## 433 Teams

# DERMATOLOGY

Dermatology SAQ + revision File

- Resources:
- 1. Doctors slides'
- 2. Fitzpatrick synopsis book

In the exam a very clear scenario will be provided for each case. So you have to read the scenario carefully before answering as dermatology have many similar cutaneous manifestations

Some topics are well-covered in the lectures. You have to study them from the lecture

## Anatomy of the skin

#### What are the skin layers?

- 1- Epidermis
- 2- Dermis
- 3- Basement membrane
- 4- Subcutaneous fat
- 5- Skin appendages

#### What are the epidermis layers?

- 1- Stratum corneum
- 2- Stratum lucidoum
- 3- Stratum granulosum
- 4- Stratum spinosum
- 5- Stratum basale

#### What are the dermis layers?

- 1- Reticular dermis
- 2- Papillary dermis

#### What are the basement membrane parts?

- 1- Plasma membrane of basal cells and hemidesmosomes
- 2- Lamina lucida
- 3- Lamina densa
- 4- Anchoring fibrils that anchors the epidermis to dermis

#### What are the skin appendages?

- 1- Sweat Glands (Eccrine & Apocrine)
- 2- Sebaceous Glands
- 3- Hair follicles
- 4- Nails

#### What are the thickest and thinnest skin?

- Thickest skin: Palms and soles
- Thinnest skin: eyelid

#### Is epidermis contains blood vessels?

Epidermis is **Avascular** and get nutrition by diffusion from dermis

#### What are the contents of dermis?

- 1- Collagen fiber
- 2- Elastic fibers
- 3- Blood vessels
- 4- Fibroblast
- 5- Ground substance

### What is the name of normal process to renew the skin and how much it takes?

**Keratinization**, it takes 1-2 months with 30% of basal cell function

### Mention one feature of each epidermal layer:

- Stratum corneum: Keratinocyte has no nucleus
- Stratum lucidoum: appears only in thick skin (Palms and soles)
- Stratum granulosum: Flat cells contains keratohyaline granules
- Stratum spinosum: Keratinocytes attached by desmosomes & Langerhans cells is most abundant in this layer
- Stratum basale: Contains melanocytes with ration of 1:10 compared to basal cells

If patient has nucleus in corneum layers what that called, in which disease and why?

Parakeratosis, <u>In Psoriasis</u> due to increase keratinization (100% of basal function which takes 10 days)

In which disease autoantibodies attack protein of basement membrane?

Blistering diseases, Such as pemphigus vulgaris and bullous pemphigus

What is the difference between eccrine, apocrine and sebaceous glands?

- Eccrine: Cholinergic stimuli Regulate body temperature – abundant in Palms and Soles
- Apocrine: Adrenergic stimuli Give body odor – Present in axilla and anogenital area
- Sebaceous: Androgen stimuli moisture the skin – Absent in Palms and soles

If sebaceous glands present in abnormal mucus membrane, what that called?

**Fordyce spots** 

#### What are the hair growth phases?

Hair follicle – hair bulb – hair shaft – hair bulge

#### What are the hair growth phases?

- **1- Anagen:** Active phase (2-5 years)
- 2- Catogen: Conversion phase (2 weeks)
- **3- Talogen:** Resting phase (2-3 months)

#### What is the pilosbeceous unit?

It is composed of <u>hair, sebaceous gland and</u> <u>arrector pili muscle</u>. <u>Main site of Acne</u>

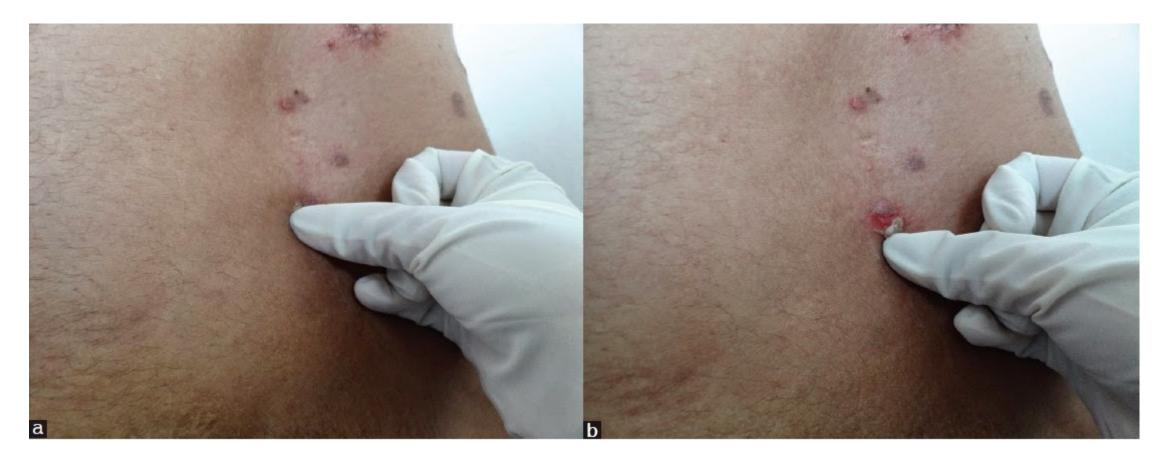
#### What is the duration of hair growth?

0.3 mm a day (1 cm in month)

#### What is the duration of nail growth?

- Fingernails grow: 3mm/month.
- Toenails grow: 1mm/month

## Investigations & Important signs



What is the name of that sign?
Nikolsky sign (Shedding of skin after applying a pressure on the skin)

#### What are the diseases associated with this sign?

- 1- Pemphigus vulgaris
- 2- Stevens-Johnson syndrome
- 3- Toxic epidermal necrolysis



What is the name of that sign?
Auspitz sign (Removal of scale will result of pinpoint bleeding)

What are the diseases associated with this sign? Psoriasis



What is the name of that sign?
Koebners phenomenon (Presence of disease at the site of trauma)

What are the diseases associated with this sign?

Psoriasis – Vitiligo - Lichen planus - Warts





What is the name of that sign?

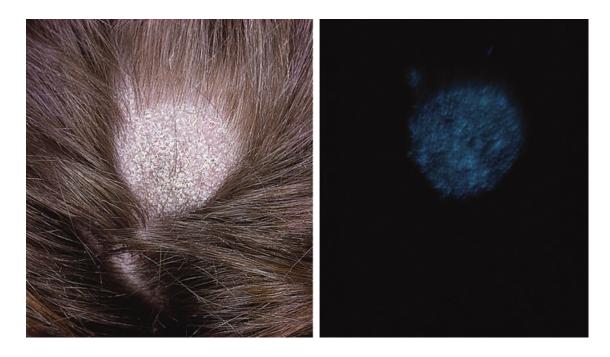
DERMATOGRAPHISM (Firm stroking of the skin produce erythema and wheal)

#### What are the diseases associated with this sign?

White: Atopy

• Red: Physical urticaria

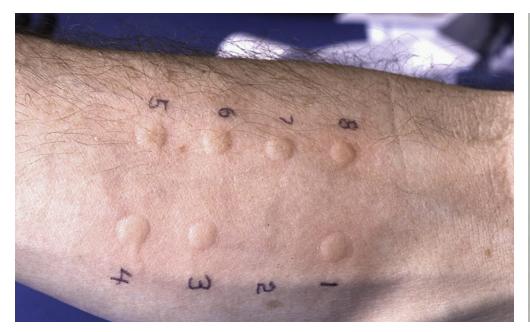


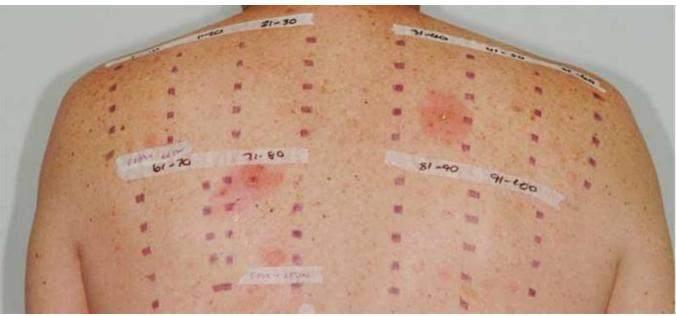


What is the name of that investigation? Woods lamp

#### What are the diseases associated with this investigations?

- Tinea Versicolor: yellowish green
- Tinea Capitis: yellowish green
- Vitiligo: Milky white.
- **Erythrasma:** coral red
- Melasma: becomes more intensified





What is the name of that investigation? Prick test

What are the diseases associated with this investigations?

 Detects immediate-type IgE mediated reaction (Type I) such as Urticaria and angioedema What is the name of that investigation? Patch test

What are the diseases associated with this investigations?

 Detects Cell-mediated reaction (Type IV) in contact dermatitis



What is the name of that investigation? Skin punch biopsy

When we need suturing after taking biopsy?
Suture if 5 mm is used



# Lupus & Other connective tissue disorder

## A patient present with skin rash which heal with scarring and without Systematic involvement of any disease

#### What is the diagnosis?

**Discoid Lupus Erythematosus** 

## Mention two pathognomonic clinical sign seen in this disease (as in picture A-B)?

A- Well-demarcated, erythematous, hyperkeratotic plaques with atrophy, follicular plugging, and adherent scale on both cheeks.

**B-** Alopecia scarring

#### What are the investigations?

- **1. Serology:** Negative
- 2. Skin biopsy
- **3. direct immunofluorescence:** deposits of IgG & C3 along the basement membrane in 80 % of affected skin & negative in normal skin

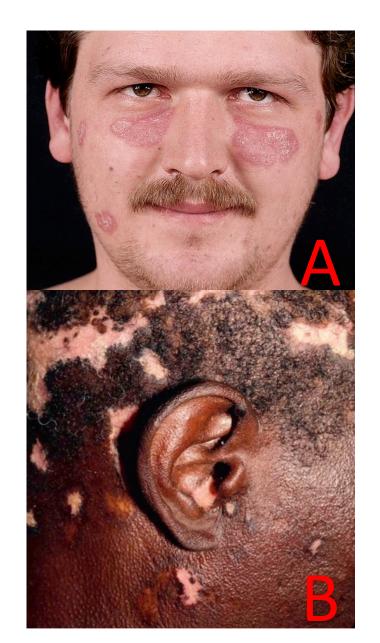
#### What is your management?

#### **Topical:**

- 1. Sun avoidance and high potence sunscreens.
- 2. Short term high-potency topical corticosteroids.
- 3. Topical immunomodulators (pimecrolimus, tacrolimus).

#### **Systematic: (ONLY in extensive rash)**

- 1- Anti-malarial (Hydroxycholoruquine)
- 2- Dapsone
- 3- Thalidomide



#### A patient present with skin rash which heal without scarring and with arthralgia only

#### What is the diagnosis?

**Subacute Lupus Erythematosus** 

#### Mention usual areas that affected in Lupus erythematosus?

Scalp – forehead – cheeks – shoulder – neck – hands – upper chest

#### What are the investigations?

- **1. Serology:** positive for anti SSA & SSB and low titer anti-dsDNA antibodies
- 2. Skin biopsy
- **3. direct immunofluorescence:** deposits of IgG & C3 along BM in lesional lesions 50-60 %; in normal skin in 10-20%.

#### What is your management?

#### **Topical:**

- 1. Sun avoidance and high potence sunscreens.
- 2. Short term high-potency topical corticosteroids.
- 3. Topical immunomodulators (pimecrolimus, tacrolimus).

#### **Systematic:**

- 1- Anti-malarial (Hydroxycholoruquine)
- 2- Dapsone
- 3- Thalidomide



32-year women present with that skin lesion for 2 days which become worse with sun exposure, and rash on the skin which spares the joint and has renal failure

#### What is the diagnosis?

Systematic Lupus Erythematosus

What is the name of that rash in the face?

malar rash

#### What are the investigations?

Many investigations to apply SLE criteria (4 and more)

#### What is your management?

#### **Topical:**

- 1. Sun avoidance and high potence sunscreens.
- 2. Short term high-potency topical corticosteroids.
- 3. Topical immunomodulators (pimecrolimus, tacrolimus).

#### **Systematic:**

- 1- Anti-malarial (Hydroxycholoruquine)
- 2- Corticosteroid (prednisone)
- 3- Immunosupprsant (Azathioprine)





Criterion	Definition
1. Malar Rash	Fixed erythema, flat or raised, over the malar eminences, tending to spare the nasolabial folds
2. Discoid Rash	Skin rash as a result of unusual reaction to sunlight, by patient history or physician observation
3. Photosensitivity	Erythematous raised patches with adherent keratotic scaling and follicular plugging; atrophic scarring may occur in older lesions
4. Oral Ulcers	Oral or nasopharyngeal ulceration, usually painless, observed by physician
5. Non-erosive Arthritis	Involving 2 or more peripheral joints, characterized by tenderness, swelling, or effusion
6. Pleuritis or Pericarditis	a) Pleuritisconvincing history of pleuritic pain or rubbing heard by a physician or evidence of pleural effusion     OR     b) Pericarditisdocumented by electrocardigram or rub or evidence of pericardial effusion
7. Renal Disorder	a) Persistent proteinuria > 0.5 grams per day or > than 3+ if quantitation not performed  OR b) Cellular castsmay be red cell, hemoglobin, granular, tubular, or mixed
8. Neurologic Disorder	a) Seizuresin the absence of offending drugs or known metabolic derangements; e.g., uremia, ketoacidosis, or electrolyte imbalance OR b) Psychosisin the absence of offending drugs or known metabolic derangements, e.g., uremia, ketoacidosis, or electrolyte imbalance
9. Hematologic Disorder	a) Hemolytic anemiawith reticulocytosis OR b) Leukopenia< 4,000/mm3 on ≥ 2 occasions OR c) Lyphopenia< 1,500/ mm3 on ≥ 2 occasions OR d) Thrombocytopenia<100,000/ mm3 in the absence of offending drugs

10. Immunologic Disorder	a) Anti-DNA: antibody to native DNA in abnormal titer  OR  b) Anti-Sm: presence of antibody to Sm nuclear antigen  OR  c) Positive finding of antiphospholipid antibodies on:  1. an abnormal serum level of IgG or IgM anticardiolipin antibodies,  2. a positive test result for lupus anticoagulant using a standard method, or  3. a false-positive test result for at least 6 months confirmed by Treponema pallidum immobilization or fluorescent treponemal antibody absorption test
11. Positive Antinuclear Antibody	An abnormal titer of antinuclear antibody by immunofluorescence or an equivalent assay at any point in time and in the absence of drugs

## 45-year old lady came to your clinic with skin rash, sensitivity to the sun, difficulty rising from sitting position

#### What is most likely diagnosis?

Dermatomyositis

## Mention two pathognomonic clinical sign seen in this disease (as in picture A-B-C)?

- A- Heliotrope lids
- B- Gottron sign (rash affect joint line)
- C- Shawl sign

#### list two tests you will request for this patient to help in the diagnosis?

- 1- Electromyography
- 2- Muscle biopsy (Best test)
- 3- Creatine kinase (Best blood indicator)
- 4- Serology: Anti-jo1 (associated with pulmonary fibrosis & Anti-Mi2
- 5- MRI

#### What is your management?

- 1. <u>Corticosteroids</u>: PO and taper, or pulse therapy, monitoring CK.
- **2.** <u>Immunosuppressants</u>: MTX, azathioprine.
- 3. Antimalarials: helps cutaneous lesions, topical steroids, sunscreen.



45-year old lady came to your clinic with Circumscribed sclerotic plaque with ivory center & red violet periphery, Without systematic involvement

What is most likely diagnosis?

Morphea

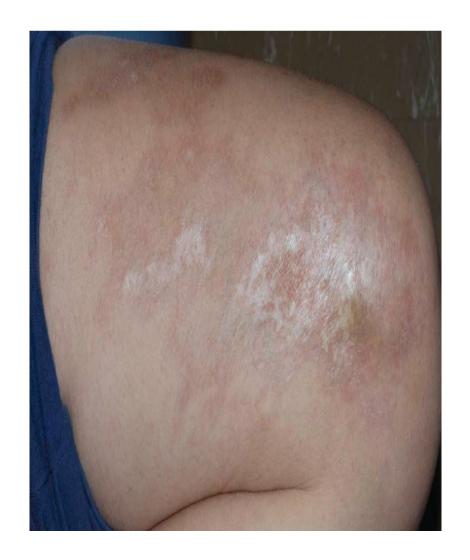
Mention pathognomonic clinical sign seen in this disease? lilac ring

list two tests you will request for this patient to help in the diagnosis?

- 1. Skin biopsy
- 2. ANA and anti ssDNA

#### What is your management?

- 1. High potency topical corticosteroids.
- 2. PUVA or UVA



## 45-year old lady came to your clinic with porcelain-white papules & plaques or atrophy in her vagina

#### What is most likely diagnosis?

Lichen sclerosis

#### What are the complication of this disease?

- 1- Phimosis in men with NO pruritus
- 2- Labia minora atrophy in women WITH pruritus

#### What is your management?

- 1. High potency topical corticosteroids
- 2. Topical immunomodulators (tacrolimus or pimecrolimus) for long term maintenance.



## 45-year old lady came to your clinic with diffuse sclerosis and multi organ involvement

#### What is most likely diagnosis?

Systematic sclerosis

#### What is the syndrome associated with this disease?

CREST syndrome

## Mention two pathognomonic clinical sign seen in this disease (as in picture A-B-C)?

A- sclerodactyly

B- Telenegiectasia

C- Raynaud's' phenomena

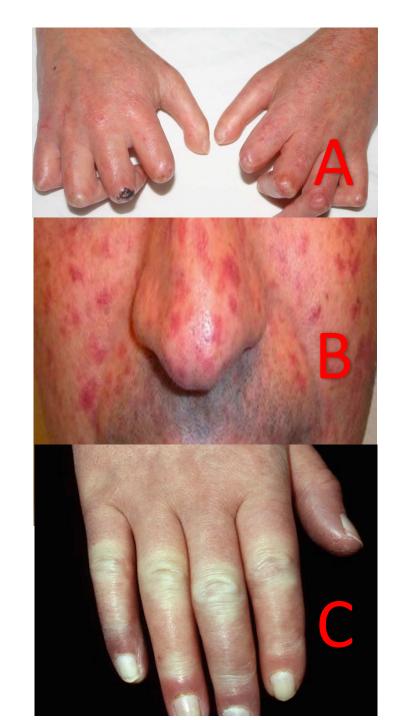
#### What are the investigations?

Many but most important is Serology Anti SCL-70 & Anti-centromere ab (associated with CREST syndrome)

#### What is your management?

1. Corticosteroids: for sclerosis.

**2. Nifidipine:** for Raynaud's phenomena



# Hair diseases and pigmentary disorders

#### **Describe the lesion:**

Multiple well demarcated non-scarring hairless patches.

#### What is the Diagnosis?

Alopecia Areata.

#### **Mention one Specific Sign:**

Exclamation mark.

#### **Mention 2 Causes:**

Autoimmune - Family history.

#### What is the Management:

- 1- Observation. (It may heal within 2-6 months)
- 2- First line:

In Adult: Intralesional Corticosteroids.

In children: <u>Topical</u> steroids.

3- Skin Sensitizers

#### **Mention 4 Bad-prognosis indicators:**

- 1. Young age.
- 2. Nail changes. (nail pitting)
- 3. Atopy.
- 4. Alopecia totalis, universalis, ophiasis



### Clinical types of alopecia areata Localized partial Localized extensive Alopecia ophiasis occipital and parietal area. Total hair loss in Alopecia totalis First line: the scalp. Skin Sensitizers. Skin Sensitizers + Alopecia universals whole body. Systemic Steroids.

#### **Describe the lesion:**

well demarcated scarring hairless patches.

#### What is the Diagnosis?

Scarring alopecia.

#### **Mention 2 Causes?**

- 1. Discoid lupus erythematous
- 2. Lichen Planus
- 3. Sarcoidosis.
- 4. Leprosy
- 5. Kerion
- 6. Trauma





#### What is the Diagnosis?

Androgenetic Alopecia (Female pattern hair loss).

What is the pattern of the hair loss in this case?

Ludwig scale: Frontal hairline is preserved.

What is the pathogenesis of the hair loss in this case?

5 Alpha reductase converts testosterone to dihydrotestosterone

(active)  $\rightarrow$  miniaturization of terminal hair.

What is the management?

Topical: Minoxidil 2%- 5% solution.

Systemic: Finastride. – Spironolactone.



#### What is the primary lesion?

Macule

What is the Diagnosis?

Freckle (Lentigo).

What is the pathophysiology?

Increase number and function of melanocyte

What is the management?

Sun block & bleaching cream.

Pigmented laser (recurrence).



#### What is the Diagnosis?

Androgenetic Alopecia (male pattern hair loss).

What is the pattern of the hair loss in this case?

**Hamilton scale**: spares the Temporal and occipital areas

What is the pathogenesis of the hair loss in this case?

5 Alpha reductase converts testosterone to

dihydrotestosterone(active) → miniaturization of terminal hair.

What is the management?

Topical: Minoxidil 2%- 5% solution.

Systemic: Finastride. – Spironolactone.



#### What is the primary lesion?

Patch

#### What is the Diagnosis?

Melasma. (Cholasma).

#### What is the pathophysiology?

Increase number and function of melanocyte

#### What is the management?

Sun block & bleaching cream.

Pigmented laser (recurrence).



#### What is the primary lesion?

Depigmentation Patch.

#### What is the Diagnosis?

Vitiligo

#### Mention one investigation

Wood's lamb (A vitiligo patient's skin will appear milky white under the Wood's lamp).

#### What is the management?

Limited: Topical corticosteroids, laser, PUVA

Resistant but Stable of 2 years Surgical treatment: Melanocyte Transplant (only in fix inactive vitiligo) or Cosmetic Tattoo

Generalized: Phototherapy or bleaching



# Atopic dermatitis & Other Eczematous diseases

#### What is the diagnosis?

**Picture A:** Acute Atopic dermatitis

**Picture B:** Subacute Atopic dermatitis

**Picture C:** Chronic Atopic dermatitis

#### What is the primary and secondary lesions?

**Picture A: Primary:** Plaque - **Secondary:** Crust and erosions

**Picture B: Primary:** Plaque - **Secondary**: Erosions

Picture C: Primary: Plaque - Secondary: Lichnification

#### If this diseases affect more than 50% body of children what will happen?

He may develop **Mental retardation** 

#### What is the complication of this disease?

Infection (Usually staph aureus or herpes simplex virus)

#### What is your management?

#### Non-pharmacological:

- Avoid soap - Protect from scratching

#### **Pharmacological:**

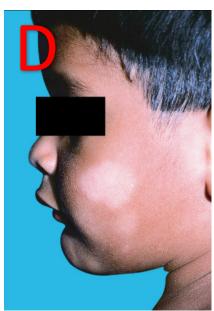
Moisturizer – Antihistamines – Steroids – Tacrlimus











#### What are the signs in the pictures?

Picture A: Dennie-Morgan fold

Picture B: Keratosis pilaris (papules arising from the hair follicles )

Picture C: Hyperlinear palms (can be caused by chronic use of steroids)

**Picture D:** Pityriasis alba (hypopigmented patch associated with poor prognosis)

**Picture E:** Xerosis with excoriations

#### What is the most common sites of Atopic dermatitis?

**Infantile:** Cheeks, scalp, neck, forehead, wrist, and extensors

Children: antecubital and popliteal fossae, flexor wrist, eyelids, and face.

Adults: Hand, antecubital and popliteal fossae, neck, the forehead, and area around the eyes.



#### What is the diagnosis?

Eczema herpticum

#### What is the cause?

Herpes simplex virus infection on top of eczema





#### What is the diagnosis?

Eczema herpticum

#### What is the cause?

Herpes simplex virus infection on top of eczema



#### Patient came with lesions on his body

#### **Describe the lesion shape**

Coin shaped patches and plaques

#### What's the most likely diagnosis?

Nummular dermatitis

#### What's the treatment?

medium to high-potency topical corticosteroid







#### Whats the most likely diagnosis?

Nipple eczema

#### When you should do further investigations?

If persist more than 3 month, and/or unilateral, biopsy is mandatory to rule out Pagets disease



#### A patient came with this condition

Whats the most likely diagnosis?

**Hand Dermatitis** 

Treatment? systemic steroid

What are the vesicles associated called?

Pompholyx- tapioca vesicles





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## Infections

#### **Primary Lesion:**

Vesicles\ Pustule (vesiculopustules).

#### **Diagnosis:**

Imptigo.

**Specific sign:** 

Yellow gold crust (honey crust).

#### **Etiology:**

Strep pyogen, Staph aureus

**Treatment:** 

Localized disease: Topical antibiotics (Bacteroban), and good

general hygiene.

Extensive lesions: Systemic antibiotics (1st generation

cephalosporin) and good general hygiene.





Pustule.

#### **Diagnosis:**

Folliculitis.

### **Predisposing factors:**

Excessive itching, immune compromised (e.g. diabetics).

# **Investigations:**

swab for gram stain and culture.

#### **Treatment:**

Topical or systemic antibiotics directed by culture findings.



#### **Primary Lesion:**

Patch\ Plaque.

#### **Diagnosis:**

Cellulitis.

#### **Risk factors:**

DM.

Venous stasis.

Immunodeficiency.

#### **Complications:**

Lymphadenopathy.

#### **Treatment:**

Systemic antibiotics.



Papule.

**Diagnosis:** 

Warts.

**Caused by:** 

HPV.

**Treatment:** 

Topical salicylic acid preparations.

Cryotherapy.

Curettage.



### **Primary Lesion:**

Papule.

**Diagnosis:** 

Molluscum Contagiosum.

**Specific Sign:** 

**Central umbilication** (pearly shiny papules)

**Treatment:** 

Observation.

2. Destructive.



Vesicles.

### **Diagnosis:**

Herpes simplex

### Caused by:

HSV.

Oral HSV  $\rightarrow$  (HSV-1).

Genital HSV→ (HSV-2).

#### **Investigation:**

**Tzanck preparation.** 

Immunofluorescent testing.

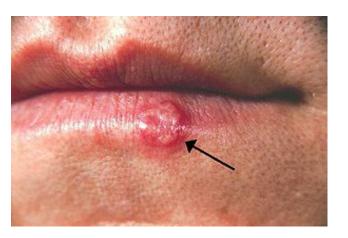
#### **Treatment:**

Oral anti-viral (acyclovir).

# **Complications:**

Eczema herpeticum Erythema multiforme







Vesicles.

#### **Diagnosis:**

Herpes zoster (Shingles).

It follows dermatomal distribution.

# Caused by:

Herpes zoster virus.

#### **Investigation:**

**Tzanck preparation.** 

Immunofluorescent testing.

#### **Treatment:**

Oral anti-viral (acyclovir).

Oral corticosteroids.

Pain Control.





What is the diagnosis?
Tinea Capitis
What is the causative organsim?
M. canis
What is the treatment?
systemic anti-fungal - fluconazole





What is the diagnosis?
Tinea Corporis
What is the treatment?
Nystatin or Imidazoles (topical)





What is the diagnosis?
Onychomycosis
What is the treatment?
systemic anti-fungal such as fluconazole
Mention 2 diagnostic tools could be used.
KOH preparation and Fungal culture





What is the diagnosis?

Oral candiasis

What is the causative organsim?

Candida albicans

What is the treatment?

1- Topical anti-fungal: Nystatin or Imidazoles

2- systemic anti-fungal: fluconazole for recurrent cases



A patient presented with skin lesions on his both hands. The lesion was very pruritic. His family also have the same complaint.

What is the diagnosis?

Scapeis

What is the treatment?

Permethrin crea





What is the diagnosis?

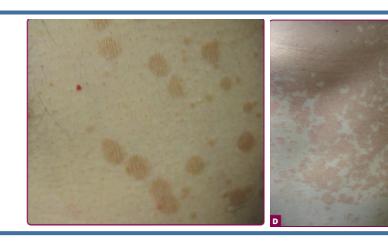
Pityriasis Versicolor

What is the treatment?

Selenium sulfide shampoo, Topical anti-fungal: Nystatin or Imidazoles

Mention 2 diagnostic tools could be used.

KOH preparation and Wood's lamb (grape-like clusters)



# Acne And Acne-related diseases

# What is the name of the primary lesion? papule (Closed Comedones)

Diagnosis? comedonal acne

White in color



# What's the name of primary lesion? papule (Open Comedones)

**Diagnosis?** comedonal acne

black in color
(due to the oxidation of fatty acids)





# What's the name of primary lesion? Cyst

Diagnosis?

Cystic acne
when follicles rupture into surrounding tissues



### What's the name of primary lesion?

Cysts, nodules

### **Diagnosis?**

Acne Conglobata

How are you going to mange the patient?

Oral isotretinoin



# What's the name of primary lesion?

Cycts, nodules

# Diagnosis?

Acne Fulminans

#### Management?

oral steroids, isotretinoin



A 34 year old women came to with this eruption in her face, it is aggravated when she takes hot baths and in hot weather

What's the name of primary lesion? papules, patches

**Diagnosis?**Rosacea

How are you going to manage the patient?
Control the triggers
Topical metronidazole



#### **Treatment of comedonal acne:**

Salicylic acid, Azelaic acid, Gycolic acid, Sulfur

#### **Treatment of mild-moderate acne:**

Benzoyl peroxide, Topical antibiotic

#### **Treatment of moderate-severe acne:**

Oral isotretinoin, oral antibiotics (tetracycline, minocycline, doxycycline, erythromycin...)

#### **Treatment of Rosecea:**

- Control triggers
- First line : Topical Metronidazole
- Topical azelaic acid
- sulfacetamide products
- topical acne medications
- Topical and oral antibiotics.

# Cutaneous Manifestations Of Systemic Diseases

A celiac patient presented with these lesions which is very pruritic.

What is the diagnosis.

Dermatitis herpetiformis

What is the management.

Dapsone and gluten-free diet.



A new-born baby presented with diarrhea and hair loss. The pediatrician has noticed this skin rush.

What is the diagnosis?

Acrodermatits enteropathica

What is the management.

Zinc supplement



Well-known case of Crohn's disease presented with painful skin lesion. What is the diagnosis.

Pyoderma gangrenosum



A celiac patient presented with these lesions which is very pruritic.

What is name of this primary lesion.

Café-au-lait macules

Mention one condition associated with these lesions.

**Neurofibromatosis** 



A patient presented with palpitation and weight-loss. He is also complaining about his eyes.

What is name of this primary lesion.

Pretebial myxedema

Mention one condition associated with these lesions.

Hyperthyroidism



What is name of this primary lesion.

**Acanthosis Nigricans** 

Mention one condition associated with this lesion.

Insulin-resistance (common in DM)

What is the management?

Weight loss



A Diabetic for 20 years presented with painless skin lesion.

What is the diagnosis.

Diabetic dermopathy

What is the management?

Diabetes control



A Diabetic for 20 years presented with painful skin lesion.

What is the diagnosis?

Necrobiosis lipoidica diabeticorum

What is management?

Topical corticostreoids



What is name of this primary lesion.

Skin tags in top of Acanthosis Nigricans

What is management?

Laser therapy



A DM patient who is known to have kidney failure presented with these pruritic skin lesion.

What is the management?

perforating dermatosis

What is the management?

Topical keratolytics, phototherapy



# What is the abnormality in these nails + mention 2 causes for each



- 1- Nail Clubbing.
- 2- Lung cancer, Thyroid disease and cyanotic heart disease



- 1- Splinter Haemorrhages.
- 2- Endocarditis, septic emboli and trauma



- 1- Koilonychia.
- 2- Iron defiency anemia, Thyroid disease and Lichen planus

# What is the Clinical sign present in the picture?

# **Purpura**

#### **Mention 2 differentials.**

- 1. Henoch- Schönlein purpura( HSP)
- 2. Kawasaki's disease



# Papulosquamous diseases

43 year old male presented to the dermatology clinic with itchy rash over his extensor surfaces as shown in pic A. He is medically free except that he takes propranolol for his

hypertension.





Q1: What is the most likely diagnosis?

**Psoriasis** 

Q2: Mention one drug that could have caused his symptoms?

Beta-blockers.

Q3: Mention 2 changes in the nails in pic B?

- 1- Nail pitting
- 2- Onycholysis

51 year old male presented to the dermatology clinic multiple lesions as shown below. He noticed recently that the lesions started to scale.





Q1: What is the primary lesion?

Plaque

Q2: What is the most likely diagnosis?

Plaque Psoriasis (AKA: Psoriasis vulgaris)

Q3: Mention 2 options for management?

Topical agents (Keratolytics or anti inflammatory)

Phototherapy

Biological therapy.

30 year old male presented to the dermatology clinic complaining of multiple lesions which were distributed over his trunk and and upper limbs as shown below. He noticed that the lesions started to appear few days after his sore throat resolved.

Q1: What is the primary lesion? Papule

Q2: What is the most likely diagnosis? Guttate psoriasis

Q3: mention what could cause this diagnosis? group A beta hemolytic streptococci.





29 year old male presented to the dermatology clinic complaining of multiple scaly erythematous lesions all over his trunk.

Q1: What is the most likely diagnosis?

Etythrodermic psoriasis

Q2: Mention 2 complications which may happen in this patient's condition?

- 1- Iron deficiency anemia
- 2- Hypoproteinemia



32 year old female patient presented to the ER with these erythematous lesions which appeared suddenly.

Q1: What is the primary lesion? Pustule

Q2: What is the most likely diagnosis?

Pustular psoriasis

Q3: Mention 2 causes which can trigger or exacerbate this condition?

1- Withdrawal of systemic steroids

2- Drugs e.g. Lithium



46 year old male patient presented to the dermatology clinic with multiple erythematous lesions which are confined to his palm and soles only.





Q1: What is the primary lesion? Pustule

Q2: What is the most likely diagnosis?

Pustular psoriasis (you may say the type like: Localized pustular or palmoplantar psoriasis)

Q3: Mention 2 MEDICAL CONDITIONS which can trigger or exacerbate this condition?

1- Hypocalcemia

2- Cholestatic jaundice

52 year old male patient presented to the dermatology clinic with multiple shiny in color lesions over many areas of his body.







Q1: What is the primary lesion?

Papule

Q2: What is the most likely diagnosis?

Lichen planus

Q3: Mention 2 drugs which can trigger or exacerbate this condition?

1- Antimalarials 2- Propranolol

Q4: Mention 2 changes seen in his nails?

1- Onycholysis 2- Longitudinal grooving and ridging

32 year old male patient presented to the dermatology clinic with multiple erythematous exanthem that has developed over the past few days.

Q1: What is the primary lesion? Macule, patch

Q2: What is the most likely diagnosis? Pirytriasis rosea

Q3: Mention 2 possible causative organisms?

1- Human herpes virus type 6 (HHV-6) 2- Human herpes virus type 7 (HHV-7)



# Blistering Diseases

# A 44 year old man came with painful lesions in the oral cavity and erosions all over the body

Whats the most likely diagnosis?

Pemphigus Vulgaris

Clinical sigh associated with the disease?

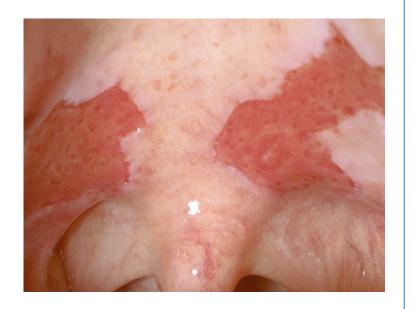
+ve Nikolsky's sign

Mention one confirmatory investigation

Direct Immunofluorescence (IgG and C3)

Whats your management?

High dose systemic steroids prednisolone



#### A 66 year old man came with tense bullae on his arm

Where the antigens could be identified?

Hemidesmosomes

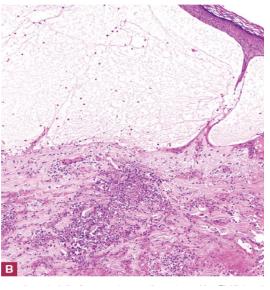
What's the most likely diagnosis?

**Bollus Pemphigoid** 

What's the management?

Topical steroids





# ACDR

# **ACDR**

#### Can mimic all the morphologic expressions in dermatology

A patient developed this skin lesion after administration of oral antibiotics.

Mention this sign.
Psoriasiform







Mention this sign. Lichenoid

Mention 3 findings could indicate a life-threatening ACDR.

Arthralgia, +ve Nickolsky sing and fever





A patient developed this skin lesion after administration of oral antibiotics with no other symptoms. Mention this sign.

Erythema Multiforme

What is the management. Discontinue the drug





Hand-foot skin reaction (Gloves and socks drug rash)









Facial edema







Retinoid dermatitis

Pyogenic granuloma



Steroid induced acne
No comedones







Vasculitis

Paronychia



Acute generalized exanthematous pustulosis



xerosis



Name of primary lesion: macules/papules
Diagnosis: Exanthematous Drug Reaction

Investigations: biopsy, CBS

Management:

• Definitive (discontinuation of a drug)

Symptomatic: Oral antihistamines, topical and systemic corticosteroids













Angioedema

Name of primary lesion: wheals

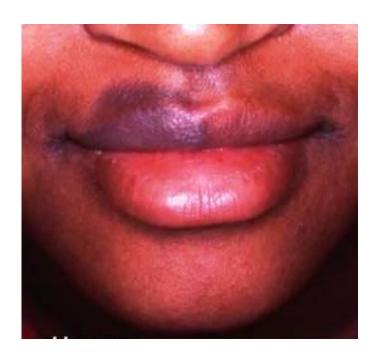
Diagnosis: Drug-Induced Acute Urticaria / angioedema

Investigations:

- biopsy and complement measurements if vasculitis suspected
- · Ultrasonography if edema of bowel suspected

- Definitive (discontinuation of a drug)
- Symptomatic: subcutaneous epinephrine





Name of primary lesion: macules/patches

(even bulla, erosion, or plaques sometimes)

Diagnosis: Fixed Drug Reaction Investigations: biopsy, patch test

- Non-eroded: potent topical corticosteroids
- **Eroded:** antimicrobial ointment
- Widespread/ painful mucosal lesions: oral corticosteroids







Name of primary lesion: Exanthematous Drug Reaction

Diagnosis: Drug hypersensitivity reaction (Drug Reaction with Eosinophilia and Systemic Symptoms "DRESS")

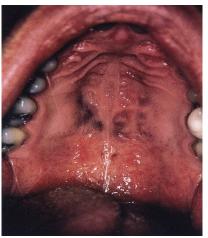
Investigations: diagnostic criteria

- 1. Cutaneous drug eruption
- 2. Hematologic abnormalities (eosinophilia ≥1500/microL or atypical lymphocytes)
- 3. Systemic involvement (adenopathies ≥ 2cm in diameter or hepatitis (SGPT ≥ 2N) or interstitial nephritis, interstitial pneumonitis or carditis)

- Discontinuation of a drug
- Systemic corticosteroids

# **Drug Induced Pigmentation**









Minocycline induced pigmentation



Bleomycin induced pigmentation (Whiplash Configuration)





Amiodarone induced pigmentation





Lesion: variation from purpura to deep tissue umceration Diagnosis: Warfarin induced cutaneous necrosis

Investigations: Coagulation studies

Management: May heal by granulation or require surgical intervention.

#### Risk factors:

high initial dose, obesity, female, hereditary deficiency of protein C, protein S or antithrombin III.

Primary Lesion: macular, bulla

Diagnosis: Stevens Johnson Syndrome (SJS) /

Toxic Epidermal Necrolysis (TEN)

Investigations: Biopsy

- Withdrawal of suspected drug
- Admit to ICU or burn unit
- IV fluids and electrolytes
- IV glucocorticoids / immunoglobulins
- Pentoxifylline
- Treat eye lesions early because it can lead to blindness if left untreated
- don't do surgical debridement.









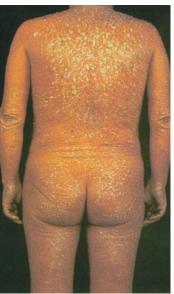
Lesion: Generalized uniform redness, scaling

Diagnosis: Exfoliative Erythroderma Syndrome (EES)

Investigations: Biopsy

- Supportive: fluid, electrolytes and albumin restoration.
   parenteral nutrition and temperature control.
- Topical: Water baths, bland emollients ± topical steroids.
- Systemic: Oral glucocorticoids





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