



Morphology session

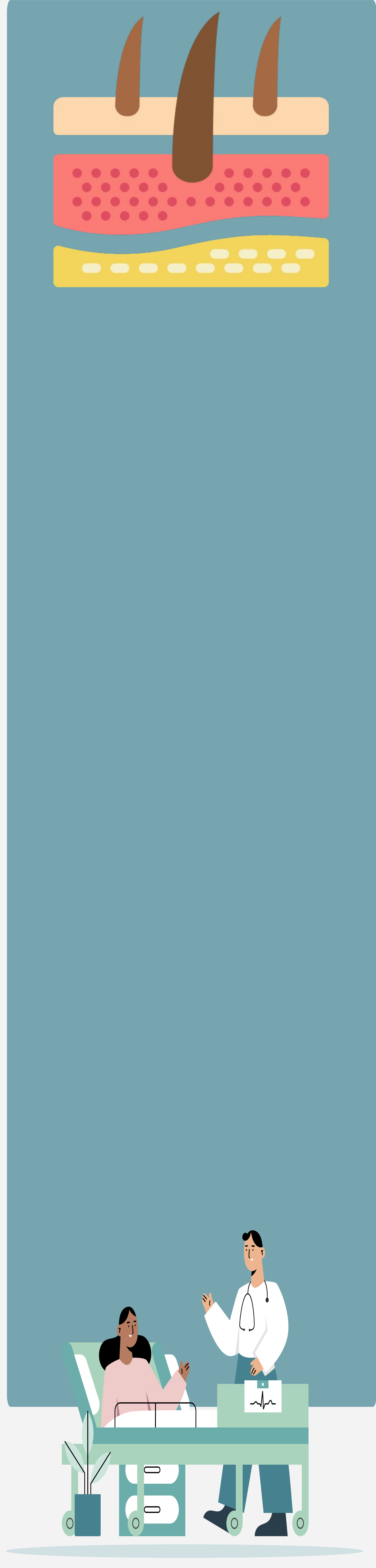
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● Important

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To describe any lesion in the skin you can follow this in this order:

- 1) **Number:** One \ two \ multiple ?
- 2) Differentiated/ non differentiated? (Well/ill defined?)
- 3) **Color:** erythematous ?
- 4) **Size:** (describe the smallest one and the biggest one)
- 5) Name the **primary** lesion for ex : Plaques
- 6) Name the **secondary** lesion.
- 7) **Location**

NB. When describing multiple lesions start by describing the biggest one, then move from head to toe.

Distribution

The pattern of spread of the lesion:

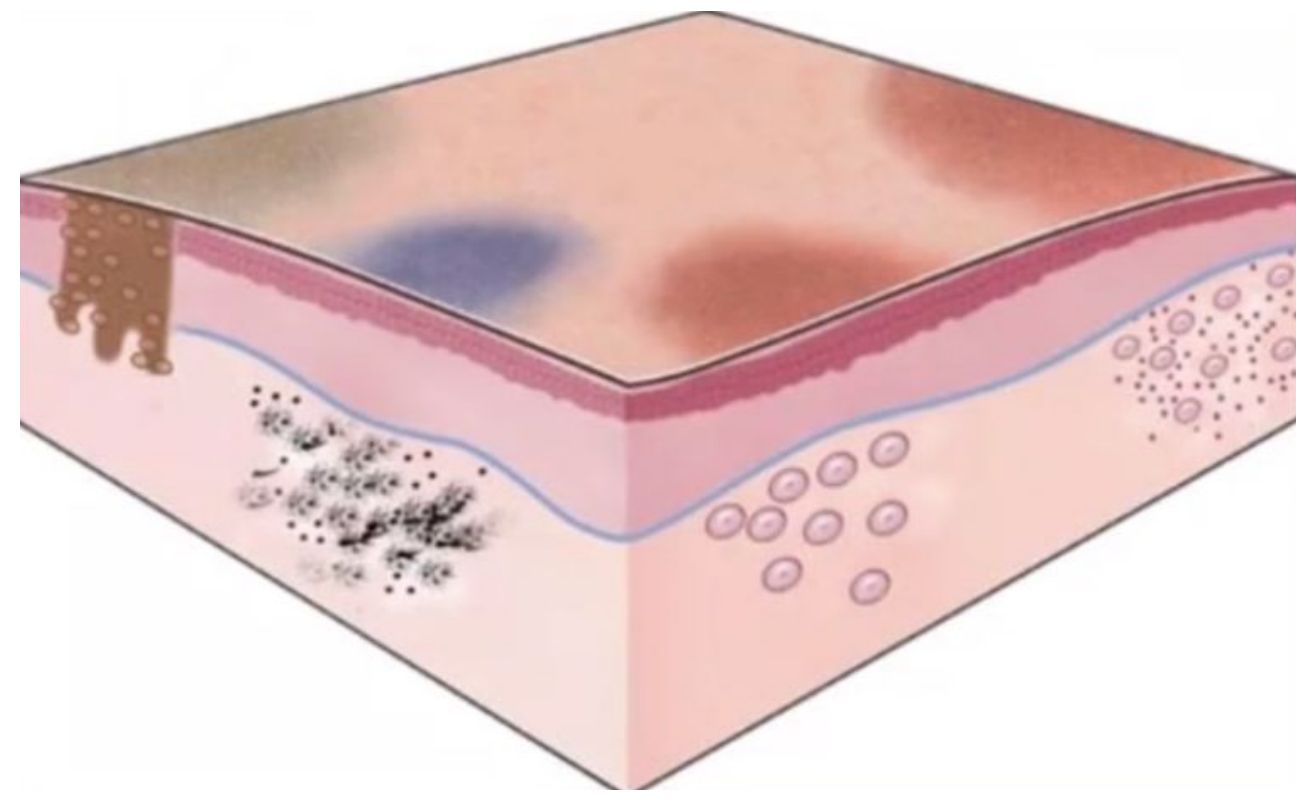
- **Generalized:** All over the body
- **Widespread:** Extensive
- **Localized:** Restricted to one area of the skin only
- **Flexural:** Body fold i.e. groin, neck, behind ears, popliteal and antecubital fossa.
- **Extensor:** knees, elbows, shins.
- **Pressure areas:** Sacrum, Buttocks, ankles, heels.
- **Dermatome:** Area of skin supplied by a single spinal nerve.
- **Photosensitive:** Affects sun exposed areas such as face, neck and back of hands.

Configuration

The pattern or shape of grouped lesions

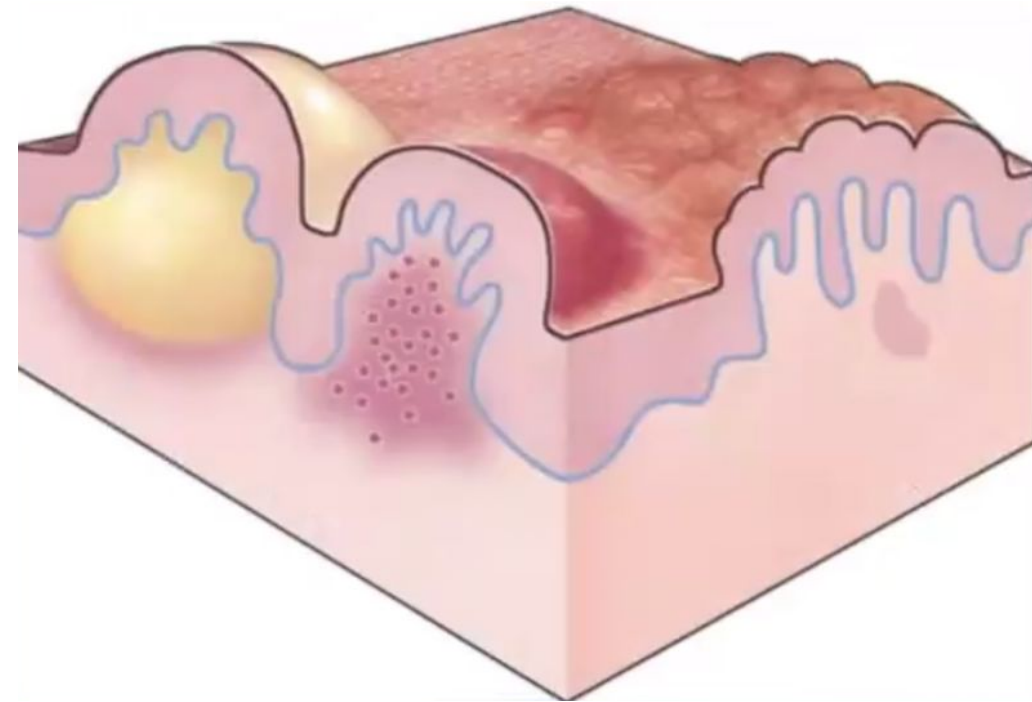
- **Discrete:** Individual lesions separated from each other.
- **Confluent:** Lesions merging together
- **Grouped:** Herpetiform
- **Linear:** In a line
- **Dermatomal**
- **Reticular:** Net like
- **Target:** Concentric rings (like a dartboard)
- **Discoid/ Nummular:** A coin shaped/ round lesion

Macule:



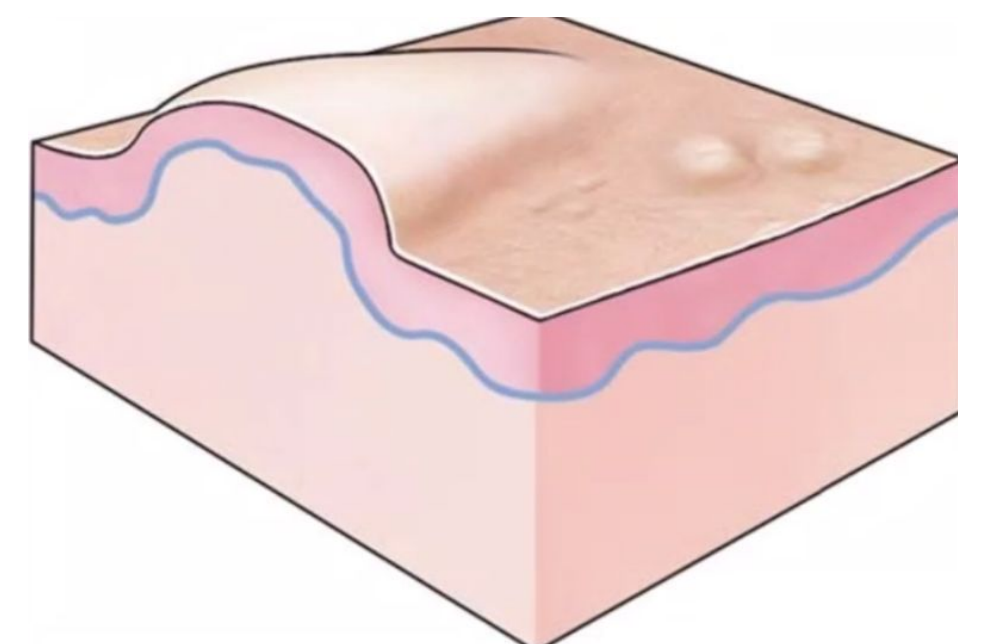
- Single or solitary well defined macula over (site), flat, <1cm (eg. freckles)

Papule:



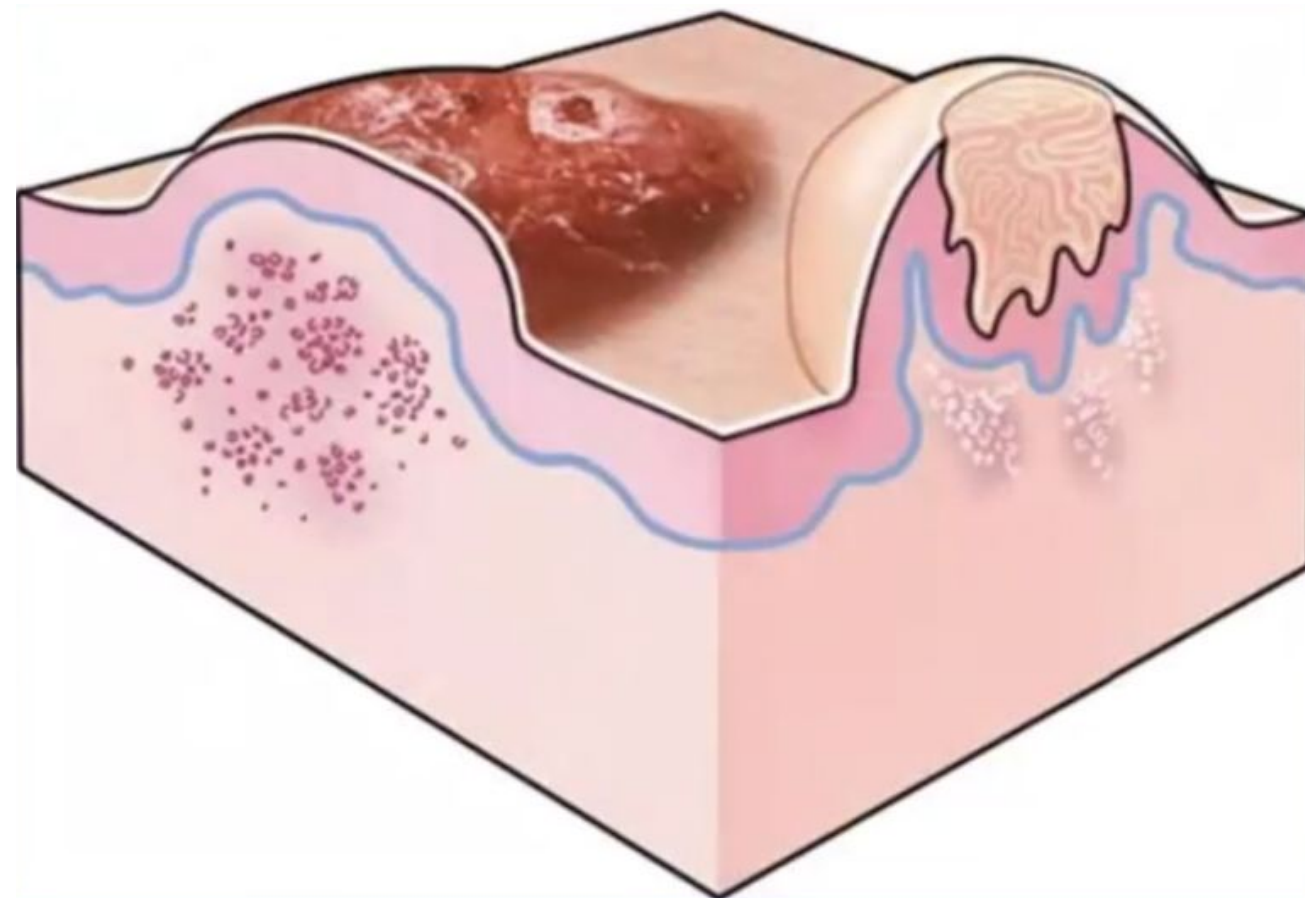
- Multiple erythematous papule over (site) <1cm
- Raised lesions (could be found in acne and folliculitis)

Wheal:



- Multiple variable size skin coloured wheals over (site)
 - Commonly in urticaria or contact dermatitis.
- Edema of the dermis tissue without any skin skin changes, could be skin colour or erythematous

Nodule:



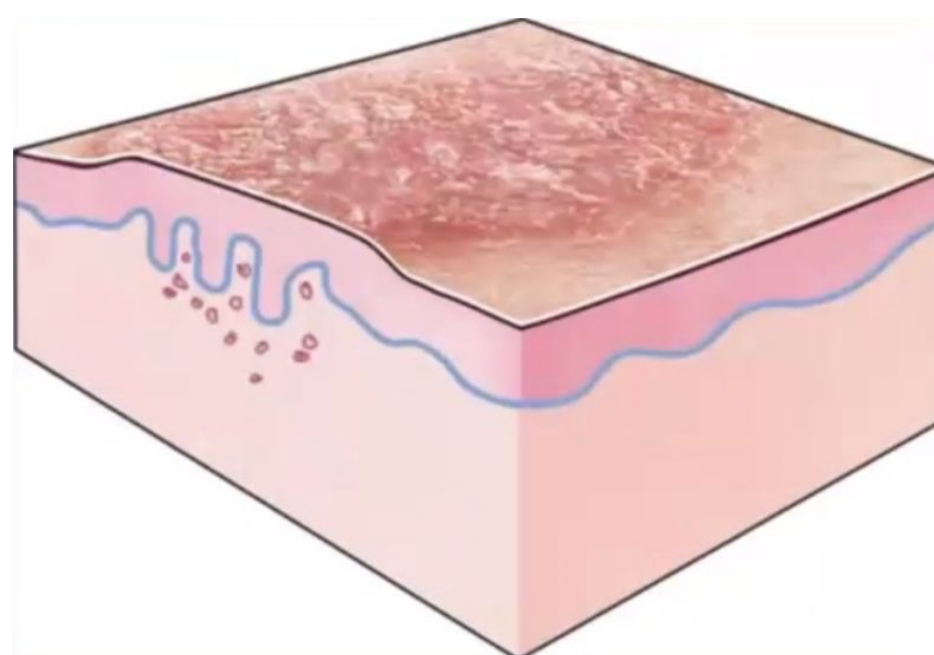
Primary lesions

- Single or solitary well defined erythematous nodules over the lateral aspect of nose with haemorrhaging crustation “dots on nodules” with multiple telangiectasia
 - DDx: basal cell carcinoma “more in elderly at sun exposed area”
 - Nodules always have a deep component >1cm

Plaque:

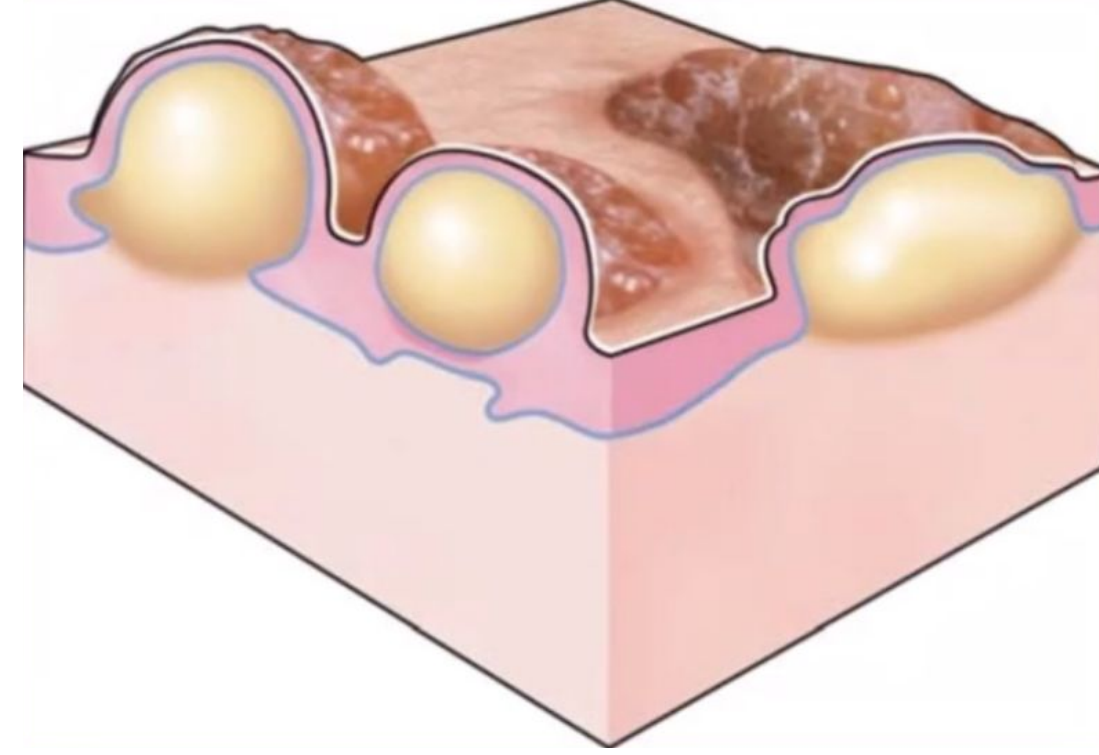


- Single or solitary well defined erythematous plaque with white scale
- Occurs when a group of papules coalesce to forms a single large (>1cm plaque)
- Silver scales associated with psoriasis



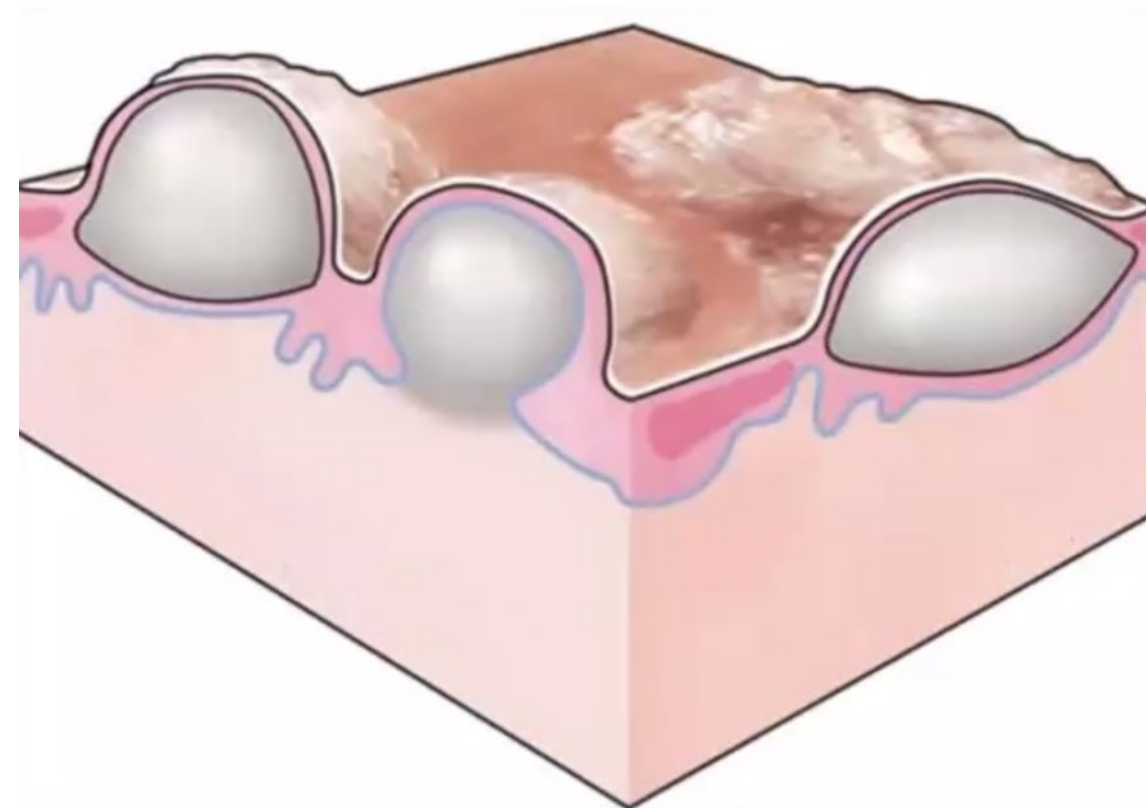
- Multiple well defined erythematous plaque over cheeks, nose & eyelids with sparing of nasolabial fold
 - Ex: SLE
- Look for telangiectasia and if sparing nasolabial fold, to differentiate rosacea from malar rash (respectively)
- This is a case of rosacea

Vesicles:



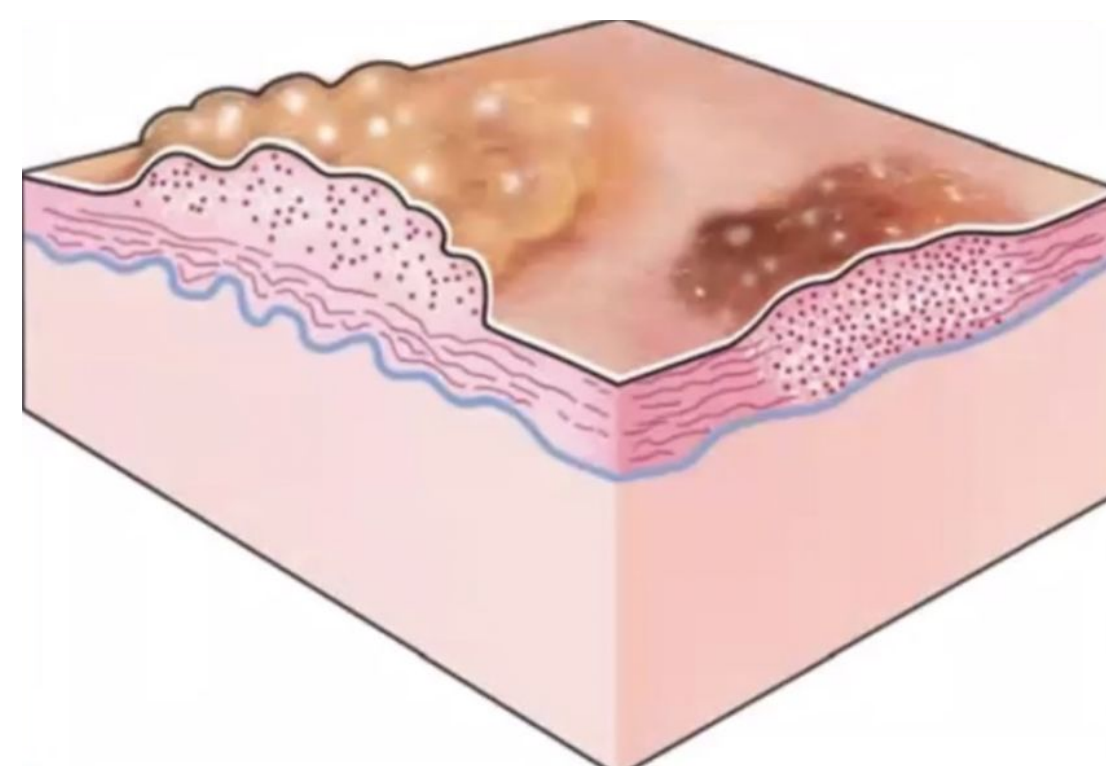
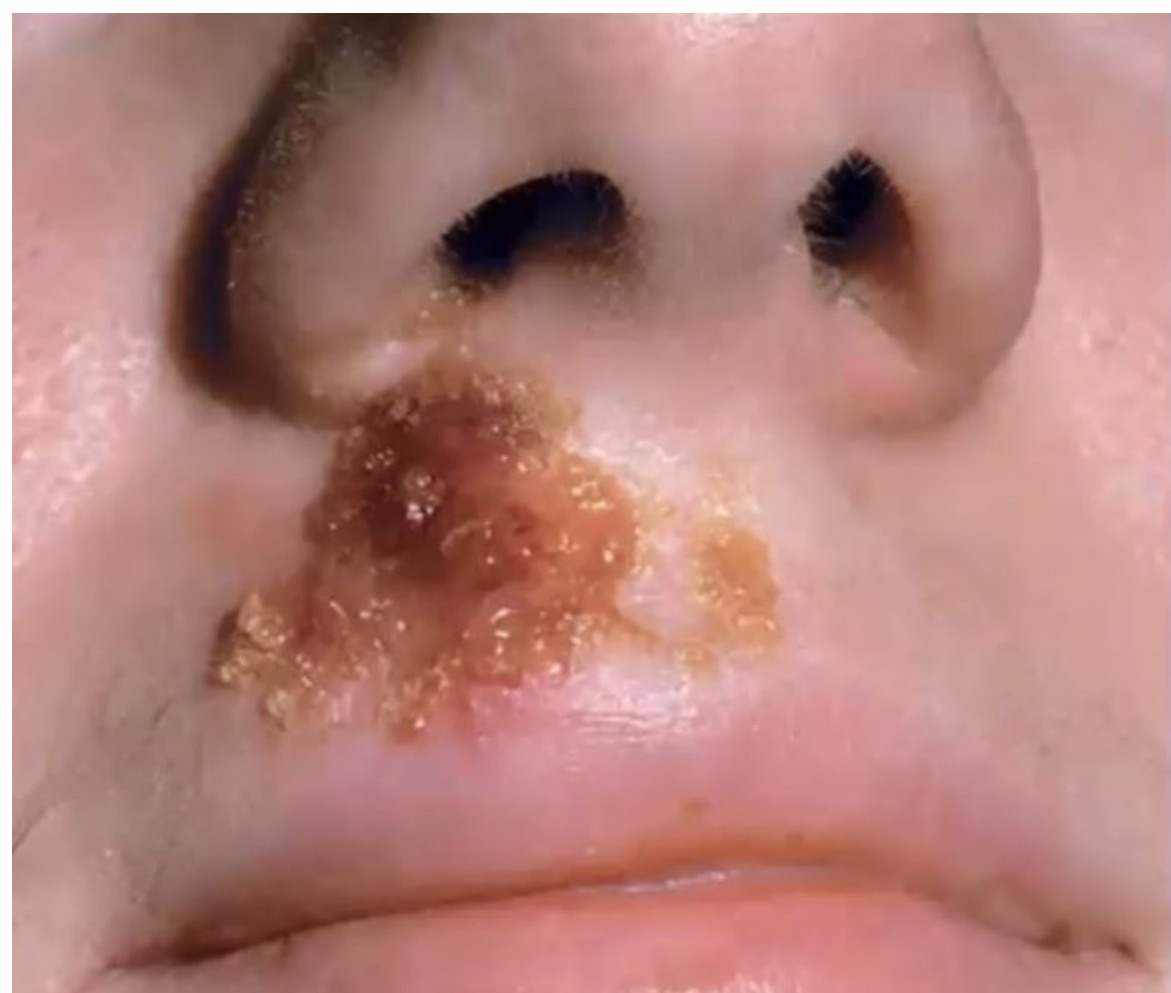
- Multiple erythematous vesicles over (site)
- Commonly with infection (**Herpes**)
- Fluid filled lesions <1cm

Pustule:



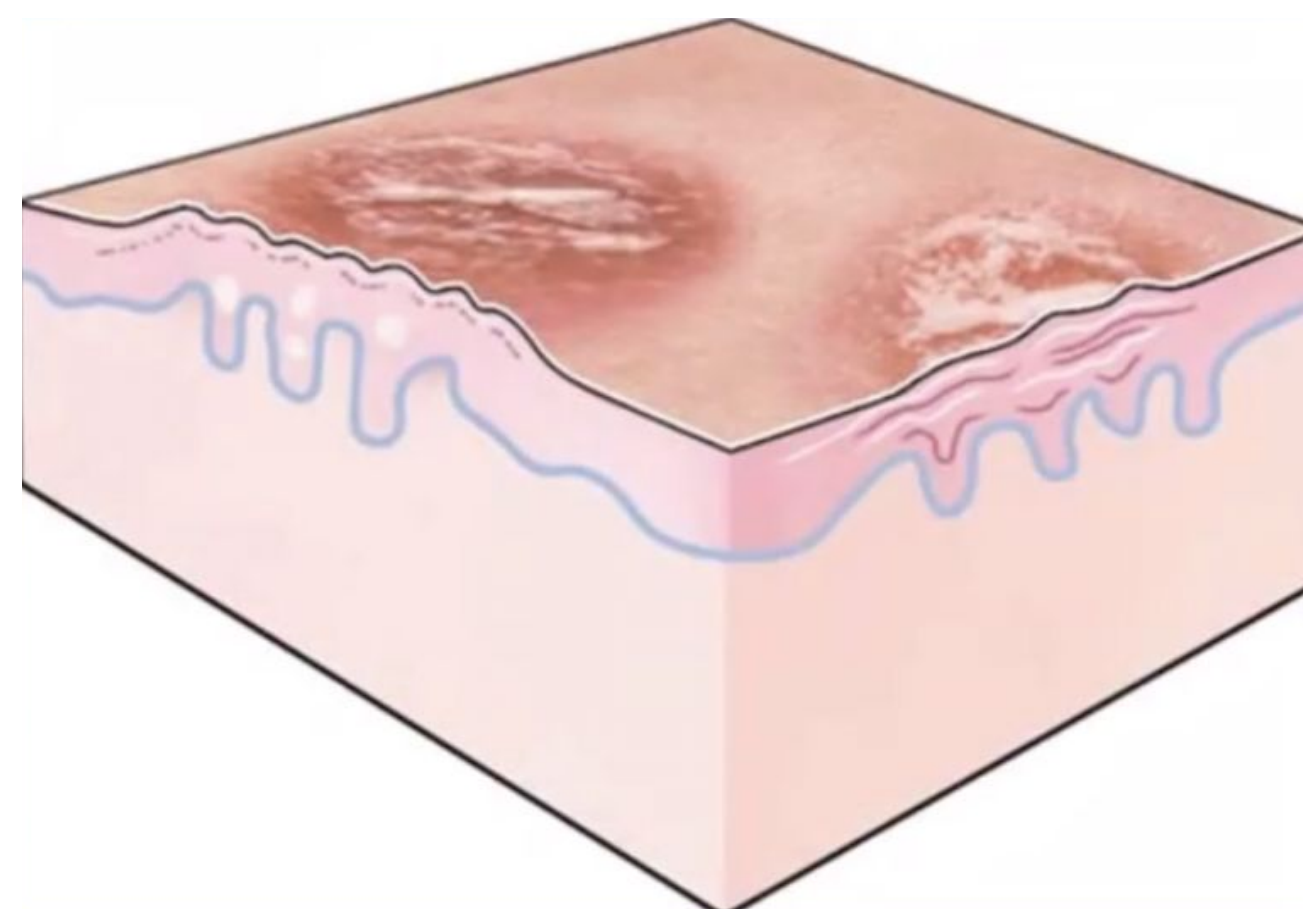
- Multiple pustules on erythematous base over (site)
- Sign of inflammation
- Pus filled and associated with any infection (common in acne)

Crust:



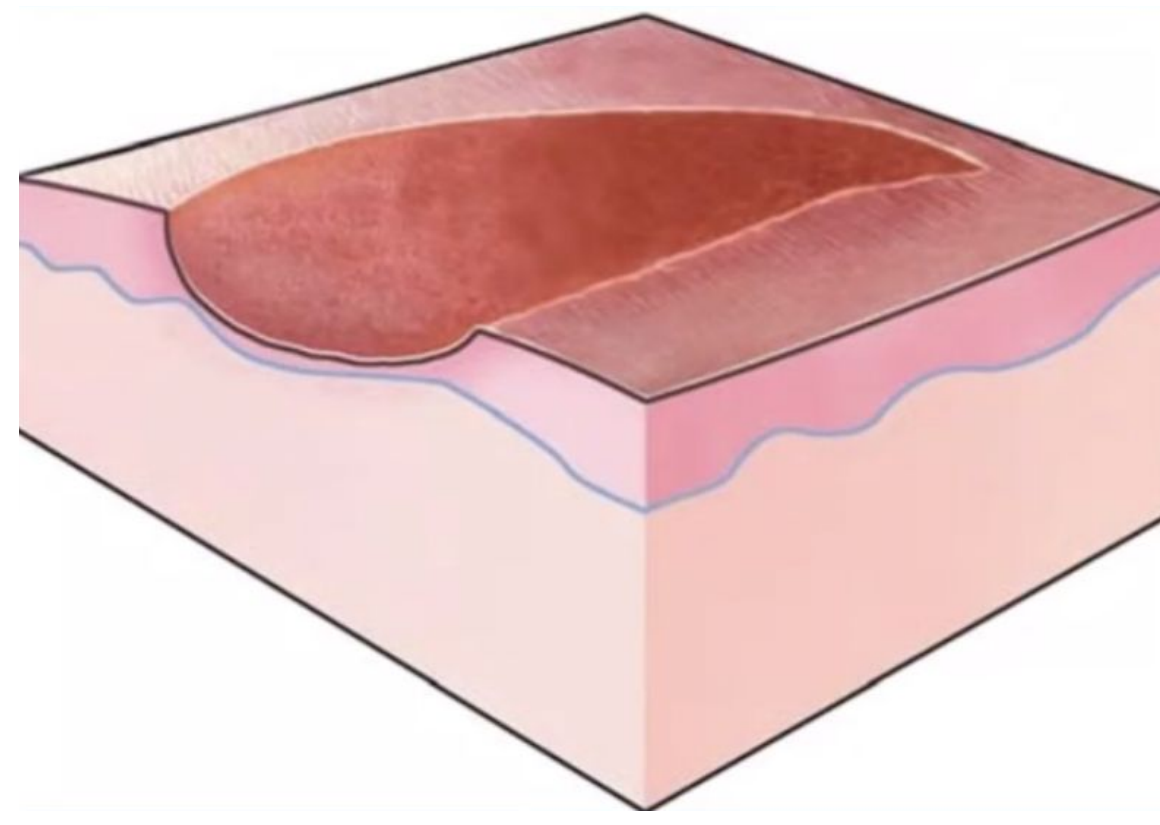
- Multiple well defined erythematous plaques with yellowish-brown crust above the lips
- DDX: Impetigo, Herpes labialis with secondary bacterial infection
- Differentiations: Scales are flaking of the epidermal layer of the skin during the epidermal cycle and are usually white/silver or yellow. Meanwhile crusts are dried serum, pus or blood.

Scale:



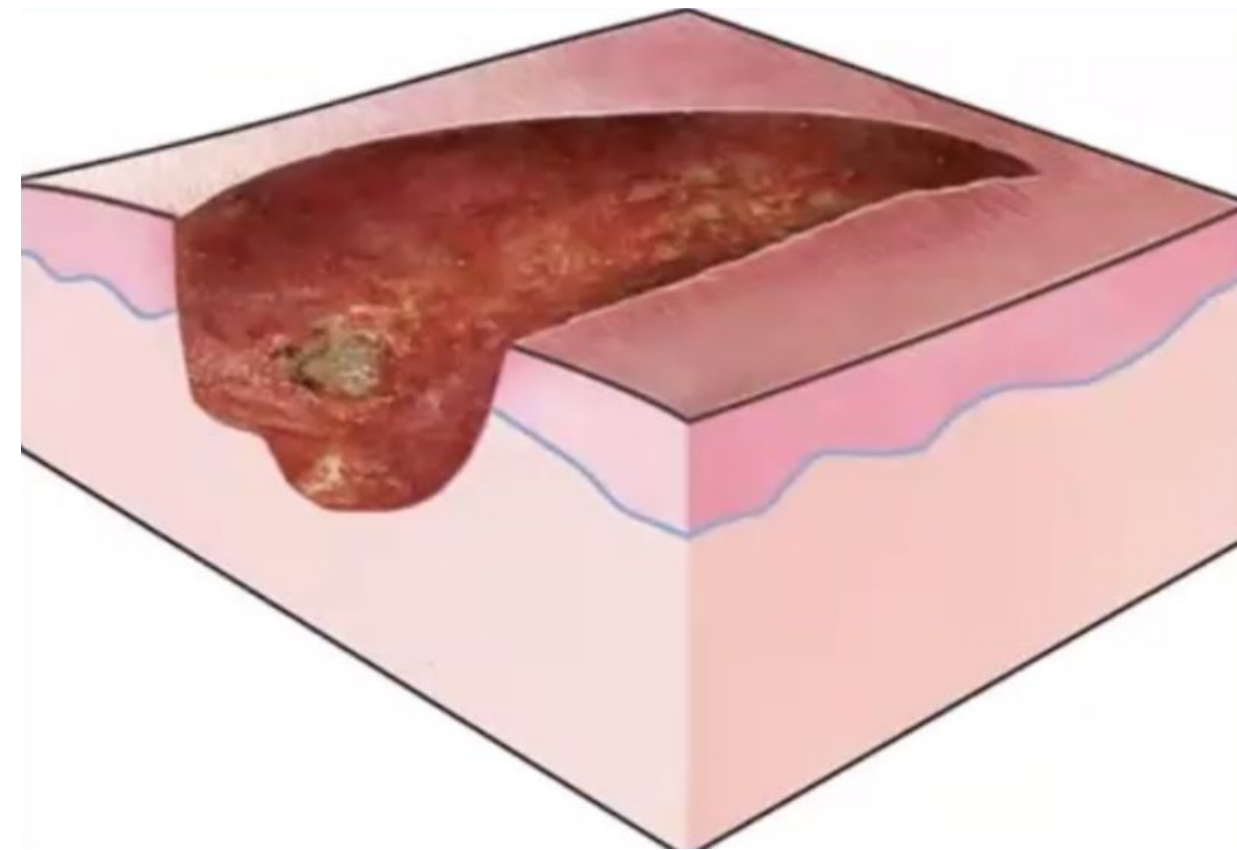
- Multiple well defined erythematous papule with with scales over (site)
 - The colour of the scales suggested the diseases:
 - White, ill defined and itchy → Atopic dermatitis
 - Yellow → Seborrheic dermatitis
 - Silver → Psoriasis

Erosion:



- Single large well defined erosion with erythematous base over (site)
- Here the cause maybe **Burn**, because only thin layer removed
- Loss of superficial layer of the epidermis
- Leaves no scarring
- Common in burns

Ulcer:



- Single well defined irregular border 4*4 ulcer with yellowish fibronus change and erythematous granulation tissue at the base.
- This is mostly venous ulcer
- How to describe ulcer: size, site, shape, border, base, discharge (amount & smell), temp, pulse & nerve supply, joint involvement and LN involvement.
- If the ulcer has irregular and regular border > choose the most “here irregular is more so we put it”
- Temperature measured by comparing with the other limb, if there’s different by 3 or more degrees > hot
- Smell of discharge (sweet = bacterial)
- Deeper loss of epidermis and dermis, reaching the S.C. tissue, or even the muscles or bones.
- Eg. Venous/arterial ulcer, diabetic ulcer, pyoderma gangrenosum, pressure ulcer.

Scar:



- Single erythematous atrophic linear scar over (site)
 - Types include:
 - Atrophic - Below the level of the skin
 - Hypertrophic - raised within the borders of the scar
 - Keloid - overgrowth beyond borders of the scar

Atrophy:



- Similar to cigarette paper thinning due to loss of elastin
 - Wrinkles

Cyst:



- Single skin coloured cyst with telangiectasia and blueish ???? over eyebrow
 - Fluid filled cavity >1cm (any fluid)
 - Eg. acne, epidermoid cyst, hidrocystoma
 - The palpation of the lesion and the blue hue seen externally indicates that its fluid filled.

Target:



- Examples: erythema multiforme, paediatric > ????
- 3 colours (red-pale-red)
- Could be found widespread and in mucous membranes
- Erythema multiforme common in pediatrics and immunocompromised, usually viral (due to herpes)

Annular:



- Multiple ill-defined erythematous annular plaque with scales over buttocks
- Lesions may have areas on normal of skin
- Found in superficial fungal infections and diaper rash.

Reticular:



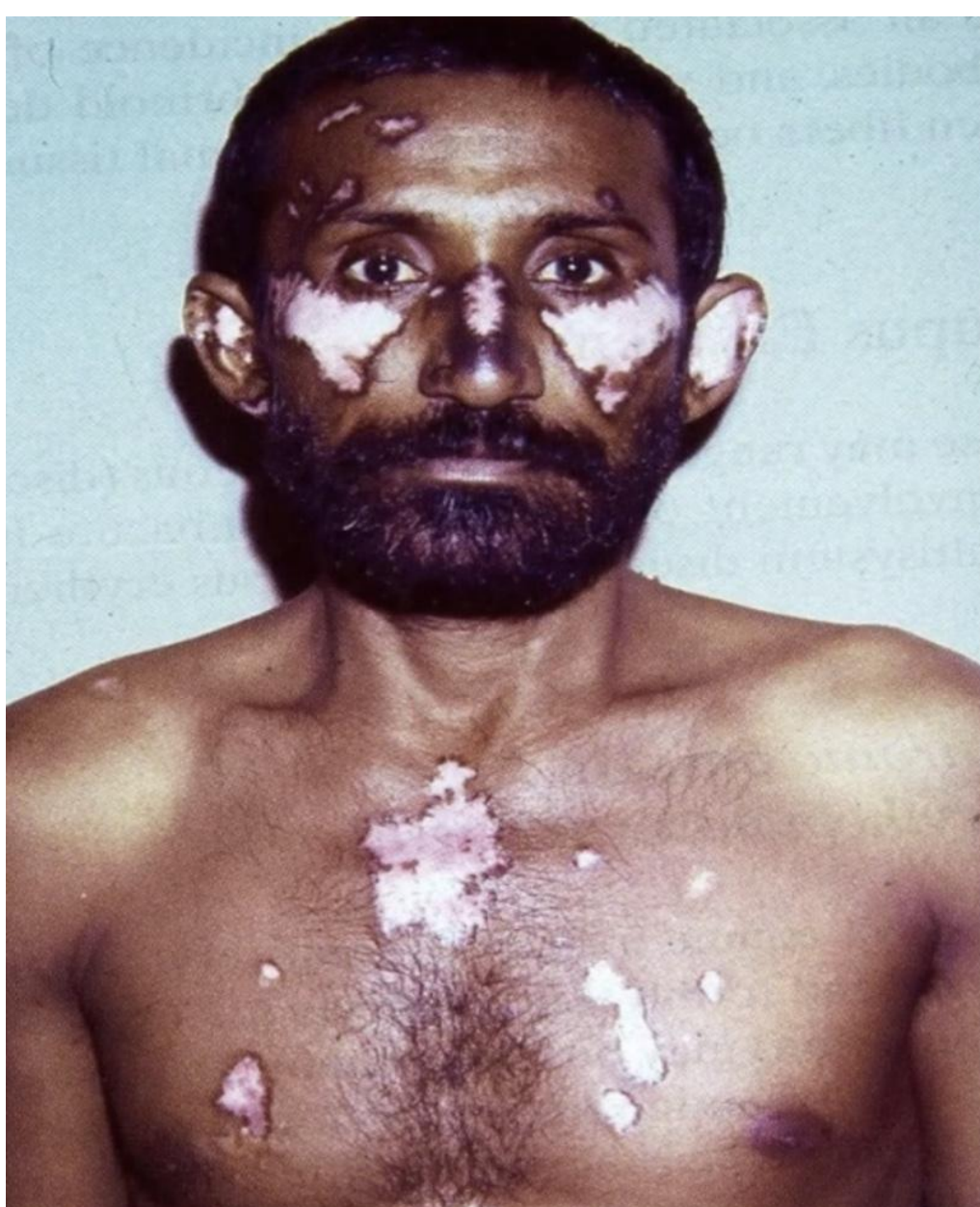
- Multiple well defined erythematous reticular patch over abdomen
 - DDX: erythema ab igne
 - Dx: don't use hot pads

Grouped:



- Grouped vesicles on erythematous base over the lower lip
- Example: Herpes labialis
- Multiple skin coloured vesicles of variable sizes on an erythematous base over left corner of mouth

Discoid:



- Multiple variable size scars with hyperpigmented border and hypopigmented center
- Dx: SLE (discoid lupus)
- Rx: as fast as you can
- Multiple variably sized scars with a hyperpigmented border, hypo/de-pigmented center over forehead, cheeks, dorsum of the nose, ears and upper chest

Case of vitiligo (pic of face and pic of knees)

- Multiple well-defined hypopigmented and depigmented variably sized patches over peri-auricular, peri-nasal and peri-oral areas and bilateral knees
- Dx Vitiligo



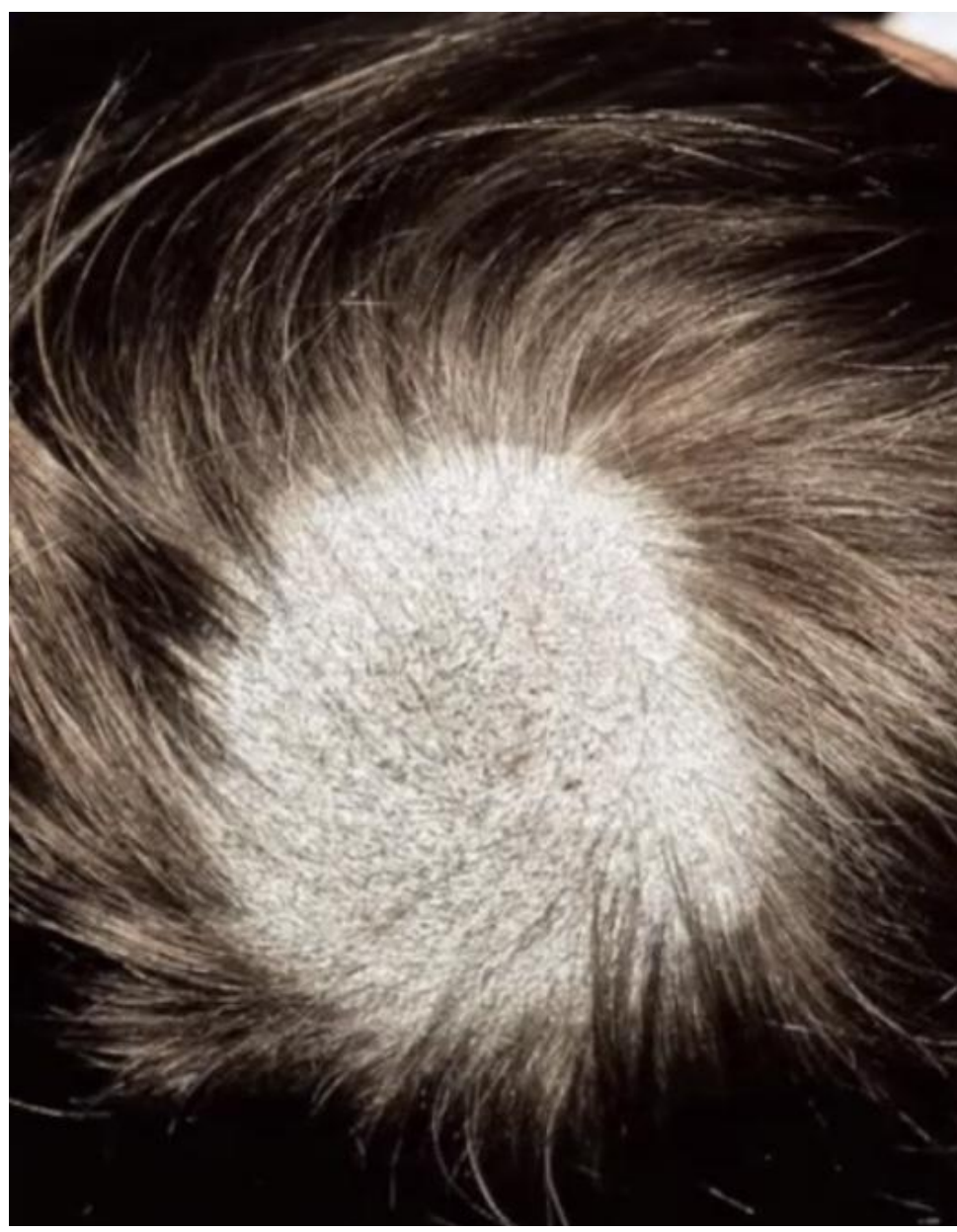
- Description: Multiple well defined erythematous plaques with silvery white scales on sacral area and buttocks
- Diagnosis: Classic Psoriasis



- Description: Multiple ill defined swelling of the face, eyelid and lips
- Diagnosis: Angioedema, is a swelling of deep dermis, subcutaneous or submucosal tissue
- Could be mild, moderate or severe
- Emergency! Could cause respiratory compromise → give epinephrine (epi-pen) or intubate



- Description: Multiple well defined ulcers with necrotic base and undermined violaceous borders. It is painful.
- Pyoderma gangrenosum which can be seen in other diseases such as rheumatoid arthritis, IBD and blood malignancy
- Treatment: treat underlying cause
- Multiple variably sized well-defined ulcers with irregular borders.
- Base of the ulcer shows yellow fibrinous material and red granulation tissue
- Lesions start as pustules then progress to ulcers
- Painful
- Border is violaceous
- Dx. Pyoderma Gangrenosum
- Tx. Systemic treatment



- Description: Single well defined plaque with white scales on the scalp with hair loss
- Diagnosis: Tinea capitis
- What is important to ask in a child? Ask about pets
- Treatment: systemic antifungal for 2 weeks
- Single well-defines white-grey plaque with loss of hair over the scalp (specify if occipital, parietal or frontal)
- Dx Tinea Capitis
- Common in pediatrics
- Hx of pets or animals at home
- If it occurs on the body its called Tinea corporis



- Napkin Dermatitis
- Multiple well-defined erythematous plaque over genital area, anus and inguinal folds
- surrounded by pustules
- Tx: Change diaper frequently and use zinc oxide cream with topical antibacterial and antifungal with every diaper change
- Clean area with water and soap between changes, avoid wet wipes



- Telangiectasia
- Dilated capillaries over the nose
- Could be idiopathic, due to rosacea or associated with lupus
- Tx: Vascular laser



- Multiple petechiae, erythematous/hemorrhagic purpura and purpuric patches over lower leg
- Famous example of leukocytoclastic vasculitis



- Acne vulgaris
- Multiple white and black comedones, erythematous papules, pustules, nodules and cysts over forehead, cheeks and chin
- Due to the severity of the case Tx with systemic antibiotics or immediately start isotretinoin.



- Multiple erythematous papules, pustules over forehead, cheeks and nose
- Not sparing the nasolabial folds
- Dx: Rosacea (papulo-pustular type)



- Multiple well-defined erythematous plaques with white/grey scales over posterior thighs
- DDx: atopic dermatitis, tinea corporis, psoriasis.



- Multiple well-defined erythematous plaques with yellowish large scales over forehead, eyebrows, nose, ears and cheeks
- Dx Seborrheic dermatitis



- Multiple vesicles on erythematous base with hemorrhagic crustaceans over thoracic dermatomal distribution, involving upper back, shoulder and inner arm
- Itchy and painful
- Dx Herpes Zoster
- Notice Cafe-au-lait macule in arm (different finding)



- Aphthous Ulcer
- Multiple well-defined regular-border ulcer with white-ish membranes over erythematous base

Males slides:



Well demarcated erythematous scaly plaque.
Dx? psoriasis
Secondary: not genuine (resulted from the primary lesion)



Single erythematous ulcer.
You could also add: Well demarcated with erythematous border.



confluent group of vesicles around the mouth, what is the diagnosis?
Herpes.



Well defined depigmented patch around the mouth involving the nose with mild erythema.



Multiple skin color umbilicated papules in a linear pattern.
What is the diagnosis? Molluscum



Single well defined scaly erythematous plaque on the back of the neck involving the scalp.
Diagnosis? psoriasis



Case 1:

Q1/ Describe the lesion ?

Solitary well defined erythematous plaque with silvery scales over the right elbow.

Q2/What is “Auspitz sign”?

The phenomenon of pinpoint bleeding following the scraping of psoriatic plaque silvery scales.

This case is very important



Case 2:

Q1/ Describe the lesion ?

Solitary well defined

Grayish scaly plaque with partial alopecia and broken off hairs over the scalp.

Q2/What is the first line therapy of this condition?

Oral antifungal

Dx? Tinea capitis (fungal infection)

Psoriasis doesn't cause hair loss

Discoid doesn't have that much scales



Case 3:

Q1/ Describe the lesion ?

Solitary well defined round ulcer with yellow granulation tissue in the base and sharp erythematous borders, measuring around 2x2 cm over the anterior aspect of the lower leg.

Q2/ What are your differentials?

- Arterial ulcer
- Venous ulcer
- Pyoderma gangrenosum



Case 4:

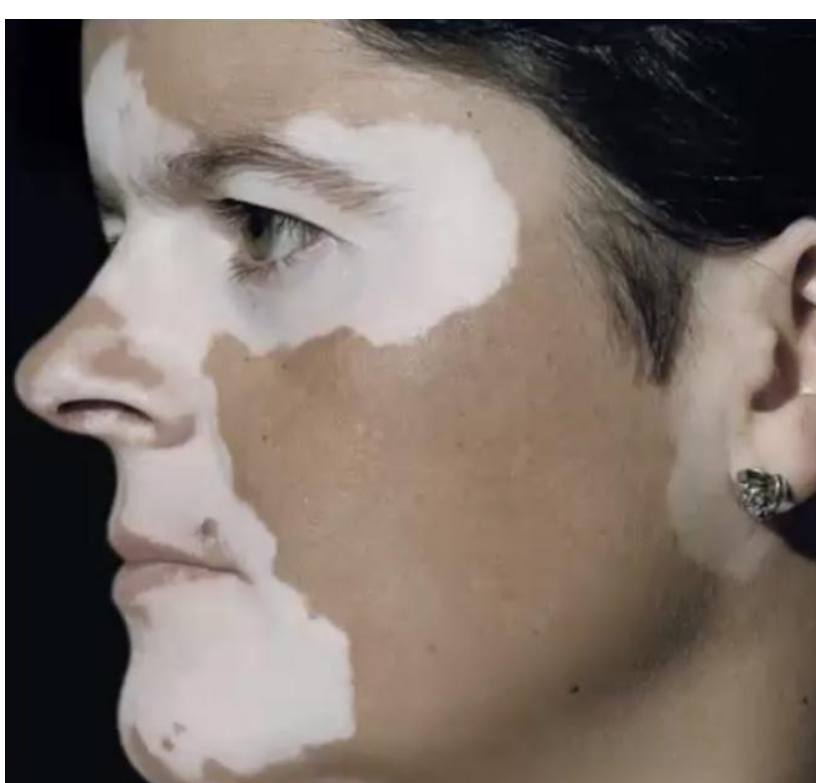
Q1/ Describe the lesion ?

Two milky white (depigmented) patches over both knees with follicular pigmented macules within the lesions (represent repigmentation). Same lesion on the face as well

Q2/ what is koebner phenomenon?

The trigger of primary skin lesion at the site of injury (trauma site).

This can be seen in some skin diseases such as Vitiligo, Psoriasis and lichen planus.



Dx? Vitiligo الصورة من السجود



Case 5:

Q1/ Describe the lesion ?

Three well defined non inflammatory (skin colored,non scarring) alopecic patches over the scalp

Q2/What is the first line therapy of this condition in this patient?
Intralesional corticosteroid injection

This is alopecia areata



Case 6:

Q1/ Describe the lesion ?

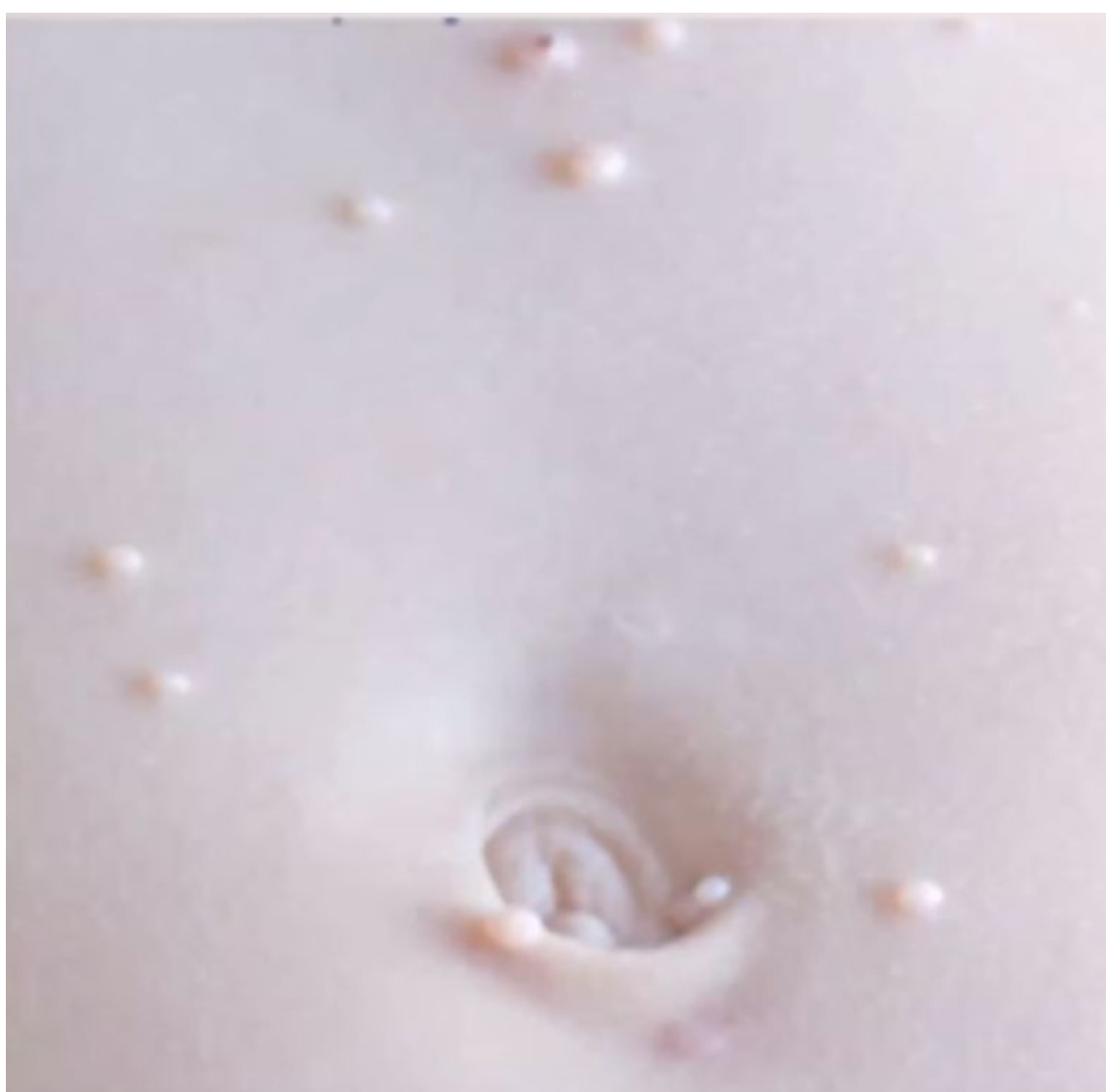
Multiple well defined violaceous (it is more pinkish but because the doctor knows the diagnosis which is lichen planus and imagine it is violaceous) scaly flat topped shiny papules coalescing into polygonal plaques over the right wrist

Q2/Name three drugs can cause this eruption?

Furosemide

Nifedipine

Propranolol



Case 7:

Q1/ Describe the lesion ?

Multiple skin colored dome-shaped umbilicated (maybe just one but because the doctor know the diagnosis which is molluscum) papules over the abdomen

Q2/ What is the cause of this condition?

Poxvirus (it is in human only and it is an DNA virus)



Case 8:

Q1/ Describe the lesion ?

Multiple erythematous inflammatory papules, pustules and nodules in addition to white/ blackheads comedones over the left cheek. With some scars “the open brownish lesions”

Q2/What are the secondary lesions in this patient?

Scars and post-inflammatory hyperpigmentation

Extra cases



Case 9:

Q1/ Describe the lesion ?

Multiple inflammatory papules and few pustules on erythematous base over the right cheek. (N.B there are no comedones in rosacea)

Q2/Mention 5 aggravating factors that trigger this skin condition?

Sun exposure, spicy food, hot drinks, stress, exercises.



Case 10:

Q1/ Describe the lesion ?

Multiple well defined small linear red dilated blood vessels over the nose "telangiectasia"

Q2/Mention lasers that can be used for treatment of this condition?

Vascular lasers as "PDL, KTP"



Case 11:

Q1/ Describe the lesion ?

Multiple well defined scaly atrophic plaque and papule with hyperpigmented border and central depigmentation over the face and the ear

Q2/What is the first line treatment in this condition?

Anti-malaria (e.g. hydroxychloroquine)



Case 12:

Q1/ Describe the lesion ?

Multiple well defined erythematous flat-topped papule and plaque over the metacarpophalangeal and interphalangeal joints.

Q2/ What is your diagnosis if the patient gave you a history of photosensitivity, facial rash and muscle weakness?

Dermatomyositis



Case 13:

Q1/ Describe the lesion ?

Multiple well defined erythematous purpuric macule and papules over the lower leg.

Q2/Mention 2 possible differential diagnosis

- 1- Leukocytoclastic vasculitis
- 2- Henoch Schonlein purpura



Case 14:

Q1/ Describe the lesion ?

Multiple well defined ulcers with regular border yellowish base and erythematous rim over the lips.

Q2/What is your diagnosis if this patient complain of similar lesions in the genitalia and his ophthalmologist diagnosed him with posterior uveitis?

Behcet's disease



Case 15:

Q1/ Describe the lesion ?

Multiple well defined erythematous edematous plaque over the face and trunk

Q2/ What is the first line therapy of this condition if these itchy lesions disappear and reappear with 24 hours

Antihistamine (H1 blocker)



Case 16:

Q1/ Describe the lesion ?

Multiple well defined annular erythematous urticarial plaques with tense vesicle and bullae over the trunk.

Q2/How you confirm the diagnosis?

- 1- Skin biopsy from the edge of an early blister
- 2- Direct immunofluorescence (DIF) from perilesional skin.
- 3- Indirect immunofluorescence (IIF) of patient serum.



Case 17:

Q1/ Describe the lesion ?

Multiple well defined salmon-pink papules and plaques with fine scales over the back.

Q2/What is "herald patch"s?

It is an oval single patch or plaque with central clearing and peripheral scale (collarette scales)