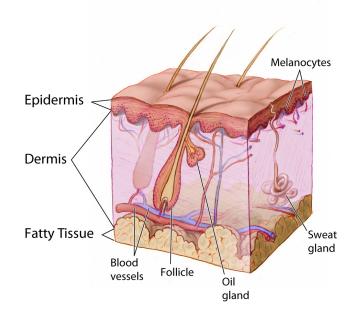


132 Teams

# Dermatology















Done by: Mohammed Abalkhail

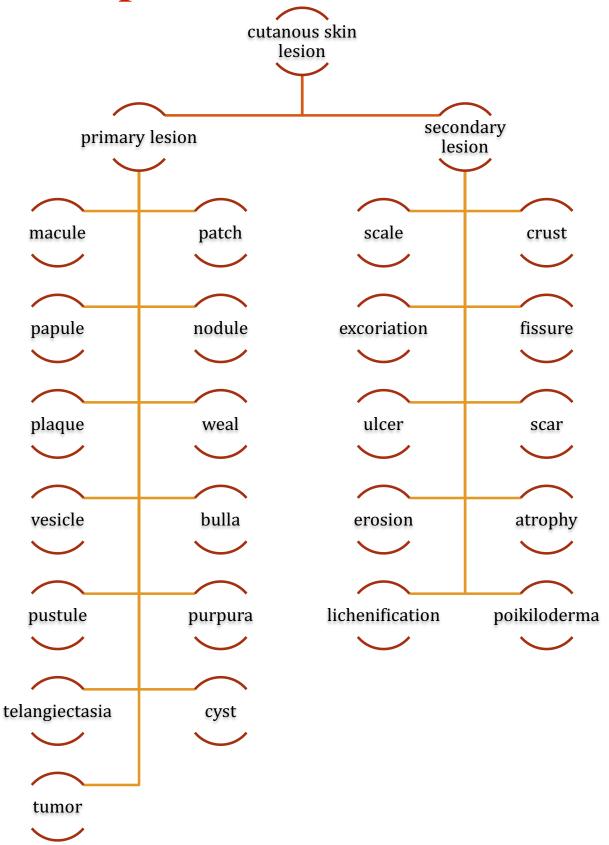
Reviewer: Fahad AlShayhan

Team Leader: Basil Al Suwaine

# **Objectives**

- 1- To be familiar with common dermatological terms.
- 2- To differentiate between primary and secondary skin lesions.
- 3- To be able to describe skin lesions and communicate with other dermatologists.
- 4- To have a methodological approach to skin lesions.

# Mind Map



# Primary skin lesion



#### Macule:

flat circumscribed area of altered skin color less than 1 cm in size. e.g. Vitiligo, Freckle.



#### Patch:

A flat circumscribed area of altered skin color more than 1 cm in size. e.g. Vitiligo, Melasma.



#### Papule:

A small, circumscribed elevation of the skin less than 1 cm. e.g. Molluscum Contagiosum, Acne.

Macule with elevation become papule.



#### **Nodule:**

A solid, circumscribed elevation whose greater part lies beneath the skin surface. (elevation+depth) e.g. Erythema Nodosum, Basal cell carcinoma.



#### Plaque:

A flat topped palpable lesion more than 1 cm in size. e.g. Psoriasis.

Patch with elevation become plaque.



#### Weal:

transient, slightly raised lesion, characteristically with a pale center and a pink margin.
e.g. Urticaria.



#### esicle:

small less than 5 mm in iameter circumscribed fluid ontaining elevation.
g. Dermatitis Herptiformis, erpes.



#### Bulla:

Large vesicle more than 5 mm in diameter. e.g. Bullous Pemphigoid.



#### **Pustule:**

Collection of pus or vesicle and bulla that contain pus. e.g. Pustular Psoriasis, Acne.



Purpura:

Visible collection of free red blood cells.

e.g. vasculitis small spot called petechiae, lareg one called ecchymoses.



### Telangiectasia:

Dilated capillaries visible on the skin surface.

e.g. Rosacea.



#### Cyst:

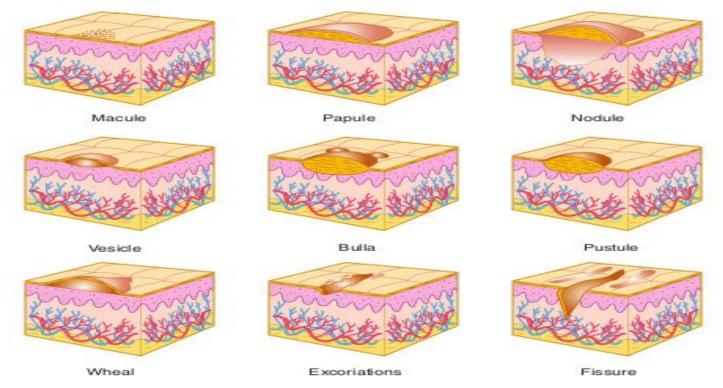
Closed sac-like lesion that contain liquid or semi-solid substance. Usually soft and has depth. e.g. Epidermal cyst.



#### Tumor:

Solid elevation of the skin more than 2 cm in diameter and has depth. Like large nodule.

Lecture 1: Language of Dermatology



# Secondary skin lesion



Scale: Thickened, loose, readily detached fragments of stratum corneum. e.g. psoriasis



**Crust:** Dried exudate. e.g. Eczema , Impetigo.



**Excoriation:** 

A shallow abrasion often caused by scratching.

e.g. Atopic dermatitis.



#### **Erosion:**

A moist, circumscribed, usually depressed lesion that result from loss of all a portion of the **epidermis**. e.g. Ruptured vesicle or bulla

#### Lecture 1: Language of Dermatology



#### Fissure:

Linear-like or crack-like cleavage of the skin.

e.g. Chronic eczema.

-Look around the fissure in the figure, you can see scale.



#### Ulcer:

A hole in the skin in which there has been destruction of the **epidermis** and at least the **upper papillary dermis**.

e.g. Leg ulcers, Pyoderma gangrenosum.

- Can cause scar.



**Atrophy:** 

Thinning of the skin (become shiny).
Could be epidermal or dermal or both.
-Epidermal atrophy present as thin transparent wrinkled epidermis.
-Dermal atrophy present as depression of the skin.



#### **Lichenification:**

Patches of increased epidermal thickening with accentuation of skin markings and pigmentation.
e.g. Lichen simplex chronicus. Atopic dermatitis.

#### Lecture 1: Language of Dermatology



#### Scar:

A permanent lesion that results from the process of repair by replacement with fibrous tissue. e.g. Surgical scar.



#### Poikiloderma:

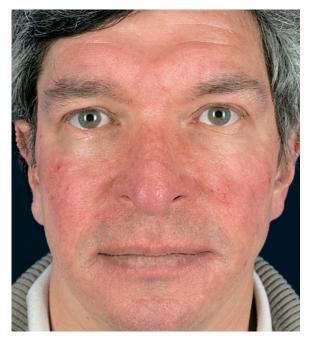
A morphologic descriptive term, refer to the combination of atrophy, telangiectasia, andpigmentary changes (hypo or hyperpigmentation) e.g. Dermatomyositis, Radiodermatitis, Mycosis fungoides.

# Other Terms Used in Dermatology

- Acantholysis: a rounding up of epidermal cells resulting from a loss of adhesion between these cells. <u>Pemphigus vulgaris.</u>
- **Acanthosis**: histological term used to describe epidermal thickening due to increase keratinocytes in the spinous layer.
- Atopy: triad of atopic dermatitis, asthma, and allergic rhinitis.
- **Balloon degeneration**: gross swelling of keratinocytes seen in epidermal viral infection like herpes simplex.
- Hyperkeratosis: excessive formation of normal keratin.
- Hypertrichosis: excessive growth of non-androgen dependent hair.
- **Hirsutism**: excessive growth of male pattern hair in women.
- Intertrigo: dermatitis in body folds like axilla and groin.
- **Koebner phenomenon**: the tendency for certain skin diseases like psoriasis to develop on sites of trauma.
- **Nikolsky's sign**: the shearing of epidermis from dermis produced by lateral pressure on the epidermal surface. Pemphigus vulgaris, TEN (toxic epidermal necrolysis). https://www.youtube.com/watch?v=3bjhVZ\_ZyyU
- **Parakeratosis**: abnormal or incomplete keratinization resulting in the presence of nucleated, flattened squamous cells in the stratum corneum.
- **Spongiosis**: edema of the epidermis mainly intracellular.
- **Rhinophyma**: gross hypertrophy of sebaceous gland tissue resulting in increase in volume of nasal soft tissue. Rosacea.
- **Wickham's striae**: white linear markings on the surface of the violaceous papules of lichen planus.
- **Auspitz sign**: appearance of punctate bleeding spots when psoriasis scales are scraped off. <a href="https://www.youtube.com/watch?v=Hf\_ofY3gcj4">https://www.youtube.com/watch?v=Hf\_ofY3gcj4</a>
- **Dermatographism**: skin becomes raised and inflamed forming weals when stroked, scratched or rubbed. Urticaria.
- **Pathergy test**: erythematous induration of the site of the needle stick with a small sterile pustule at the center. <u>Behcet's disease</u>. <u>Pyoderma gangrenosum</u>.



Pemphigus vulgaris



Erythematous rosacea

# Lecture 1: Language of Dermatology



atopic dermatitis



Pyoderma gangrenosum.



Behcet's disease

# **History**

- How long have skin lesions been present. Acute, subacute, chronic.
- Where did the problem first appeared?
- Progression of the problem.
- Any other symptoms like pruritus.
- Treatment history.
- General relevant medical history.
- Occupational and recreational history.
- Travel.
- Family and household contact history.

# **Examination**

- **Full skin** examination should be carried out to determine the full extent of the problem and possible unrelated conditions.
- Examination should be done in a **good light**, better natural sun light.
- Skin, nails, hair, mucous membranes should all be examined.
- General appearance of the patient must be assessed.
- **Lymph node** exams in selected diseases like mycosis fungoides and skin cancers.
- Wood's lamp, dermoscope, photography and other office based test like KOH preparation could help in diagnosis and follow up.

# **Description of Skin Lesion**

- Type (primary or secondary), shape, size, color, arrangement of lesions, distribution and configuration of the lesions all must be addressed while describing a lesion.
- **Distribution**: symmetrical, asymmetrical, unilateral, bilateral, diffuse, universal.
- **Site** of involvement: flexor, extensor, inverse, seborrheric, acral, photodistributed.
- **Configuration**: linear, grouped, reticular, annular, circular, arciform, dermatomal, koebneraization.

# **Summary**

### **Primary skin lesion features:**

- ❖ Macule is small, flat, collored skin; Patch is bigger.
- Papule and plaque are elevated; Nodule have a depth.
- ❖ Vesicle is small, containing fluid; Bulla is bigger.
- ❖ Purpura is collection of blood; Telangiectasia is dilated capillaries.

### Secondary skin lesion features:

- Scale is detached fragment of stratum corneum.
- Exocoriation is a shallow abrasion; Lichenification is a thickening and pigmentation.
- Erosion depressed lesion with loss epidermis; Ulcer a hole with destruction of epidermis and dermis.

# Questions

## 1- In which disease we see Nikolsky's sign:

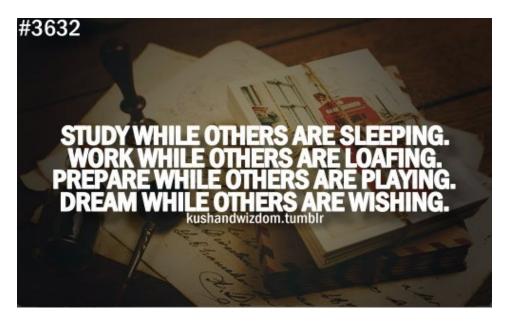
- a- Behcet's disease
- b- Psoriasis
- c- Rosacea
- d- Pemphigus Vulgaris

# 2- Which of the following is secondary lesion:

- a- Telangiectasia
- b- Purpura
- c- Scale
- d- Cyst

# 3- A moist, circumscribed, usually depressed lesion that result from loss of all a portion of the epidermis:

- a- Ulcer
- b- Erosion
- c- Fissure
- d- Poikiloderma



#### **Answers:**

1- I

2- 0