

Morphology Session

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Editing file

How to describe a skin lesion?

To describe any lesion in the skin you need to mention:

- 1) **Number?** (One / two / multiple).
- 2) Differentiated / undifferentiated? (well/ill defined)
- 3) **Color:** erythematous / whitish?
- 4) Name the **primary** lesion Eg: Plaques.
- 5) Name the **secondary** lesion.
- 6) **Location.**
- 7) **Size:** (describe the smallest and biggest one).

NB. When describing multiple lesions start by describing the biggest one, then move from head to toe. (437 Team)

Distribution (The pattern of spread of the lesion) :

- **Generalized:** All over the body.
- **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.
- **Unilateral:** The rash affects one side of the body only.
- **Photosensitive:** Affects sun exposed areas such as face, neck and back of hands.
- **Acral:** Affecting the distal extremities such (ears, fingers, toes, nose).
- **Pressure areas:** Such as (sacrum, buttocks, ankles, heels).
- **Widespread:** Extensive.
- **Dermatome:** Area of skin supplied by a single spinal nerve.

Configuration (The shape or grouped lesions) :

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

How to describe a skin lesion?

PRIMARY LESIONS:

Macule:

- Flat lesion.
- Change in skin color (the only change).
- Less than 1 cm (5 mm) in size.



Patch:

- Flat lesion.
- Change in skin color.
- More than 1 cm (5 mm) in size.



Papule:

- Raised lesion.
- Solid
- Less than 5mm in size.
- shown in the pic: Linear configuration(



Pustule:

- Raised lesion
- Contain pus indicate infection (common in acne)
- Less than 5mm (1cm) in size.



How to describe a skin lesion?

PRIMARY LESIONS (cont'):

Plaque:

- Raised lesion.
- No deep component.
- More than 5mm (1cm) in size.



Nodule:

- Raised lesion.
- With deep component (3D shape with depth).
- We need to palpate to differentiate between papule (no deep component) and nodule
- More than 5mm in size.



Vesicle:

- Raised lesion.
- Contain clear fluid.
- Less than 5mm (1cm) in size.
- Eg. Herpes



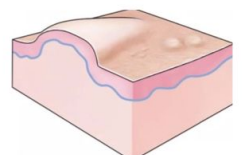
Bulla:

- Raised lesion.
- Contain clear fluid.
- More than 5mm (1cm) in size.



Wheals:

- It fits the definition of plaque, but we mention it as a pathognomonic for (urticaria), so when someone said to me the patient has wheals the first thing come to my mind is urticaria.

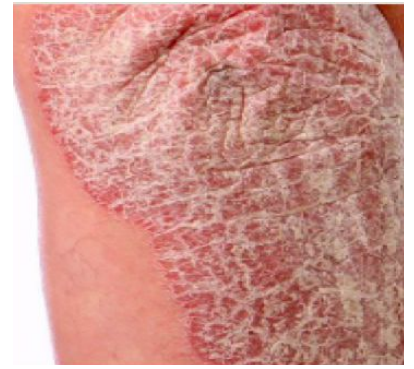


How to describe a skin lesion?

SECONDARY LESIONS:

Scale:

- Thickening of stratum corneum.
- High skin turnover (vs. crust)



Crust:

- Dried serum, blood or pus (exudate)
- Primary lesion usually a vesicle or pustule
- There is different colors, yellowish (honey color), dark red (hemorrhagic).



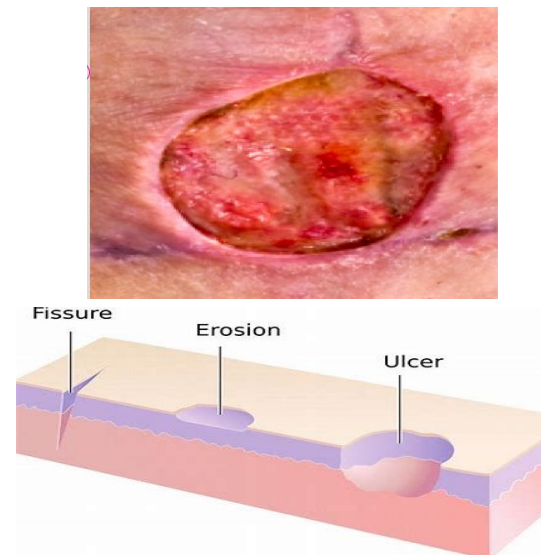
Erosion:

- Complete or partial loss of epidermis.
- Heals without scarring. (Unless it gets infected and infection goes deeper than epidermis)
- It is considered as superficial.



Ulcer:

- A full thickness loss of epidermis and dermis.
- Heals with scarring. because it is deeper, and that will cause fibrosis formation → scar.
- What is the differences between ulcer and fissures? they are all deep and reach the dermis but in fissure there is no loss of substance.
- When someone has a fissure like in (eczema), the easiest way to heal it by moisturizer like vaseline and bandage and it will heal by it self with no or limited scar.



Scales or crust? Ear pic: crust



CASES 1-3

Describe the lesion?

- Solitary (one) well defined erythematous plaque with silvery scales (raised) over the extensor surface of right elbow.



What is "Auspitz sign"?

- The phenomenon or pinpoint bleeding following the scraping of psoriatic plaque silvery scales (dots).

- As a dermatologist, you describe what you see and finish it without the word "lesion" (common mistakes with students).

Describe the lesion?

- Solitary irregular well defined grayish scaly plaque with partial alopecia (hair loss) and broken-off hairs over the scalp.



What is the first line therapy or this condition?

- Oral antifungal agents. Because topical can't penetrate the hair follicle as deep as systemic. And we have to act fast
- DDx: Discoid Lupus (SLE) but it won't be scaly like in this case
- Woods lamp in clinic

- Dx? Tinea capitis.

Describe the lesion?

- Solitary well defined round ulcer with yellow granulation tissue (healing by scar) in the base and sharp erythematous borders, measuring around 2x2 cm over the anterior aspect of the lower leg. If more than one describe the distribution



What is your differentials?

- Arterial ulcer, Venous ulcer, pyoderma gangrenosum (eg. ?)

CASES 4-8

Describe the lesion?

- Multiple **irregular** well defined border, violaceous (of a violet colour) scaly (Doctor said: there is no apparent scale in this picture) flat topped shiny papules coalescing into polygonal plaques over the right wrist (plaques forming a plateau surface).



Name 3 drugs can cause this eruption?

- Furosemide, Nifedipine, Propranolol.

Describe the lesion?

- Multiple **scattered** skin colored dome-shaped umbilicated; there's a small pit/depression in the centre of the lesion. (it's not clear in this pic, but a hint for the diagnosis) papules over the abdomen.



What is the cause of this condition?

- Poxvirus. (**Molluscum contagiosum dermatitis**)

Describe the lesion?

- Multiple erythematous inflammatory **papules**, **pustules**, nodules (you need to feel it to assess the depth). in addition to **white/blackheads** comedones over the left cheek.
- Type: ice pick scar, deep and difficult to treat**



What is the secondary lesions in this patient?

- Scars and post-inflammatory hyperpigmentation.

Describe the lesion?

- Three well defined **Discoïd or rounded non-inflammatory** (skin colored, non scarring) alopecic patches over the scalp.



What is the first line or this condition?

- Intralesional corticosteroid injection

- This is alopecia areata.

Describe the lesion?

- Two **irregular** well defined milky white (**depigmented**) patches over both knees **symmetrical** with follicular pigmented macules within the lesions (**repigmentation**). In vitiligo the most protected melanocytes Are the ones within the hair follicles They are the last to be affected and the first to reappear thus repigmentation (response to treatment)

What is "koebner phenomenon"?

- The capacity or reproducing skin lesions at the sites or local injury, this can be seen in some skin diseases such Vitiligo, psoriasis, and Lichen planus. The skin disease can also start in the site of injury as the first presentation (isomorphic response) Eg: after surgery, trauma or السجود.

Extra picture



CASES 9-13

Describe the lesion?

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



Mention 5 aggravating factors that trigger this condition ?

- Sun exposure, spicy food, (**caffeinated**) hot drinks, stress, exercises.

Describe the lesion?

- Multiple well defined small linear dilated red blood vessels over the nose "telangiectasia". **One of the most important lesion in rosacea**



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

- Vascular lasers as "PDL, KTP".

Describe the lesion?

- Multiple well defined scaly **atrophic** plaques and papule with hyperpigmented border and central depigmentation over the face and ear.
- I would rephrase it with "Multiple well defined annular **atrophic scarring** areas with **hyperpigmented** border and **hypopigmented** centre over the face.



What is the first line treatment?

- Anti-malaria (E.g: hydroxychloroquine).

Describe the lesion?

- Multiple well defined erythematous **flat-topped** papule and plaques over the metacarpophalangeal and interphalangeal joints.
- **Gottron's sign/papules**



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

- Dermatomyositis.

Describe the lesion?

- Multiple well defined erythematous purpuric macule and papules (**if raised**) over the lower leg (**Purpura: extravasation of RBC (non-blanchable)**).

Mention 2 possible differential diagnosis?

1. Leukocytoclastic vasculitis (**raised palpable purpura**).
2. Henoch Schonlein purpura. (**IgA**) (**Most common**) (**idiopathic**)



CASES 14-17

Describe the lesion?

- Multiple well defined ulcers with regular border **yellowish base (if discolored base it indicates the disruption of superficial layer (ulcer) vs erosion: red base the superficial layer is intact)** and erythematous rim over the lips. (aphthous ulcer)

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.



Describe the lesion?

- Multiple well defined erythematous edematous plaques (**wheels(urticaria is the medical term)**) over the face and trunk.

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

- Antihistamine(H1 blocker)
- **Epinephrine if SOB/Angioedema...**
- **On-off pattern indicate urticaria, if its sustained thats indicate association with vasculitis, we mark it and wait for 24 hrs .**



Describe the lesion?

- Multiple well defined annular erythematous urticarial **plaques (surrounded by annular vesicles "clustered papules")** with tense vesicles & **bullae** over the trunk.

How to confirm the diagnosis?

- **two skin biopsy from the edge or an early blister (1st one for histology)**
- Direct immunofluorescence from perilesional skin.
- Indirect immunofluorescence of patient serum.



Describe the lesion?

- Multiple well defined salmon-pink papules and plaques with fine scale over the back.
- (**pityriasis rosea**) (النخالة الوردية) **DDx: Secondary syphilis**

what is "herald patch" ?

- It is an oval single patch or plaque with central clearing and peripheral scale (collarette scales).
- **Scales are inside and annular in shape**



End of the lecture