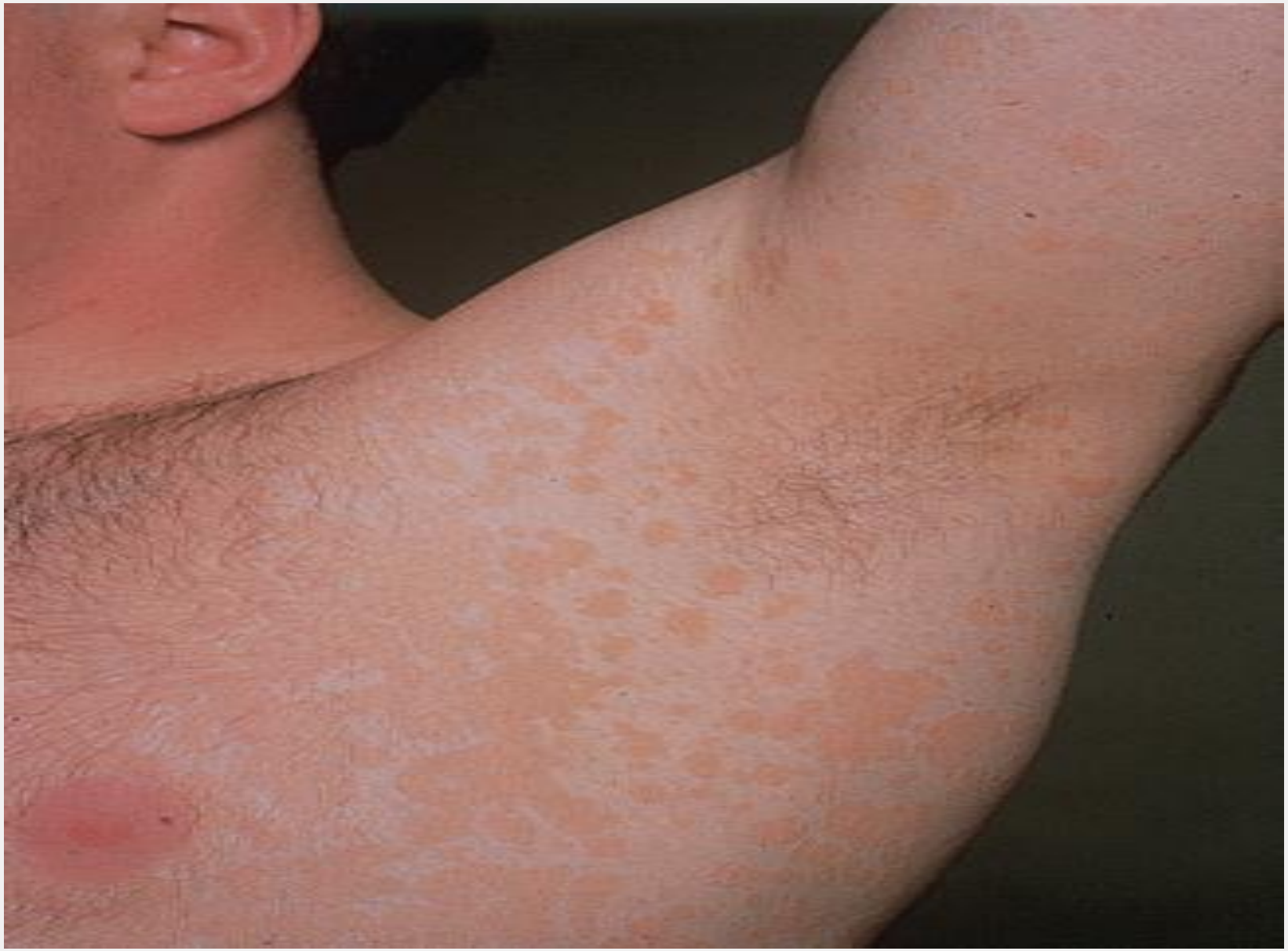
CORNS

Plantar Warts vs . Corns

Both can be painful

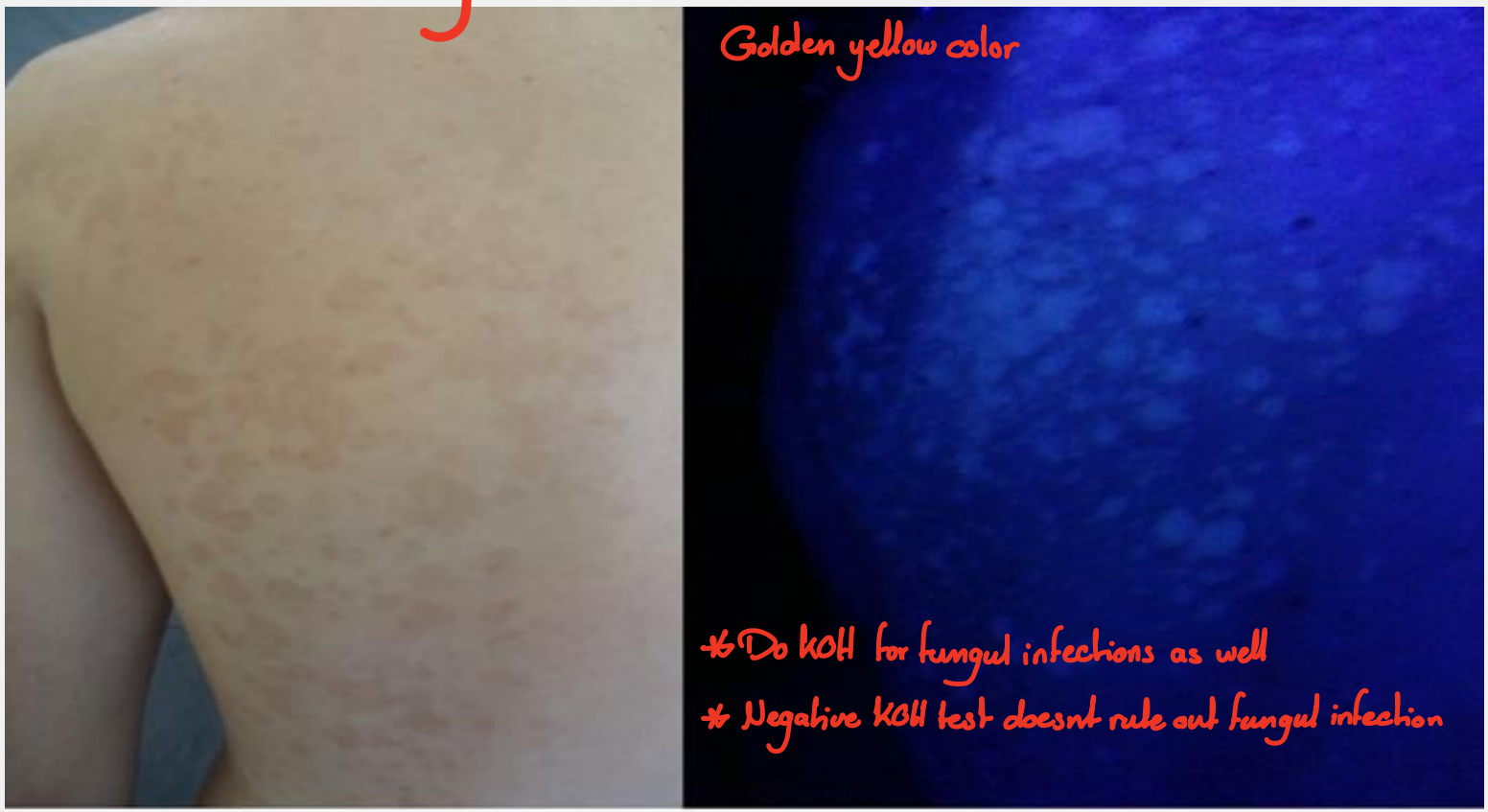
Plantar warts > Due to HPV, multiple, disrupts skin lines, black dots (thrombosed capillaries)

Corns >Due to friction (high pressure sites) , preserved skin lines

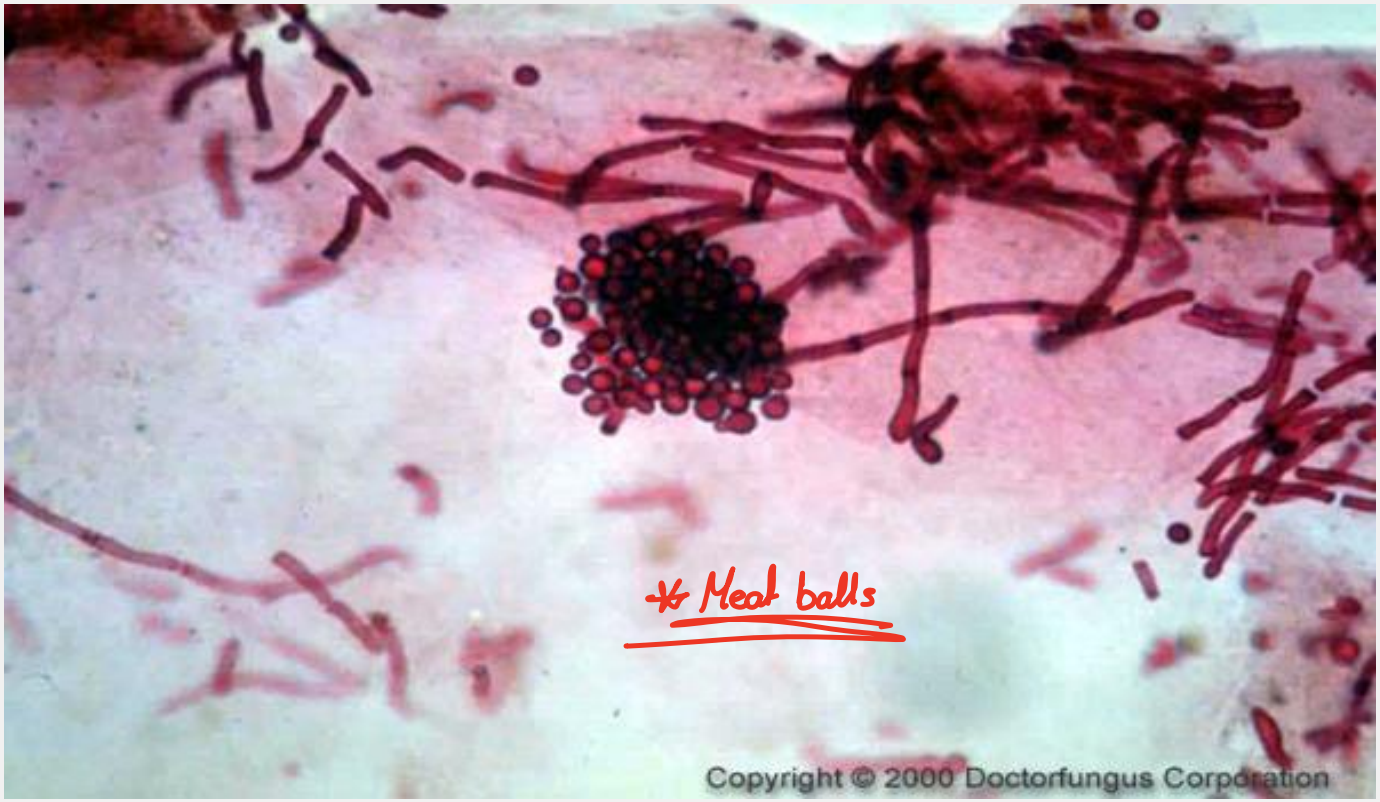


WOOD'S LIGHT

Pityriasis Versicolor



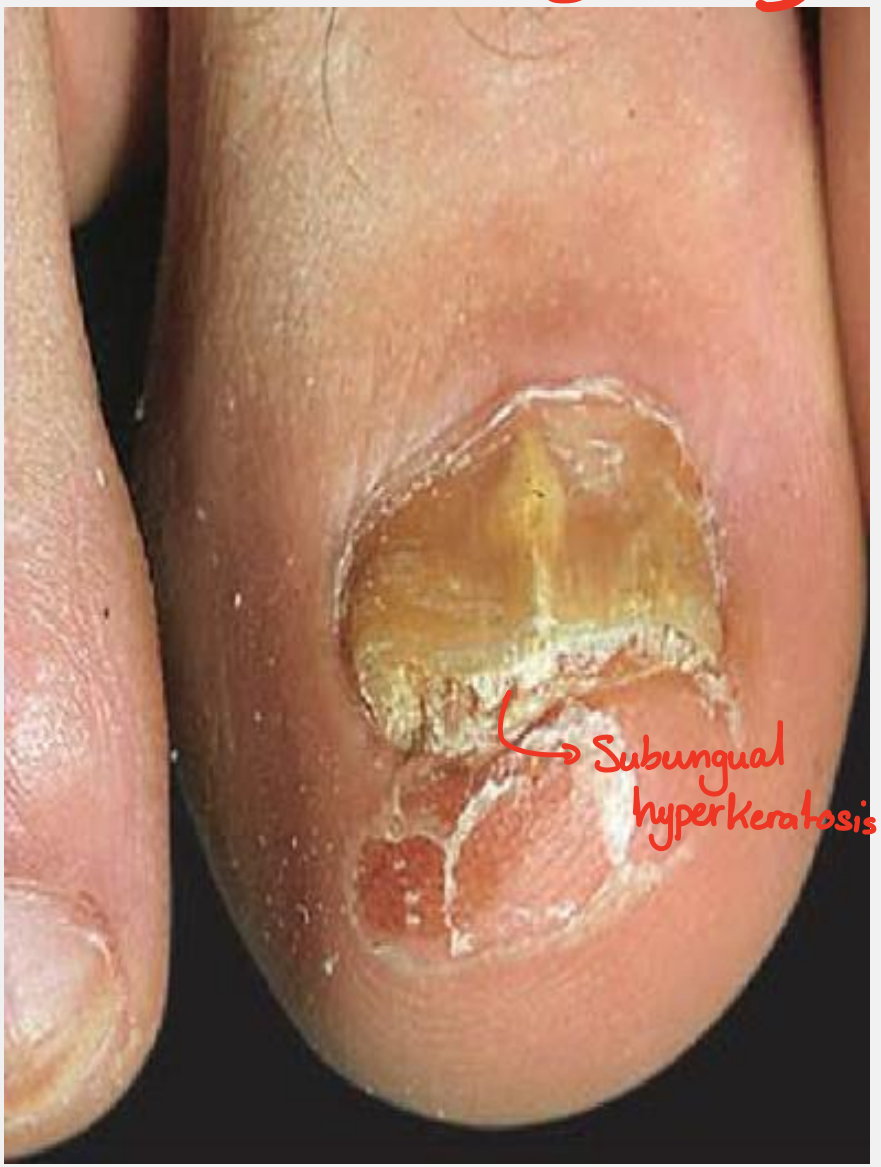
KOH

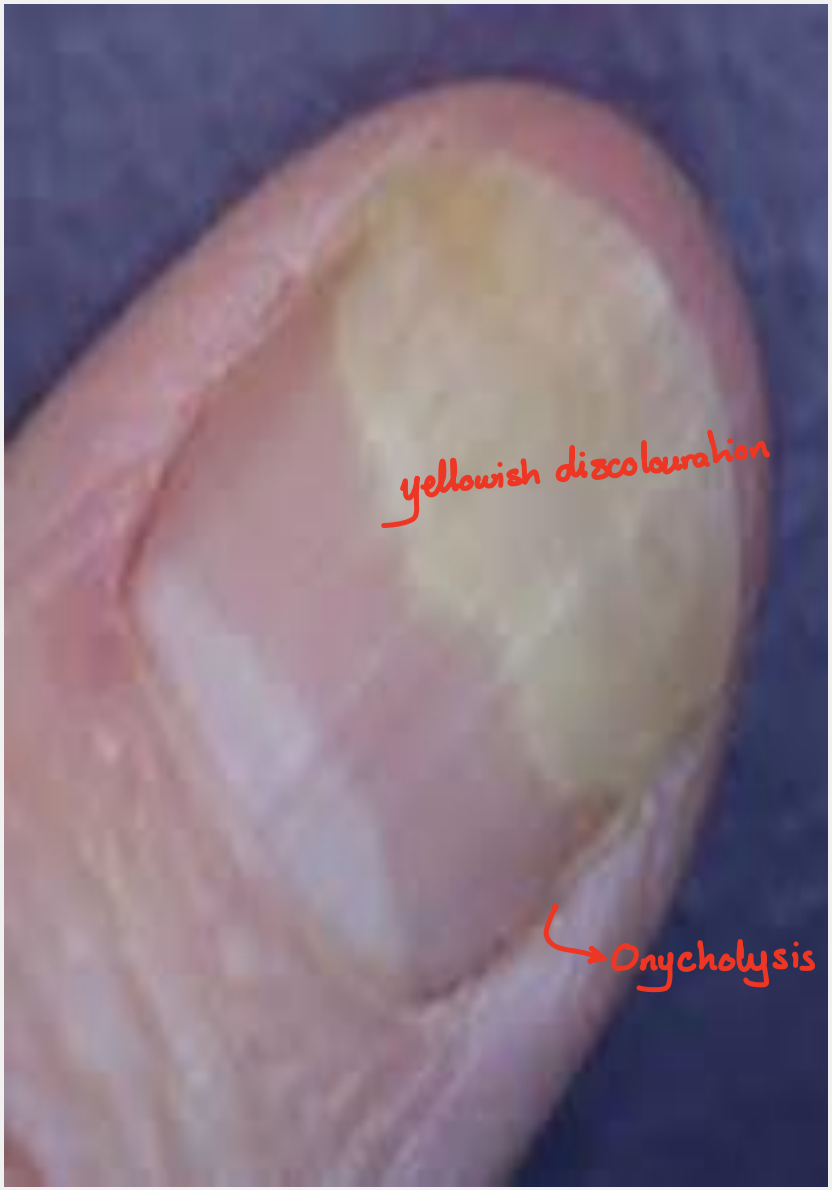


PITYRIASIS VERSICOLOR

- **Non-infectious**
- **Cause:** commensal **yeasts, part of the normal flora**, Pityrosporum orbiculare (Malassezia Furfur)
  - Overgrowth in hot humid conditions.
  - Release carboxylic acids, inhibit the increase in pigment production by melanocytes after exposure to sunlight.
- **Superficial Fawn** or pink **scaly patches** on non-tanned skin
- Become paler than the surrounding skin after exposure to sunlight
- Scaly, fine scales are seen after stretching the skin

Onychomycosis



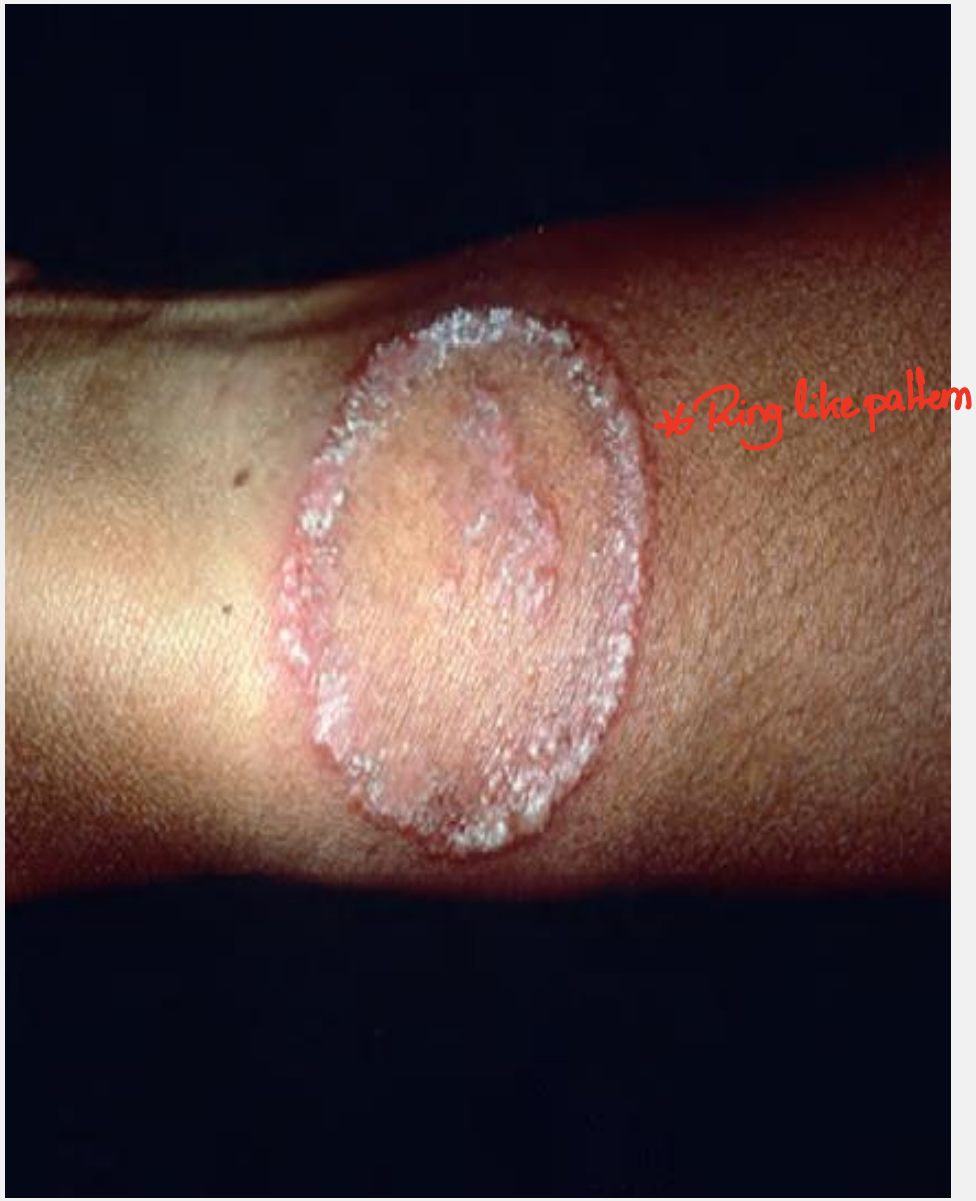


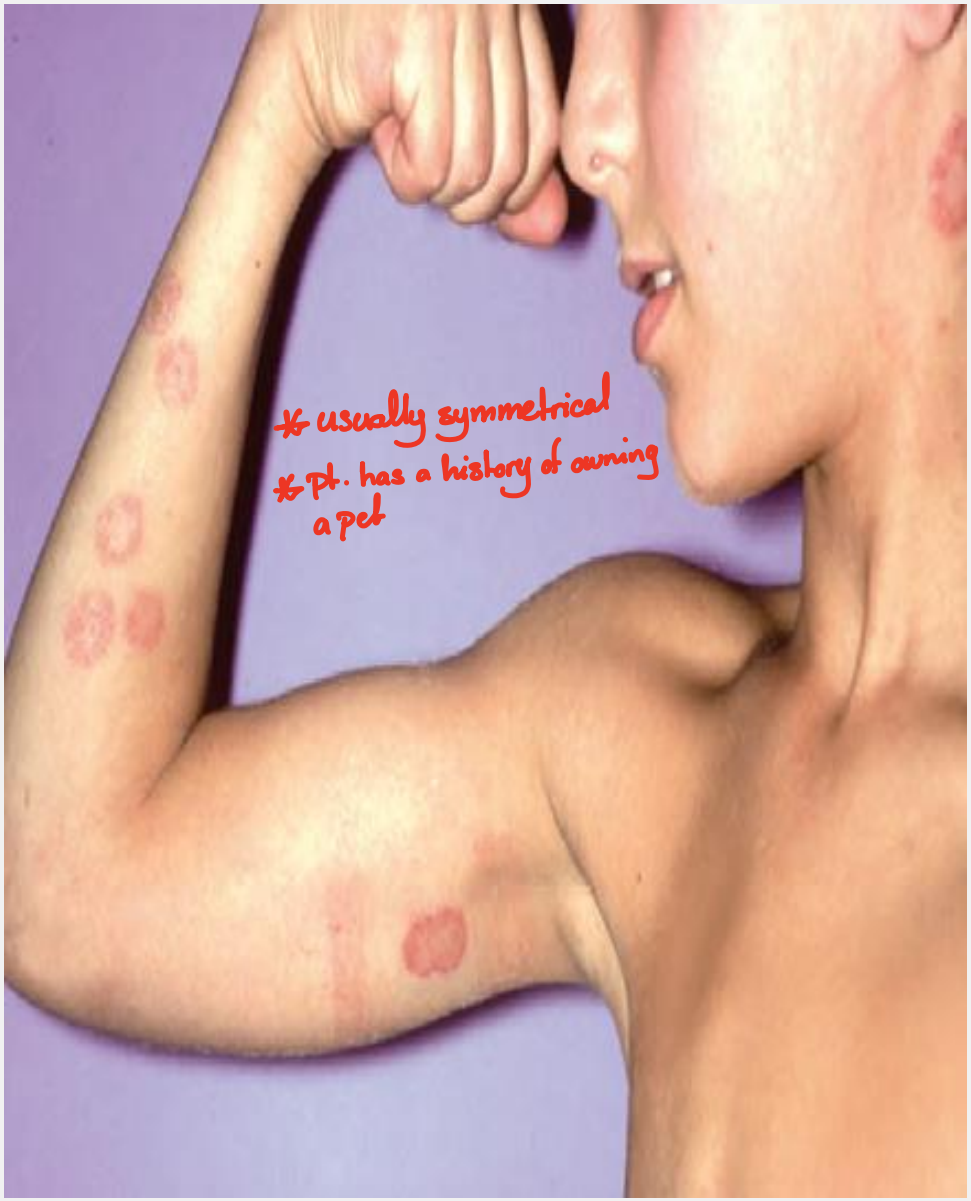
∴ Give Systemic antifungal

TINEA UNGUIM

- Usually associated with tinea pedis
- The nail bed becomes yellow & crumbly
- Usually only a few nails are affected, but rarely all are
- Initially: changes occur at the free edge of the nail & spread proximally
- Subsequently:
  - Subungual hyperkeratosis
  - Onycholysis (Nail separation from its bed)
  - Thickening

Tinea corporis





TINEA OF THE TRUNK AND LIMBS (TINEA CORPORIS)

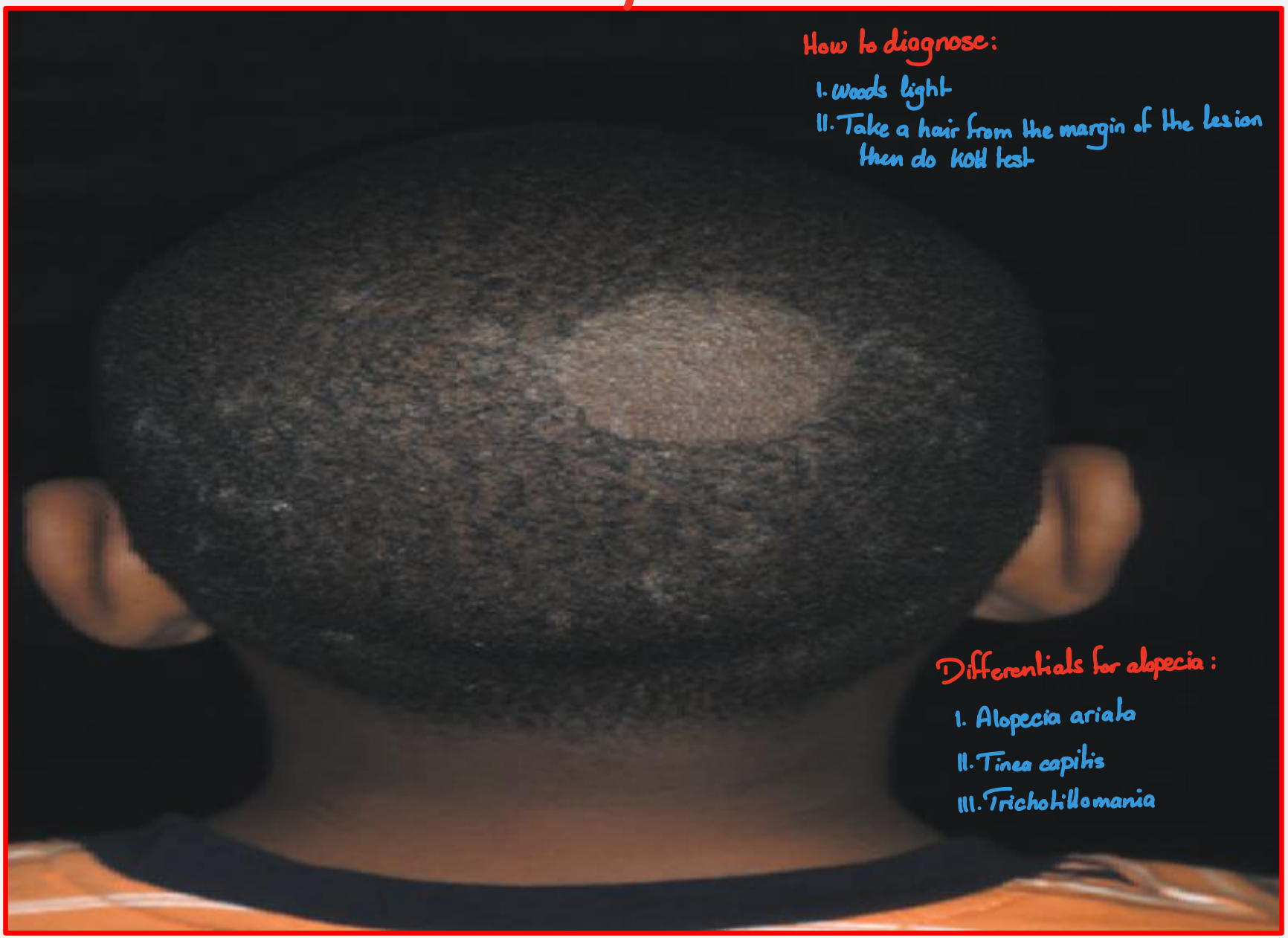
- Plaques with scaling and erythema
  → Most pronounced at the periphery

- A few small vesicles and pustules may be seen within them

- The lesions expand slowly
- Healing in the centre leaves a typical ring-like pattern
  - So the annular arrangement of tinea is due to the healing process which starts in the canter first

- In some patients the fungus elicits almost no inflammation

Tinea Capitis



How to diagnose:

I. Woods light

II. Take a hair from the margin of the lesion then do KOH test

Differentials for alopecia:

I. Alopecia ariata

II. Tinea capitis

III. Trichotillomania

* Hair ∛ Nails → Systemic antifungul

TINEA CAPITIS

- Usually a disease of children.
- The causative organism varies from country to country.
- Anthropophilic fungi cause:
  Bald and scaly areas, with **minimal** inflammation and black dots (hairs broken off 3–4 mm from the scalp).
- Zoophilic fungi induce: A more **intense** inflammation.

- Black children are especially prone to infection with T. tonsurans.

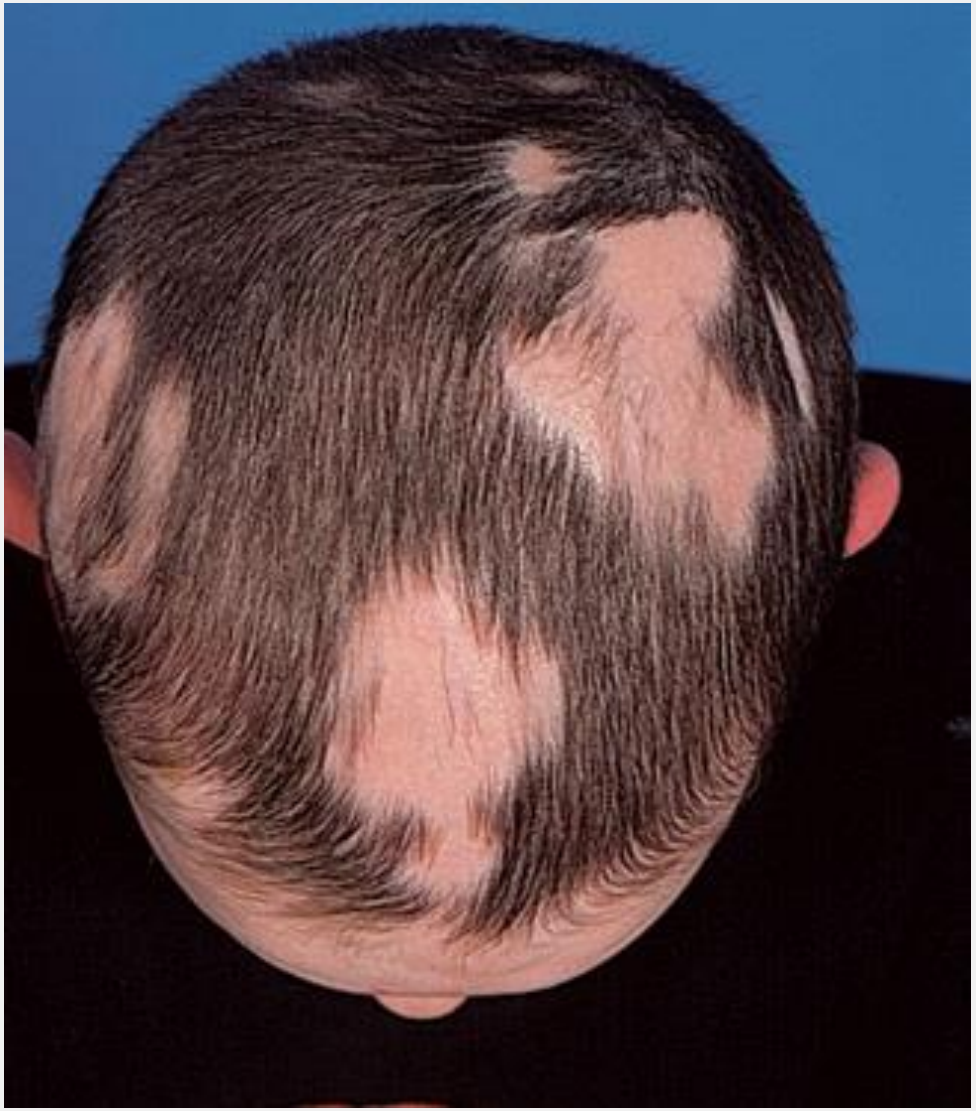
- Kerion: an animal ringworm characterized by the presence of a
  - Boggy swelling
  - Inflammation
  - Pustulation
  - Lymphadenopathy

  → Hair loss associated with it may be permanent (scarring alopecia)
  → It's often misdiagnosed as bacterial abscess causing a delayed treatment

Tinea of the beard (Tinea barbae)
- Usually caused by zoophilic species and shows the same features as tinea capitis so severe

Favus caused by T. schoenleini
- Foul-smelling yellowish crusts (called scutula) surrounding many scalp hairs, and sometimes leading to scarring alopecia.

Alopecia areata



ALOPECIA AREATA

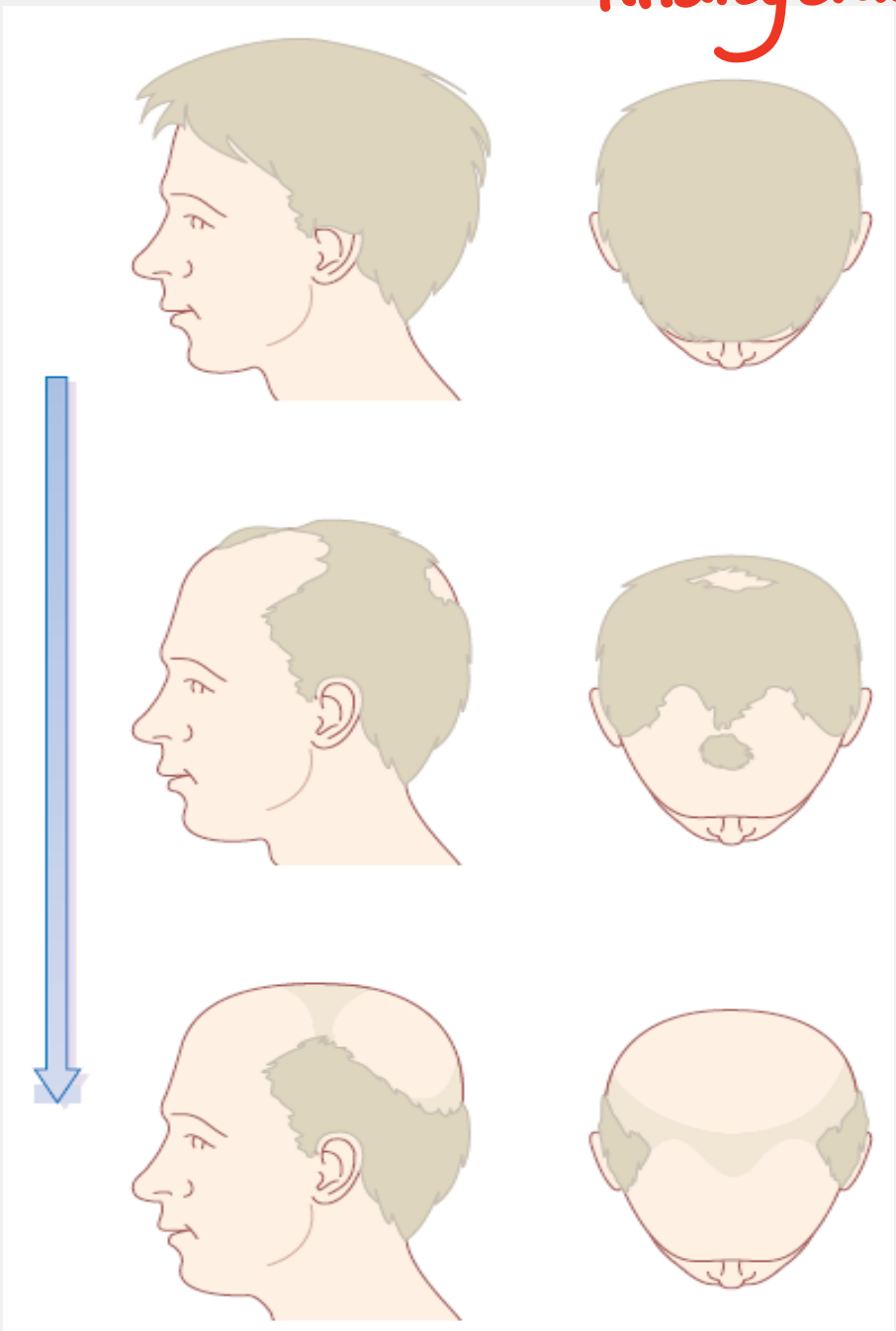
- What do you see on the scalp ?
- Preserved hair openings
- What do you use to complete your physical examination ?
- Dermoscopy (Exclamation marks , black dots)
- **Alopecia areata vs tinea capitis ?**
- Alopecia areata : non-scaly, exclamation-mark, no inflammation
- tinea capitis: scaly, inflammation in inflammatory types
- What changes may be seen on nails ?
- Nail pitting and wrinkling

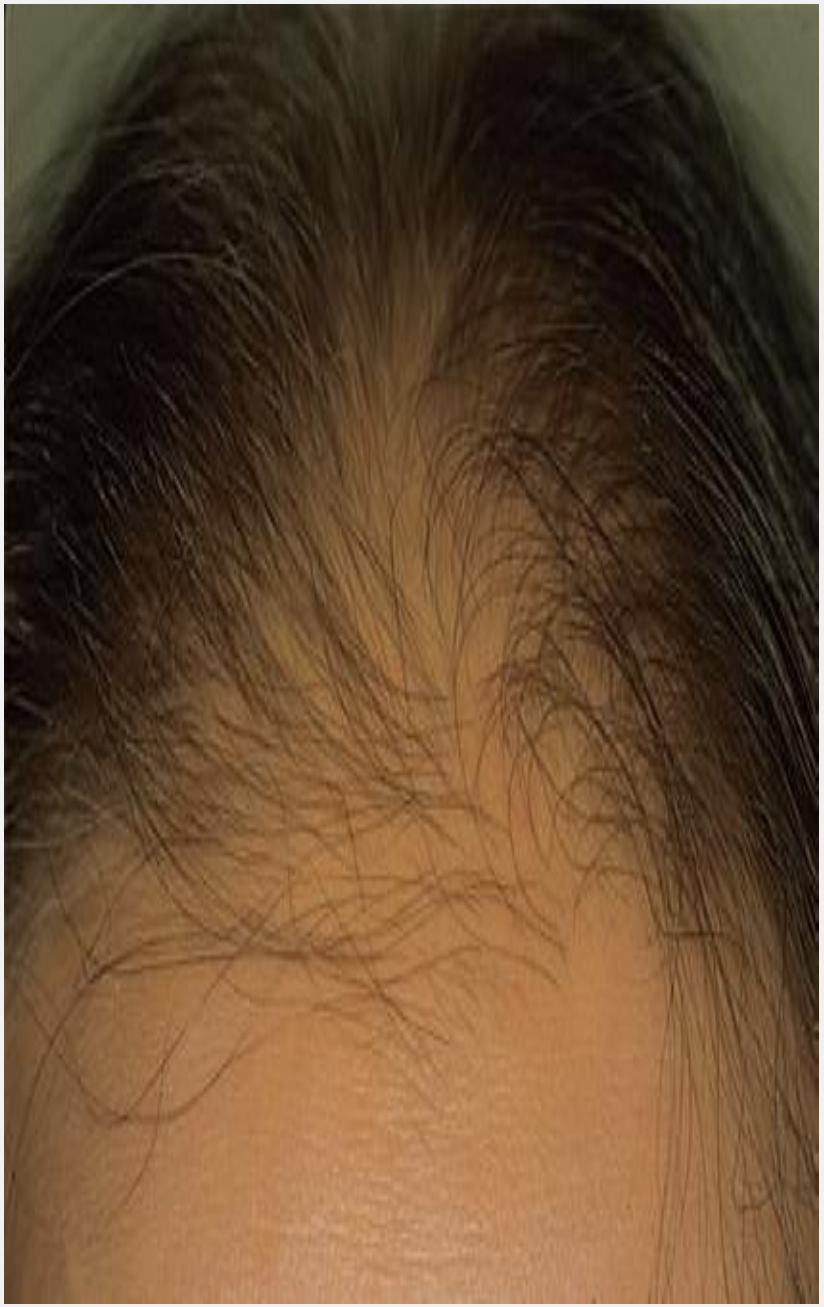
Figure 13.11 Traction alopecia. The rollers she thought would help to disguise her thin hair actually made it worse.

TRACTION ALOPECIA

- Hair can be pulled out by several procedures intended to beautify, including hot-combing to straighten kinky hair, tight hairstyles such as a pony tail or 'corn rows', and using hair rollers too often or too tightly.
- Usually seen in girls and young women, particularly those whose hair has always tended to be **thin**

Androgenic alopecia





ANDROGENIC ALOPECIA

- Male-pattern baldness is androgen dependent
  - 1st from the **temples**
  - Then from the **crown**