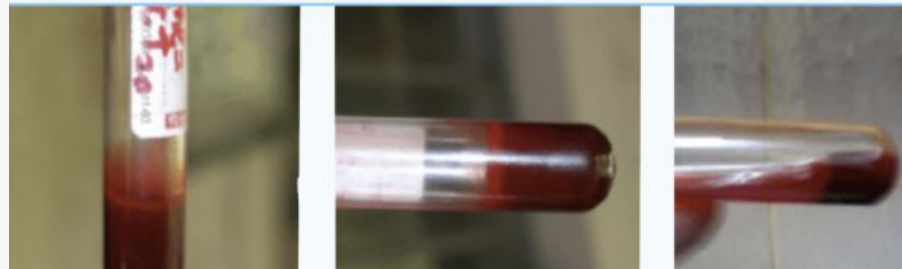
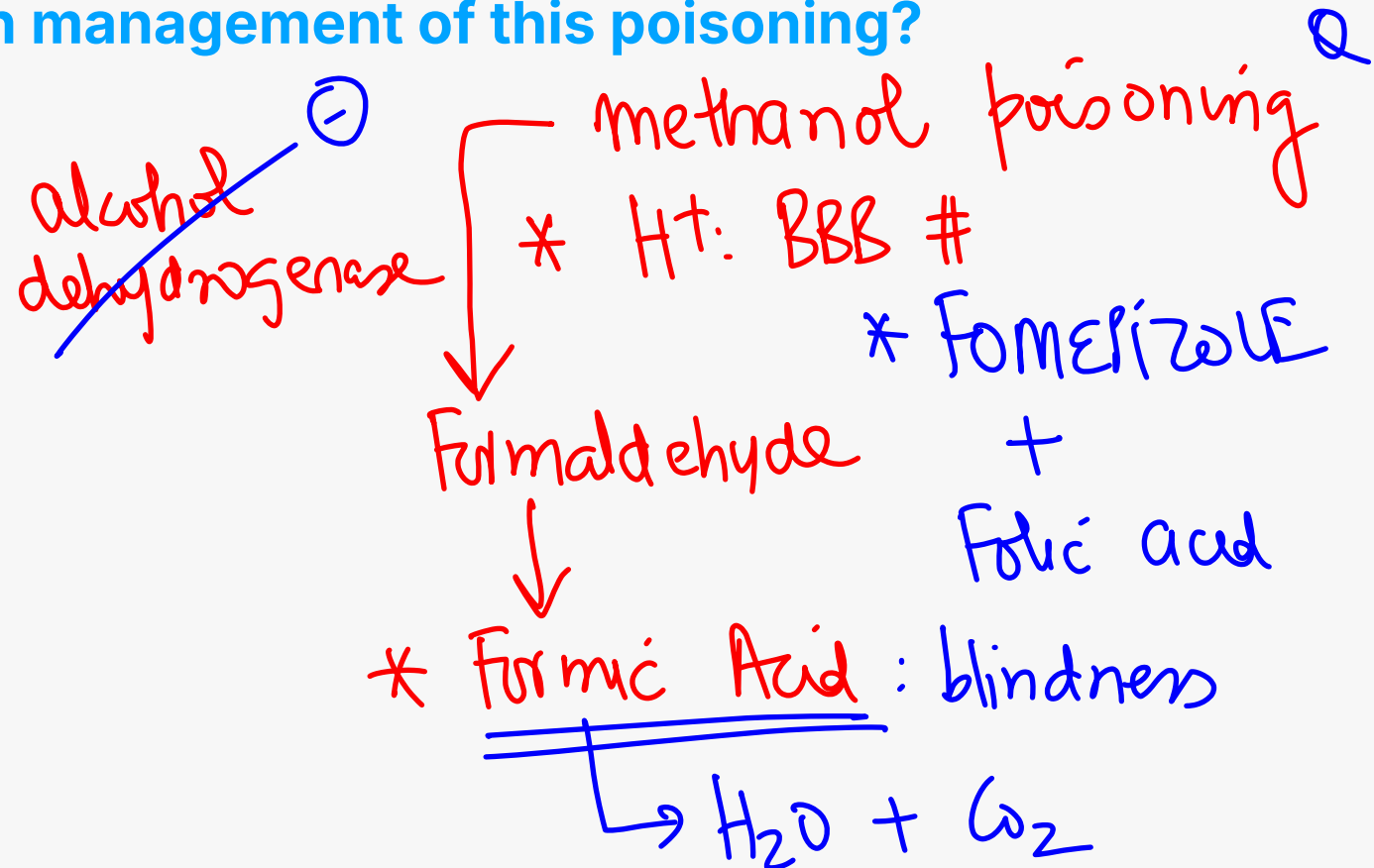




# **DERMA & FORENSIC MEDICINE**



Q1. A 30 year old alcoholic consumed alcohol from a local shop. After one hour he became delirious and developed snow field vision followed by blindness. Work up shows high anion gap metabolic acidosis. Which of the following will be used in management of this poisoning?



GOA

- ~~a.~~ Thiamine + Dextrose
- ~~b.~~ Pyridoxine
- ~~c.~~ Cyanacobalamin
- d. Folic acid

Q2. A 30-year-old lady comes in with erythema involving the face. She says the lesions are precipitated by hot sun, emotion and hot drinks. Which of the following is the most appropriate next step in management?

SLE

// Acne Rosacea //

- ~~a.~~ Autoimmune panel and topical glucocorticoids
- ☒ b. Topical Metronidazole
- c. Topical Retinoids
- d. Oral isotretinoin

// acne vulgaris



\* acneiform lesions  
\* Telangiectasia

## Acne Vulgaris vs. Acne Rosacea

	Acne Vulgaris	Acne Rosacea
Chronic Inflammatory Disease	✓	✓
Comedones	✓	No
Papules and Pustules	✓	✓
Areas Affected	Widespread	Central Face (flush areas)
Occurrence	Chronic	Episodically
Triggers	Varied	Sun, heat, alcohol, strong emotions, caffeine, spicy foods



CONVEXITIES: face



COMEDONES



acne  
vulgaris



acne Rosacea

### Q3. Comment on the diagnosis of this case?

- ~~a.~~ Seborrheic dermatitis
- ☒ b. Psoriasis
- ~~c.~~ Lichen planus
- d. Pityriasis capitis

VIOLET



Pitting nails

Salmon patch

Q4. A 30-year-old woman with hypertension presents with the pruritic lesions as shown below. He says that lesion started as a small patch on the trunk and increased in Christmas tree pattern. Which of the following is correct about diagnosis?

HERALD  
Trunk

- a. Pityriasis Rosea
  - b. Tinea corporis
  - c. Pityriasis Versicolor
  - d. Pityriasis alba
- scales red

PITYRIASIS ROSEA

PITYRIASIS VERSICOLOR

HHV 7  
HHV 6



P. ALBA

Pityriasis Rosea ↓ Red	Starts with herald patch and evolves into multiple oval lesions in Christmas-tree pattern on trunk, self-limiting	Viral (HHV 6/7), young adults, pruritic, resolves in 6-8 weeks
Tinea Corporis RING WORM	Annular, erythematous plaques with central clearing & active scaly border ('ringworm')	Fungal (dermatophyte), itchy, KOH mount typhase
Pityriasis Versicolor //	Hypo/hyper-pigmented macules with fine scaling, more on trunk/shoulder, coalesce into patches	Malassezia yeast, accentuated on sweating, "spaghetti & meatballs" on KOH mount
Pityriasis Alba	Hypopigmented, ill-defined patches with fine scales, mainly on face of children	Post-inflammatory, atopic kids, improves spontaneously, emollients help



## Pityriasis Rosea (scales that are pink colored)

- HHV 7 > HHV 6 \*
- ~~ACEI~~ , imatinib, interferon, ergotamine
- Starts as herald patch and then causes collarette scales
- Christmas tree pattern
- Does not involve palm and soles ( why ? : lesions resemble secondary syphilis)
- Self limiting  
=



Q5. Pautrier microabscess formation is seen in which of the following?

- ~~a.~~ Psoriasis MUNRO Abscess
- b. Cutaneous T cell lymphoma → MYCOSIS FUNGOIDES
- ~~c.~~ Dermatitis herpetiformis Papillary Tip Abscess
- ~~d.~~ Lichen planus VIOLET

## Microabscess formation in Dermatology

Munro's <i>HA</i> ✓	Psoriasis, neutrophils in stratum corneum
Kogoj's spongiform pustule ✓	Psoriasis, neutrophils in stratum spinosum
Pautrier's <i>HA</i>	Mycosis fungoides, atypical lymphocytes in epidermis
Passini's <i>HA</i>	<i>SLE</i> neutrophils in <u>epidermis</u>
Papillary tip neutrophilic abscess	<i>DERMATITIS HERPETIFORMIS</i>
Max Joseph space	LP (though more of cleft than abscess)



Q6. The following presentation is seen in which of the following?



Dennie Morgan eye fold

- a. Atopic dermatitis
- b. Contact dermatitis
- c. Asteatotic eczema
- d. Dermatomyositis

- Asthma
- allergic Rhinitis
- atopic dermatitis

↓  
GOTTRON  
PAPULES

\* [ HANIFIN &  
RAJWA  
CRITERIA

↓  
**Q7. Which is not correct about psoriasis?**

- a. Parakeratosis ✓
- b. Seen on extensor aspects like elbows, knees, scalp ✓
- c. Candle stain sign ✓
- d. Associated with HLA DR2 with positive family history

↓  
SLE  
MS  
Narcolepsy  
GPS

HLA B27

- Associated with HLA CW6 \*
- Th1 and Th 17 function increased and Th2 cells activity is reduced
- Skin proliferation reduced from 28 days to 4 days
- PSO RAM : Mnemonic

- Parakeratosis (Stratum corneum contains nuclei) ✓
- Squirting papillae contain neutrophils
- Spongiform pustules of Kojoj
- Rete edges prominent (Camel foot)
- Acanthosis (Thickness of Spinosum is increased)
- Absent granular layer
- Munro microabscess



→ oil droplet

AUSPITZ SIGN  
CANDLE GREASE  
SIGN

\*  
GΘ ST +

Q8. DIF study of skin biopsy taken from the lesions is shown below. The diagnosis is?

a. Dermatitis herpetiformis

~~b. Lichen planus~~

c. Bullous pemphigoid

~~d. Pemphigus Vulgaris~~

↓  
flaccid  
bulle

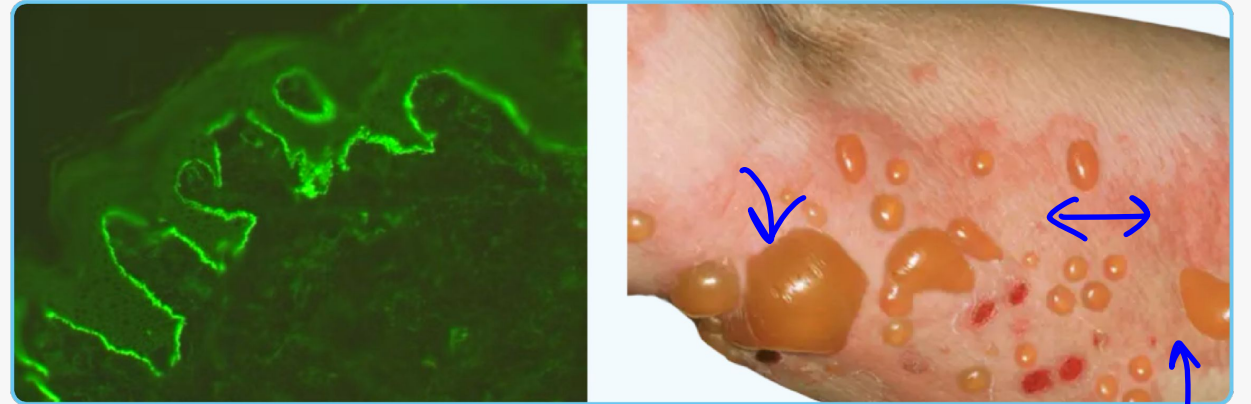
↓  
IF: FISH NET

VIOLET 5P

IgG anti BP

IF

//  
"TENSE" BLISTERS

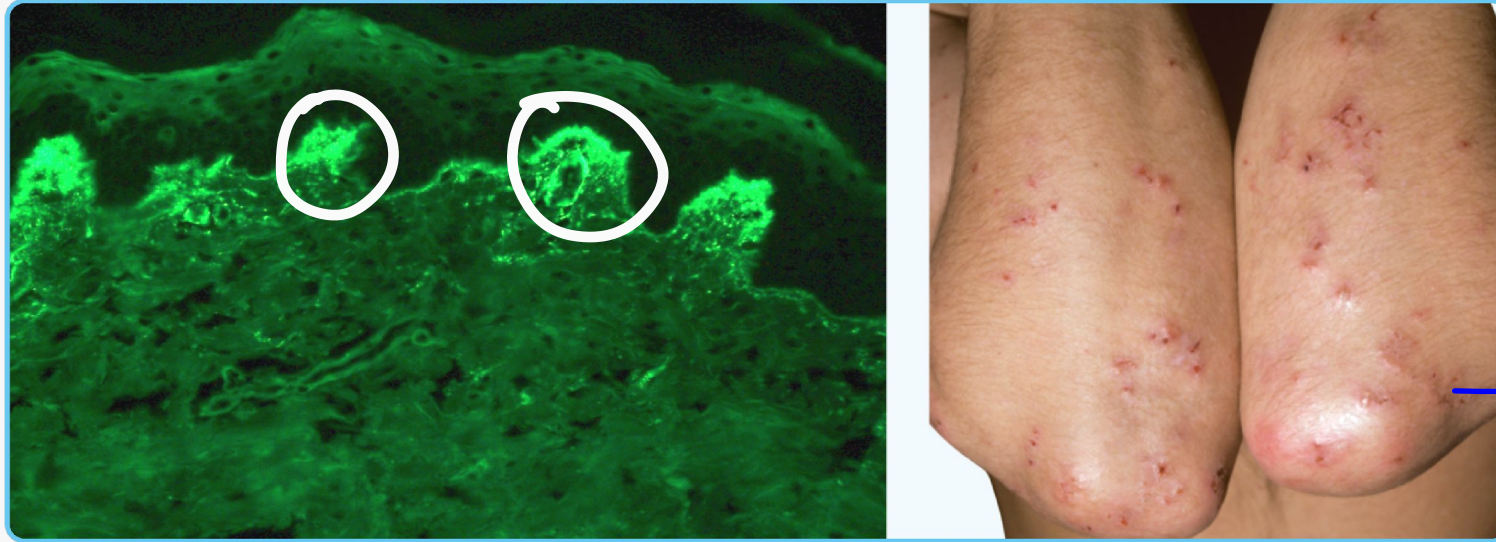


~~~~~

ERYTHEMA +

Q9. Correct about the disease shown in this 15-year-old boy is?

DH



PRURITIC  
lesions  
on  
elbows  
knee

☒ a. Focal granular IgA deposits at dermo-epidermal junction

☒ b. Lesion flare up with ~~withdrawal~~ of gluten

☒ c. Start patient on Didanosine **DAPSONE**

☒ d. Antibody responsible for cutaneous lesion is Anti TTG antibody

ETG

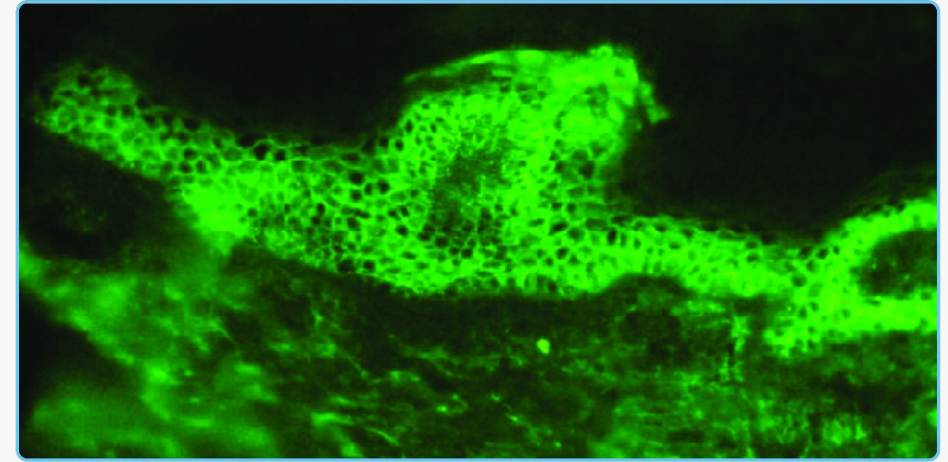
anti epidermal Transglutamin

Q10. Correct about the cause of this IF appearance is?

FISH NET appearance

anti desmoglein 3

- a. Antibodies against desmosomes
- b. Antibodies against melanosomes
- c. Antibodies against hemidesmosome
- d. Antibodies against melanin



PV



Q11. Which of the following is your spot diagnosis?

- a. Becker nevus
- b. Nevus of Ito ✓
- c. Nevus of Ota ✓
- d. Spitz nevus ✓



# Congenital melanocytic nevus



Since birth

STURGE  
WEBER  
Syn

PORT  
\* WINE  
Stain

CAVERNOUS  
ANGIOMA

Tram Track  
app



SPITZ  
NEVUS



O.T.A



ITO

Ocular, Trigeminal



Q12. The following skin lesion is associated with?

a. Hepatitis B

☒ b. Hepatitis C

c. EBV

d. HPV 6,11

↓  
Condyloma acuminata

MPGN: TRAM TRACK abp

LP

cryoglobulinemia

5P , lichen planus



WICKHAM STRIAE

\* dental amalgam: oral LP  
pre-malignant

- EBV
1. BURKITT / NHL
  2. HL
  3. NPC

HBV = H.C.C, PAN  
SERUM SICKNESS

HCV = MPGN  
LP  
Cryoglobulinemic  
Vasculitis

Q13. The following lesions are caused by which of the following?

- a. HPV 6,11
- b. HSV 1
- c. Varicella zoster
- d. Herpes zoster

GENITAL WARTS



Rx: ↓  
Podophyllotoxin (CI: pregnancy)

② IMIQUIMOD

Pregnancy  
① → TRICHLOROACETIC Acid

Sx: CO<sub>2</sub> LASER / CURETTAGE / CRYOSx

HLA B27

Q14. The following lesions occur due to?

DERMATOMAL distribution

grouped vesicles in

Rx: acyclovir Topical  
oral

- a. Herpes zoster
- b. Herpes simplex
- c. HSV 1
- d. HSV 2

HCW: CHICKENPOX  
Vaccine  
⊖



\* Whitlow: dentist; HSV-2

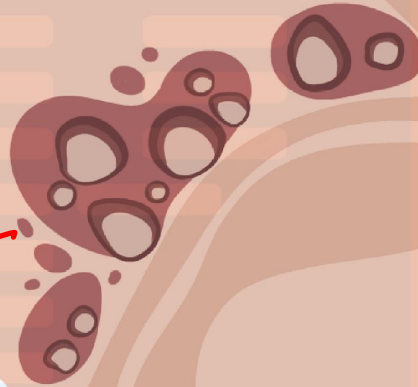
\* HLA B27 — AS, IBD  
— JRA  
— REITER

grouped  
vesicles  
dermatomal

genital: HSV-2

- grouped vesicles on glans
- HERPES SIMPLEX - 2

I: face : HZ  
- 1/c nerve



Q15. The following clinical sign is seen in which of the following?

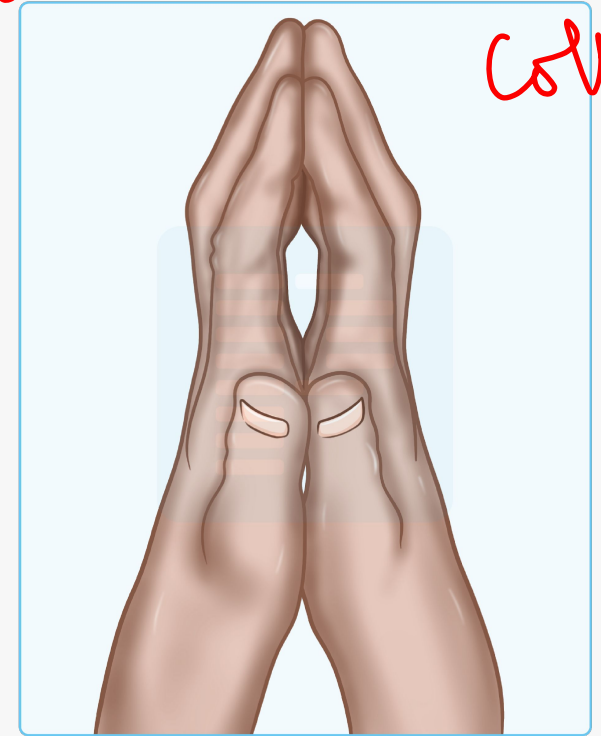
a. Cheiroarthropathy of diabetes

b. Ehler danlos

c. Marfan syndrome

d. Swan neck deformity

\* glycosylation of collagen



- DM

- SCLERODERMA

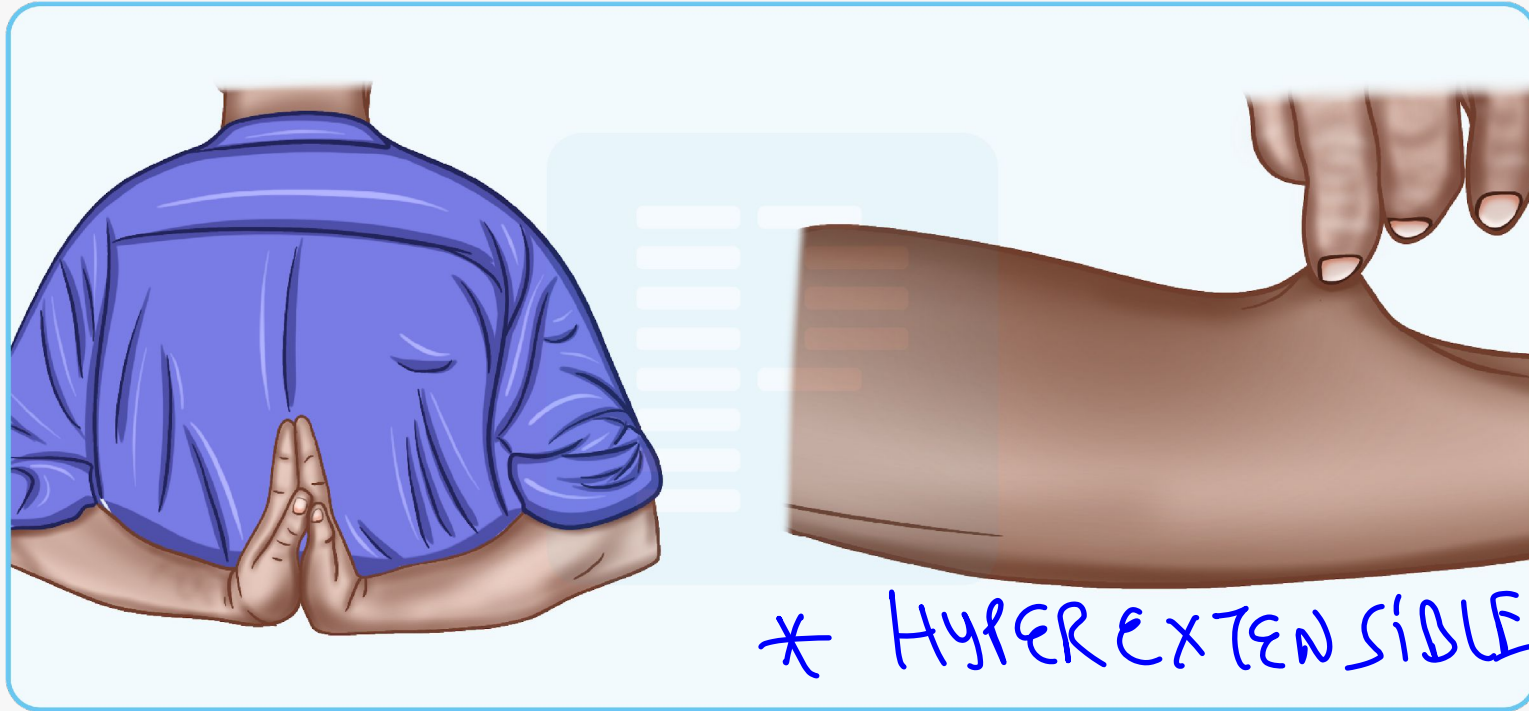
- ↓Ty

- amyloidosis ← PRAYER'S SIGN

Painless, proximal JTs

\* CHARCOT JOINTS → DM.

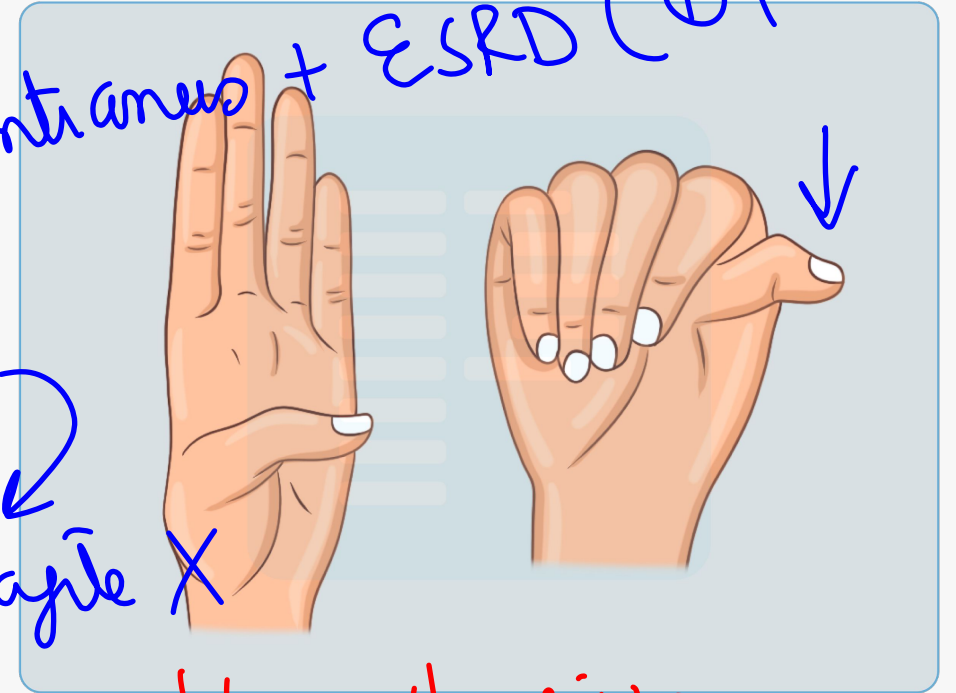
## Reverse Namaskar sign of Ehler Danlos





Q16. The following appearance of hands is seen due to defect of?

- a. COL5A1 → EDS: Reverse rhinopharynx
- b. COL4A → alport — SN deaf + lenticonus
- c. FMR1 → CAG TRINUCLEOTIDE
- d. FBN1 → Fibrillin: Marfan



ch15 # KERA TO D ERMA blenorrhagium

CANT SEE, PEE, WALK ⇒ Chylomydia, Shigella : Reiter syn  
UREAPlasma



Q17. 20-year-old female rag picker comes with complaints of pruritus that worsens at night and after a hot bath. She is currently in T1 of pregnancy.

Lesions on hands are shown below. Which is not correct about this condition?

SARCOPTES SCABEI

burrows

a. Permethrin can be used in pregnancy ✓

b. Lesions follow circle of hebra ✓

c. Called vagabond disease PEDICULOSIS

d. Face and scalp are spared in adults ✓

DOC: PERMETHRIN x2



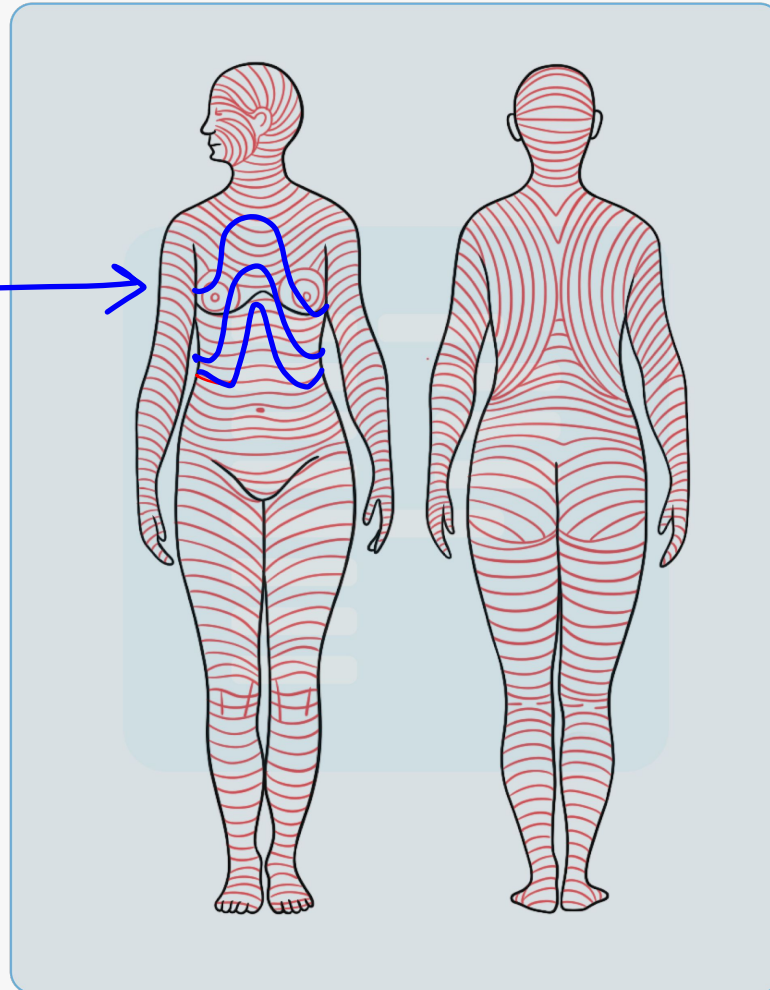
NORWEGIAN SCABIES

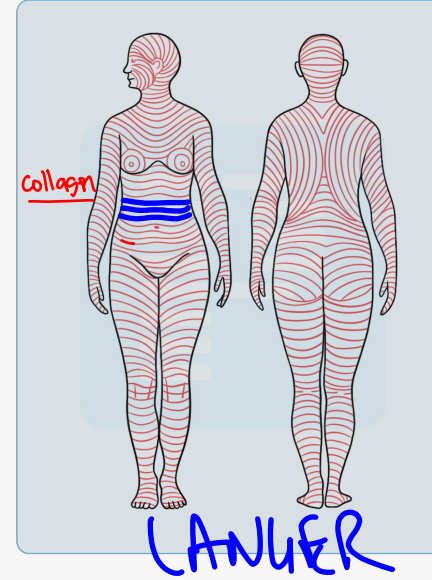
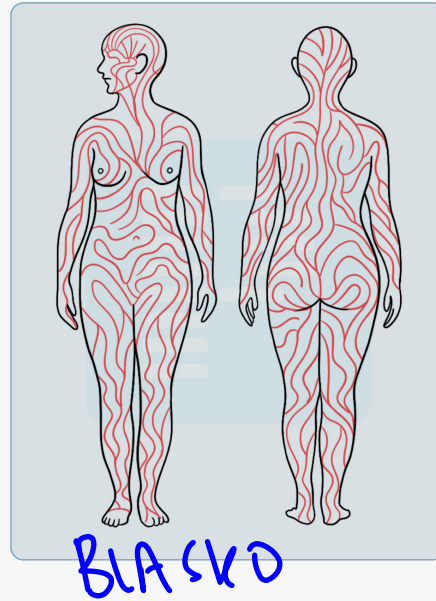
\* HIV(+): CRUSTING OVER SKIN: IVERMECTIN

Q18. Which is correct about these lines shown below?

*Ageing*

- a. Kraissl lines
- b. Blaschko lines
- c. Langer lines
- d. Wallace lines



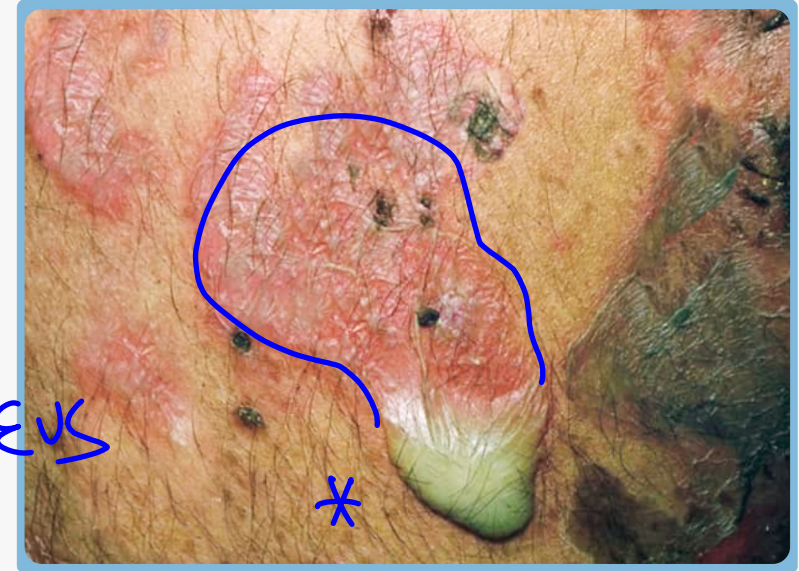


|                  |                                                                                                |
|------------------|------------------------------------------------------------------------------------------------|
| Kraissl →        | Wrinkle lines <b>FACE</b>                                                                      |
| Langer lines →   | Surgical incision along these collagen fibers heal with less scarring                          |
| Blaschko lines → | Pathways of keratinocytes migration                                                            |
| Wallace          | Line on lateral aspect of palms and soles where the glabrous skin meets with hair bearing skin |

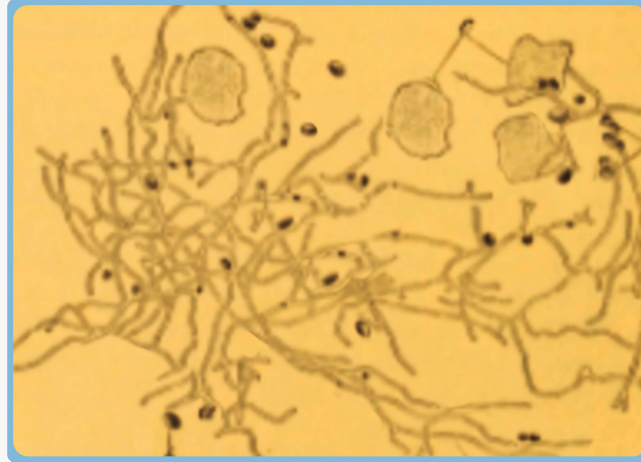
\*

Q19. The following clinical sign shown in case of pemphigus vulgaris is called?

- + a. Nikolsky sign
- + b. Asboe Hansen sign — BULLA spread sign
- + ☒ c. Pear sign
- d. Hypopyon sign : BULLOUS IMPETIGO: S. AUREUS



Q20. Which is the correct treatment of this condition?



P. VERSICOLOR

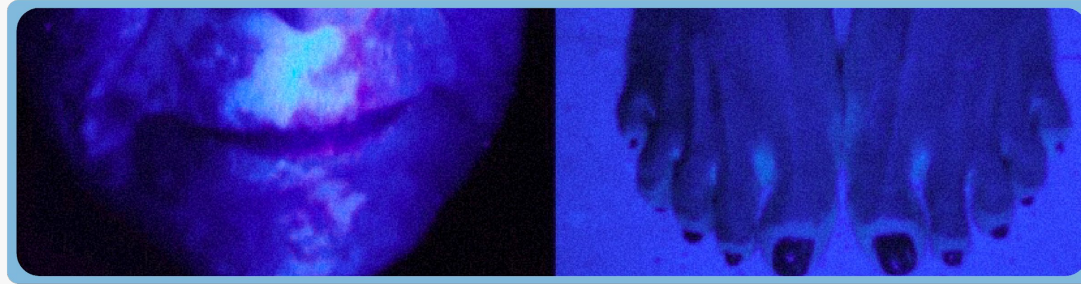
Spaghetti  
Meat ball

- a. Selenium sulfide plus ketoconazole
- b. Voriconazole — Aspergillosis
- c. Itraconazole — Sporotrichosis
- d. Caspofungin — Invasive candidiasis



Q21. The following instrument is made up of?

WOOD LAMP



- a. Nickel oxide plus silica and light generated is 360 nm
- b. Nickel oxide plus silica and light generated is 560 nm
- c. Nitinol plus silica and light generated is 360 nm
- d. Nitinol plus silica and light generated is 560 nm

Q22. Which is correct about tinea incognito?

- a. Extensive tinea leading to pluckable hairs
- b. Extensive tinea with inflammatory pustular infection of scalp
- ☒ c. Extensive tinea with atypical appearance due to use of steroids
- d. Extensive tinea involving groin or perianal region





Q23. Which of the following drugs will not be used for management of this condition?

- a. Terbinafine ✓
- b. Clotrimazole ✓
- c. Ciclopirox ✓
- d. Cidofovir = Molluscum contagiosum

Tinea Pedis



Q24. Correct about the diagnosis of this 5-year-old child?

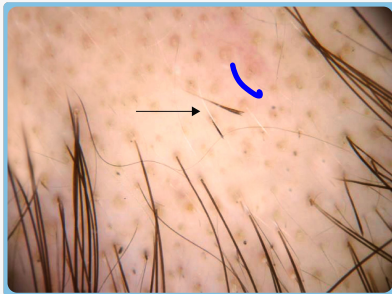
→ BLACK DOT SIGN

- a. Tinea capitis
- b. Trichotillomania
- c. Alopecia areata
- d. Moth eaten alopecia



## Alopecia areata

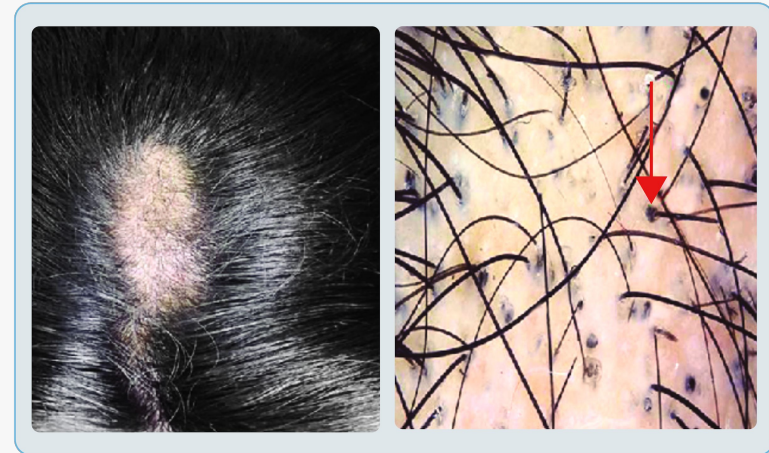
Scalp hair loss  
face



## Tinea capitis



## Trichotillomania



Exclamation mark sign  
=

Comma hair  
Black dot sign

V sign for two or more hair  
shafts emerging from the  
same follicular opening are  
broken at the same length

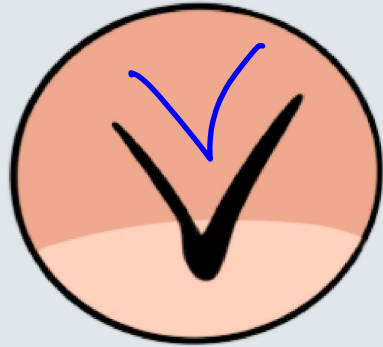
**Moth eaten alopecia is seen in secondary syphilis**

==

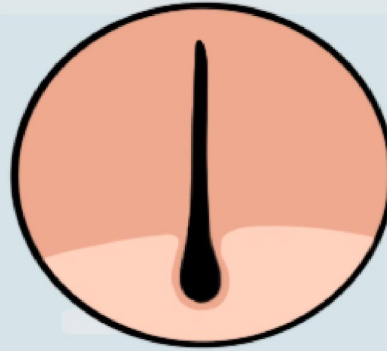
Trichotillomania

AA

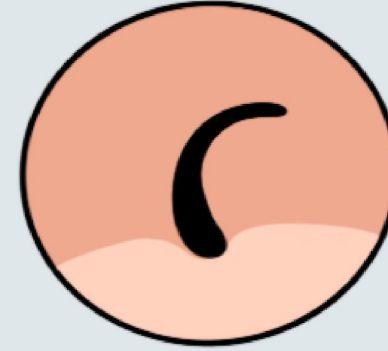
T. CAPITITIS



V-sign



Exclamation  
mark hair



Comma  
hair

Q25. A 30-year-old woman with P.C.O.D has extensive acne. She plans to conceive in the near future. Which of the following is the best treatment for this case?

TERATOGENIC

Testosterone ++ : Acne ++

a. ~~Isotretinoin~~ with Azelaic acid

b. ~~Isotretinoin~~ with doxycycline

c. Cyproterone acetate + Spironolactone → Estrogen Receptors +

d. Topical retinoids

↓ LH : ↓ TESTOSTERONE



Q26. What is the color of this lesion under woods lamp?

Sycosis BARBAE / Folliculitis  
MUPIROCAIN

- a. Coral red
- b. Bright orange
- c. Navy blue
- d. White

KOH mount  
⊖

Gram stain  
Gram ⊕  
Rod

\* *Corynebacterium*  
*MINUTISSIMUM*

\* porphyrins +  
CORAL Red F : wood lamp



ERYTHRASMA

Rx  
\* Clindamycin  
\* Erythromycin  
\* Fusidic Acid



Q27. The following honey crusting is caused by which of the following organisms and what treatment is done?

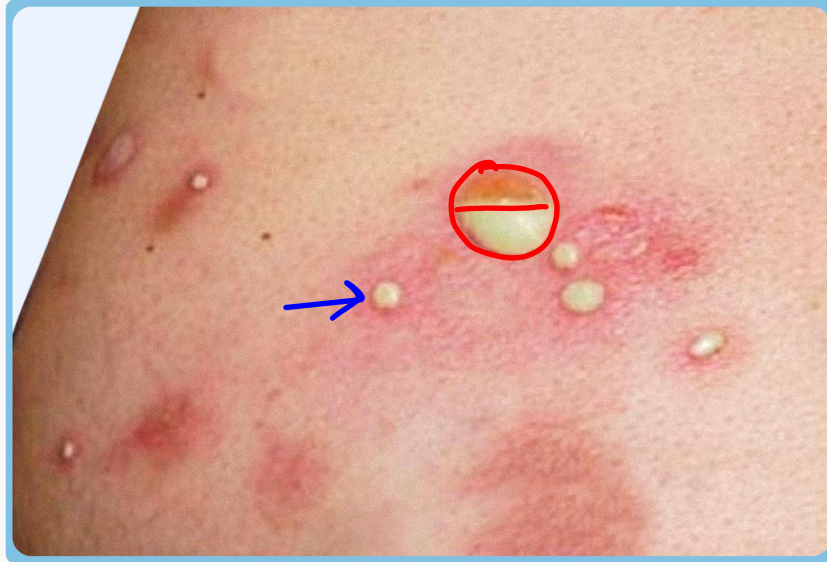
- a. Staph ~~Aureus~~, Topical Soframycin
- ☒ b. Streptococcus Pyogenes, Topical mupirocin
- c. Streptococcus ~~Pneumoniae~~, Topical clindamycin
- d. Coagulase negative ~~Staphylococcus~~, Topical metronidazole

\* IMPETIGO



# BULLOUS IMPETIGO

"HONEYCOIN SIGN"



S. AUREUS

↓

Q28. Known case of ulcerative colitis on topical steroids and mesalamine presents with the following skin lesions. Diagnosis is?

- a. Pyoderma gangrenosum
- b. Ecthyma gangrenosum
- c. Necrotising fasciitis
- d. Erythema multiforme

Pseudomonas  
Staph  
Target sign



\* UC = MESALAMINE

\* CD = STEROID: BUDESONIDE local release

Q29. The following lesions are caused by?

a. HSV-1

☒ b. HSV-2

c. Secondary syphilis

d. Herpetic Whitlow

"CONDYLOMA LATA"

INDEX FINGER

Erythema Multiforme  
TARGET SIGN ↙



Q30. A 35-year-old AIDS patient was started on cotrimoxazole for P. Jiroveci prophylaxis. He develops the following lesions involving 30% of BSA with haemorrhagic crusting of lips. Diagnosis is?

- a. Steven Johnson syndrome + BSA: < 10%.
- ☒ b. Toxic epidermal necrolysis ++
- c. Erythema chronicum migrans → Lyme's disease
- d. Erythema pernio

| < 10%. | 10 - 30%. | > 30%. |
|--------|-----------|--------|
| SJS    | SJS-TEN   | TEN    |



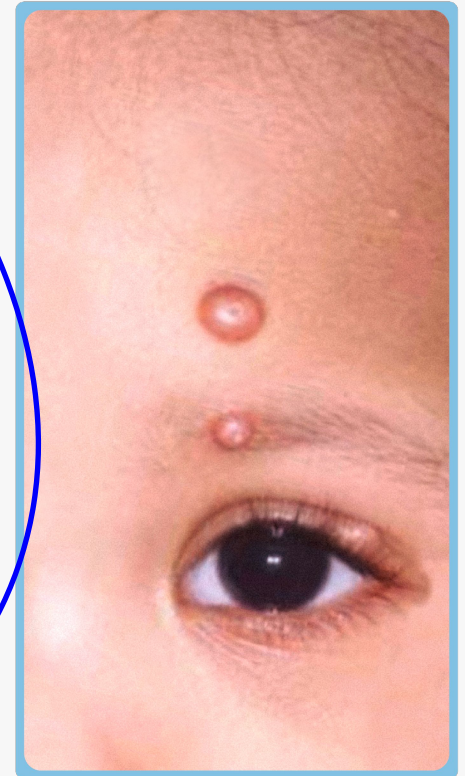


**Q31. A 6-year-old child presents with multiple, small, dome-shaped, pearly white papules with central umbilication on the trunk. The lesions express a cheesy material on squeezing. What is the most likely diagnosis?**

- a. Verruca vulgaris
- ☒ b. Molluscum contagiosum
- c. Lichen nitidus
- d. Keratoacanthoma

POX VIRUS,

HP BODIES  
eosinophilic  
cytoplasmic  
Bodies





Q32. A 25-year-old female presents with red brown plaques on face. She recently tested positive for sputum for AFB twice. Which is not correct about this case presentation?

TB. lupus vulgaris ✓

- a. Diascopy shows apple green nodules ✓
- b. Earliest sensation lost is heat and cold differentiation
- c. Can develop Squamous cell carcinoma ✓
- d. Destroy nasal and ear cartilage ✓

leprosy

lupus VORAX

Q33. Buruli ulcer is caused by which of the following?

ULCER

a. Mycobacterium ulcerans

b. Mycobacterium marinum

→ FISH TANK GRANULOMA

~~c. Mycobacterium leprae~~

d. Mycobacterium Kansasi

Q34. Which type of hypersensitivity is seen in this patient diagnosed with leprosy?

- a. 1
- b. 2
- c. 3
- ☒ d. 4



GA  
NERVE THICKENING  
BL  
Type 1 lepra Reaction  
Type 4 HSR  
5

- The patient has greater auricular nerve thickening seen in the borderline spectrum of disease. These patients have type 1 lepra reaction and type 4 hypersensitivity.
- In LL when treatment is initiated then type 2 lepra reaction is seen and has type III Hypersensitivity reaction

Q35. Which of the following is the preferred site for nerve biopsy in patients with leprosy?

- a. Superficial branch of radial nerve
- b. Sural nerve
- ~~c.~~ Ulnar nerve
- d. Posterior tibial nerve

M/C NERVE involved

CMT / P. neuritis

Q36. MC cranial nerve involved in case of Hansen disease?

leprosy

- a. Ulnar nerve
- b. Common peroneal nerve
- c. Facial nerve
- d. Lateral cutaneous nerve of thigh

← P. NERVE

CRN

facial N #

1. Ramsay Hunt: HZ
2. Lyme's = E. migrans
3. leprosy
4. Idiopathic



Q37. Which cranial nerve is first to be involved in Leprosy?

=

NASAL DROPLETS

- a. Olfactory
- b. Trigeminal → HZO
- c. Abducens
- d. Facial

Leprosy

1. MC PRN: ulnar
2. NERVE Bx: Sup. br. Radial
3. CRN: VII
4. 1st involved: olfactory

Q38. A 6-year-old child presents with severe sunburns, freckling. Biopsy from skin shows SCC. Genetic analysis reveals a defect in repairing ultraviolet radiation-induced thymidine dimers. Which of the following is the most likely underlying abnormality?

XERODERMA PIGMENTOSUM

---

AR

- a. Mismatch repair defect
- b. Base excision repair defect
- c. Nucleotide excision repair defect
- d. Homologous recombination defect

NER



Q39. A 24-year-old man develops sudden swelling of lips, eyelids, and genitalia after eating peanuts. The swelling is non-pitting, non-pruritic, and without urticaria. Which of the following is the most likely diagnosis?

- ANGIOEDEMA .. ACEi
- a. Quincke's disease
  - ~~b. Anaphylaxis~~ BP↓↓, pitting edema, Rhonchi, PRURITUS
  - ~~c. Toxic shock syndrome~~ → TAMPONS: ♀ INMATE
  - ~~d. Urticaria~~ → Measles vaccine: > 1hr of opening

# Q40. Most common skin manifestation seen in patients with diabetes mellitus?

- ↓
- a. Diabetic dermopathy      SKIN: BROWN MACULES      → T1DM: SKIN      ULCER
  - b. Necrobiosis Lipidoica diabetorum
  - ~~c.~~ Acanthosis nigricans      → OBESITY, IR, HYPERPIG<sup>N</sup>      DORSUM  
neck  
axilla
  - d. Skin thickening of palms and soles
- ULCER SKIN      IBD : P.G  
DM: Type 1 : NLD  
(option B)

## Skin Manifestations in Diabetes Mellitus

| Condition                                           | Key Clinical Features                                                                | Common Sites                              | Association with DM                                                  |
|-----------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------|
| Diabetic dermopathy                                 | Small, round/oval, brownish atrophic macules ('shin spots']                          | Pretibial areas (shins)                   | Very common, seen in <u>&gt;50% diabetics</u>                        |
| Necrobiosis lipoidica diabeticorum                  | Yellow-brown strophic plaques with central thinning and telangiectasia, may ulcerate | Anterior limbs                            | Rare (~0.3-1%), strongly associated with long standing DM            |
| Acanthosis nigricans                                | Hyperpigmented, velvety thickening of skin folds                                     | Neck, axillae, groin                      | Seen in insulin resistance (T2DM, obesity, PCOS, metabolic syndrome) |
| Skin thickening (scleredema diabeticorum/waxy skin) | Waxy skin, stiffness, limited joint mobility ("prayer sign")                         | Dorsum of hands, palms, soles, upper back | More in long-standing, poorly controlled DM                          |

Q41. Young college student presents with beefy red ulcer with rolled edges on glans penis after unprotected sexual exposure. which organism is likely responsible?

- a. Klebsiella granulomatosis
- b. Hemophilus ducreyi
- c. C. Trachomatis
- d. Herpes simplex 2

CHANCROID

\* P.I.D

DONOVANOSIS  
granuloma inguinale

PGI

- \* Painless  
Beefy ULCER
- \* Pseudobuboes
- \* Safety pin app

PUNd cell.



Rx: Azithromycin: weekly → tell lesion  
i.m heal



B.P<sub>1</sub> ←  
CEFTRIAXONE

azithromycin

X SYPHILIS  
← GONORRHEA  
CHANROID  
GI / donovanosis  
LGV



→ HARD CHANCRE LN  
→ PERIURETHRAL d/s  
→ SOFT CHANCRE(S) LN  
→ beefy ULCER  
pseudobuboes  
→ GROOVE SIGN  
Buboes  
BLACK-kit!

**Q42. Grouped vesicles on glans penis in young college student with bilateral tender inguinal lymphadenopathy is seen in?**

- a. Groove sign of C. Trachomatis ✓
- b. Pseudo-buboes of Granuloma inguinale ✓
- c. Phagedenic lesions of H. Ducreyi ✓
- d. Genito ulcerative lesions of Herpes simplex 2**

Q43. Cor bovinum and tree bark appearance of ascending aorta is seen with?

- a. Primary syphilis
- b. Secondary syphilis
- ☒ c. Tertiary syphilis
- d. Quaternary syphilis

COR PULMONALE

- 1. COPD
- 2. PE

CV syphilis

inj benzathine penicillin im  
weekly x 3 shots

Neurosyphilis

Pen G iv x 14 days

**Q44. The patient is diagnosed with neurosyphilis. Which of the following is the most appropriate treatment?**

- a. Benzathine penicillin
  - b. Procaine penicillin
  - c. Penicillin V
  - ☒ d. Crystalline Penicillin
- Single dose: Syphilis  
Three dose, weekly: CV Syphilis  
Monthly: RMD

Q45. 28-year-old man presents with a history of a small, painless genital ulcer that healed spontaneously within a few days. Two weeks later, he develops \*painful inguinal lymphadenopathy with multiple tender nodes that have coalesced to form "groove sign". Which color kid would be used in this patient under syndromic management?

LGV  
buboes

- a. Red
- ☒ b. Black
- c. Green
- d. Yellow

Q46. Death in throttling is due to?

Asphyxial death

- a. Inward compression fracture of hyoid bone *diagnostic feature*
- ☒ b. Cardiac arrest
- c. Carotid artery dissection
- d. Blockage of trachea

Q47. A young unknown person is brought dead to the ER. Which of the following will make you suspect strangulation as the cause of death?

a. Ligature mark above the level of thyroid HANGING

☒ b. Bloody froth at nose and mouth with cyanosis

c. Saliva dribbling from side of face HANGING | le faciès sympathique

d. Pupillary dilatation and eyes wide open //

⊕ ciliary ganglion

MULLER



Q48. In a religious procession there is a stampede that led to the death of multiple people that have now been brought to ER. What is the cause of death?

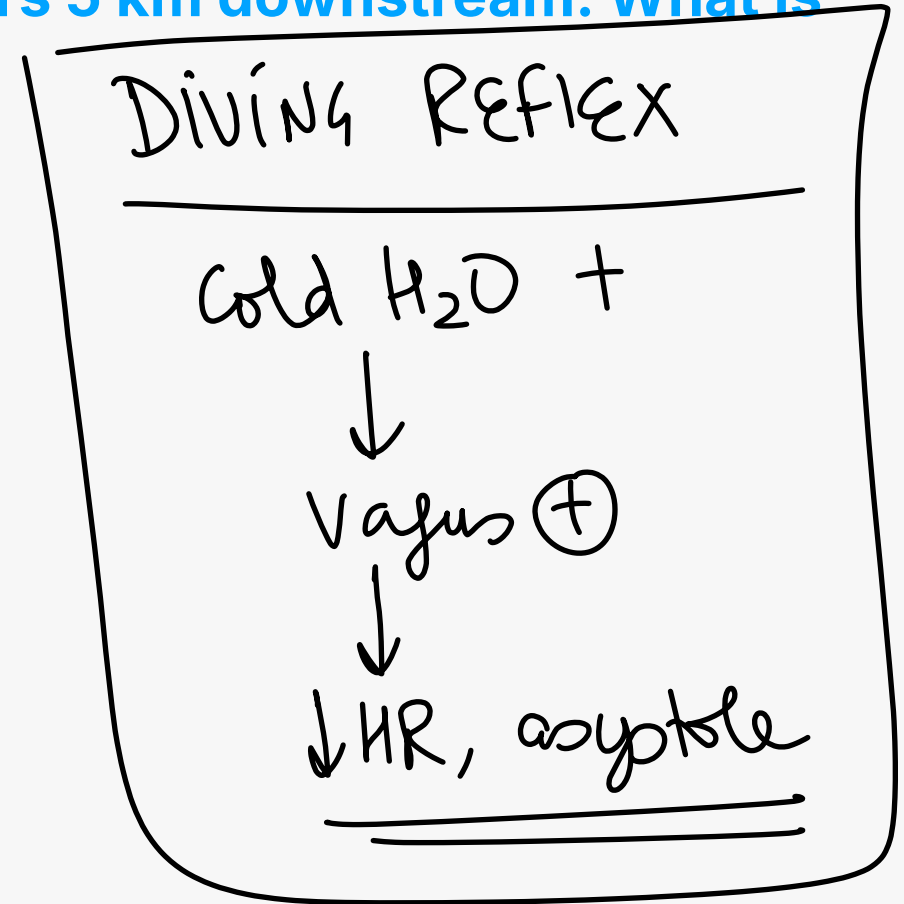
↓  
TRAUMATIC Asphyxia : mechanical fixation of Chest

- (a) Perthe syndrome
- b. Positional asphyxia
- c. Choking
- d. Reflex vagal inhibition of heart

JACK-KNIFE POSITION

Q49. A young person was making instagram reels by jumping into the cold water of a river in early December morning. He jumped into the water and could not swim. His body was fished out by police divers 5 km downstream. What is the plausible cause of death?

- a. Laryngeal spasm
- ☒ b. Immersion syndrome
- c. ~~Hyperkalemia~~ due to lysis of RBC
- d. ~~Hypovolemia~~ and hemoconcentration



↓  
Q50. The most important external sign of typical drowning?

- a. White lathery froth at mouth and nostril
- b. Cadaveric spasm
- c. Cutis anserina GOOSE SKIN
- d. Presence of sand in the airways

morwahmedine @ gmail.com

Q51. The most important internal sign of drowning is?

- a. Sub pleural hemorrhages
- ☒ b. Water in lungs and stomach
- c. Water and hemorrhage in middle ear
- d. Diatoms test

**Q52. Contusion or bruise is not seen at which of the following sites?**

- a. Face
- b. Scrotum
- ☒ c. Soles
- d. Breast

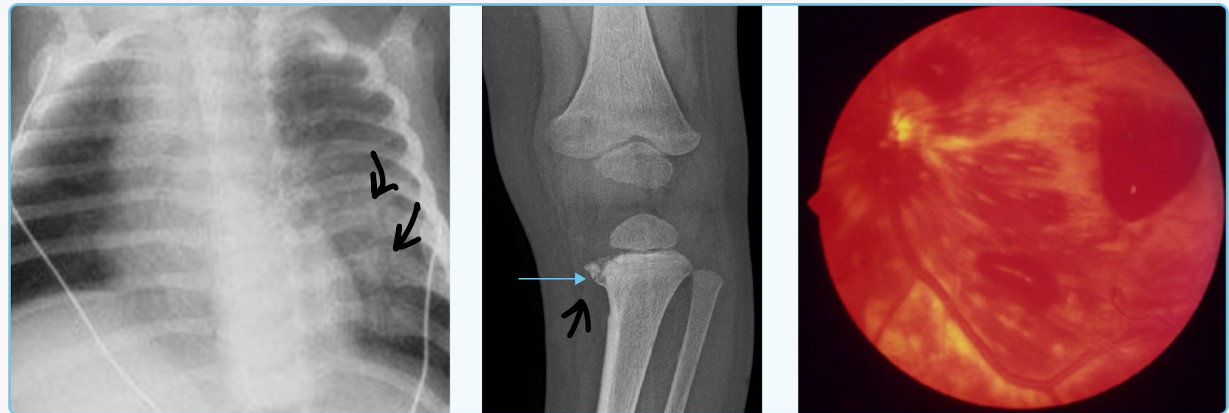
### Q53. Butterfly bruise is seen in?

Q

- a. Child abuse
- b. Love bites Hickey
- c. Marking nut juice( Semicarpus calotropis)
- d. Ectopic bruise

↓  
Q54. A 2-year-old child is brought by a mother to the emergency with a history of excessive crying followed by sudden silence and drowsiness. The senior nurse tells you that the mother is a single mother and has brought a child to the ER previously also. Examination reveals scalp swelling and periorbital bruises. Work up is shown below. Which of the following is the most likely diagnosis?

- a. Osteogenesis imperfecta
- b. Rickets
- ☒ c. Battered baby syndrome
- d. Scurvy



Retinal bleed

BUCKET HANDLE #





OI



| Feature        | Battered Baby Syndrome<br>(Non-accidental trauma)                                                                         | Osteogenesis Imperfecta                                                               |
|----------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| History        | Inconsistent history, delay in seeking care, multiple episodes explained poorly                                           | Family history of fractures, autosomal dominant inheritance (COL1A1/COL1A2 mutations) |
| Fractures      | <b>Multiple fractures at different stages of healing. especially ribs, metaphyseal corner ("bucket handle") fractures</b> | Recurrent fractures after minimal trauma, often diaphyseal                            |
| Other injuries | Bruises, burns, retinal hemorrhages, subdural hematomas                                                                   | No soft tissue injuries suggestive of abuse                                           |
| Sclera         | Normal                                                                                                                    | Blue sclera (classical finding)                                                       |
| Teeth          | Normal                                                                                                                    | Dentinogenesis imperfecta (opalescent teeth, early wear)                              |
| Hearing        | Normal                                                                                                                    | Hearing loss (due to otosclerosis)                                                    |

Q55. A farmer is working in the field in hot Indian summer in the month of may when he collapses and is brought to ER. On examination pulse is 120/min, BP 90/60 mm Hg with moist cold clammy moist skin and temp of 37.6 C. Diagnosis is?

SWEATING (+)

WET TOWEL + FAN

- a. Heat cramps
- ☒ b. Heat exhaustion
- c. Heat stroke
- d. Sun stroke

CORE TEMP  $> 40.5^{\circ}\text{C}$  , sweating (-)  
Rx: ICE BATH

## Differentiation of Heat Illnesses

| Feature     | Heat Cramps                          | Heat Exhaustion                       | Heat Stroke (Sun Stroke)                       |
|-------------|--------------------------------------|---------------------------------------|------------------------------------------------|
| Core Temp   | Normal                               | Normal or $<40^{\circ}\text{C}$       | $>40^{\circ}\text{C}$                          |
| Skin        | Moist                                | Cold, clammy, moist                   | Hot, dry                                       |
| BP / Pulse  | Normal                               | $\downarrow$ BP, $\uparrow$ Pulse     | Variable, often unstable                       |
| CNS         | Normal                               | Normal/mild headache. dizziness       | Severe dysfunction - confusion, seizures, coma |
| Key Feature | Painful muscle cramps after exertion | Collapse with dehydration & salt loss | Life-threatening emergency                     |

**Q56. Which is not correct about superfetation?**

- a.** Fertilization of two or more ova from same cycle by different acts of coitus
- b. Fertilization of second ovum in woman already pregnant
- c. Increased risk in septate uterus
- d. increased risk of fetus papyraceous

## Q57. Secondary blast injury leads to?

- a. Tympanic membrane rupture +
- b. Lung rupture +
- c. Burns on upper torso +
- d. Puncture lacerations

SHOCK WAVE

### Q58. Death in electrocution occurs due to?

- a. Myoglobinuria induced ATN
- b. Vagus stimulation
- c. Arrhythmia V. FIB<sup>N</sup>
- d. Internal organ burns



**Q59. Air India flight crashed into a residential campus causing intense fireball.**

**Which of the following is most likely finding anticipated in post mortem?**

- a. Heat hematoma
- b. Curling ulcers
- ☒ c. Pugilistic attitude
- d. cadaveric spasm

**Q60. Paradoxical undressing is seen in?**

- a. Hyperthermia
- ☒ b. Hypothermia
- c. Sexual fetish
- d. Joule Burns

Q61. Vaginal swab for determining recent intercourse can be taken up to?

- a. 24 hours
- b. 48 hours
- c. 72 hours
- ☒ d. 96 hours

Q62. The most reliable test for detection of blood stains is?

- a. Spectroscopy
- b. Takayama stain
- c. Teichman stain
- d. Precipitin test *species diff<sup>n</sup>*

Q63. Organochlorine poisoning (Lindane) causes death by?

INSECTIDE

+

- a. Open sodium channels causing persistent depolarization
- b. Irreversible competitive inhibition of ~~acetylcholinesterase~~
- c. Irreversible non-competitive inhibition of ~~acetylcholinesterase~~
- d. Open potassium channels causing persistent repolarization

organophosphate

Q64. On autopsy kerosene odor of stomach is seen in?



- a. Organophosphate poisoning
- b. Aluminium phosphide poisoning
- c. Calotropis poisoning
- d. Cerebra thevetia

GARLIC ODOUR

Q65. All are correct about Strychnos nux vomica except?

- a. ~~Emprosthotonus~~
- b. ~~Stimulation of CNS~~
- c. ~~Preserved consciousness till death~~
- d. Presents with Lock jaw

Opisthotonus

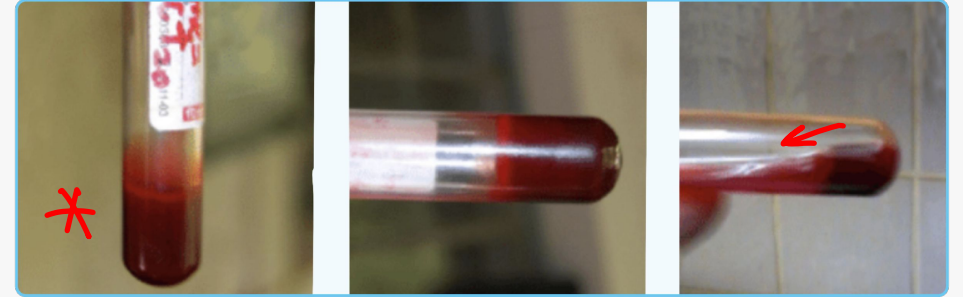
↳ neonatal Tetanus



Q66. 20WBCT is used for evaluation of?

20 min whole blood - clotting time \* Viper bite  
Haemotoxic : DIC

- a. Efficacy of ASV
- b. Calculation of dose of ASV
- ☒ c. Venom induced afibrinogenemia
- d. venom induced neurotoxicity



Q67. Postmortem of vagabond shows fixed dilated pupils with odor of bitter almonds in breath and cherry red color postmortem hypostasis. Which type of hypoxia is seen in this case?

a. Hypoxic

☒ b. Histotoxic

c. Anemic

d. Stagnant

CO poisoning → cherry red lips!  
→ CN poisoning

Q68. Which of the following drug(s) is not used for management of cyanide poisoning?

a. Sodium nitrate

b. Sodium thiosulfate + Hydroxycobalamin

DOC

c. Amylnitrate

d. Sodium nitroprusside + Thiamine

HTive encephalopathy!

|                                             |                                                                                                  |
|---------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Sodium nitrite</b>                       | Induces methemoglobinemia → MetHb binds cyanide forming cyanmethemoglobin → reduces free cyanide |
| <b>Amyl nitrite (inhaled)</b>               | Same as sodium nitrite (MetHb formation)                                                         |
| <b>Sodium thiosulfate</b>                   | Acts as sulfur donor → Rhodanese enzyme converts cyanide → thiocyanate (renally excreted)        |
| <b>Hydroxocobalamin (Vit B12 precursor)</b> | Directly binds cyanide → forms cyanocobalamin (Vitamin B12) → excreted in urine                  |

Q69. Antifreeze agent / ethylene glycol poisoning antidote is treated with?

- a. Fomepizole
- b. Physostigmine
- c. Hemodialysis
- d. Amylnitrate

methanol P

antifreeze agent

**Q70. A doctor receives two summons—one to appear in court as an expert witness murder case and another to provide expert medical opinion in negligence for leg amputation with consent. Which of the following should the doctor prioritize?**

CRIMINAL

- ☒ a. Appearance in the murder case
- b. Appearance for providing medical expert opinion
- c. The summon received first
- d. The summon from court which is near to his workplace

Q71. A man was abducted from his home, and his son subsequently claimed rights to his father's property. As per Section 111 of the Bharatiya Sakshya Adhiniyam (BSA), until when is the son not entitled to claim inheritance?

- a. 5 years
- b. 6 years
- ☒ c. 7 years
- d. 10 years

- Section 111 of the Bharatiya Sakshya Adhiniyam (BSA) deals with the presumption of death. It states:
- When a person is not heard of for seven years by those who would naturally have heard of him if he had been alive, the burden of proving that he is alive is shifted to the person who affirms it.



**Q72. In a bomb blast incident, Lung rupture and Tympanic membrane rupture would be described as?**

- a. Level I**
- b. Level II
- c. Level III
- d. Level IV

| Level                  | Mechanism                                                   | Examples                                                           |
|------------------------|-------------------------------------------------------------|--------------------------------------------------------------------|
| Level I (primary)      | Direct effect of blast overpressure wave<br><i>shrapnel</i> | Tympanic membrane rupture, pulmonary barotrauma, bowel perforation |
| Level II ( Secondary)  | Injuries from flying debris/ fragments →                    | Penetrating injuries, shrapnel wounds                              |
| Level III ( Tertiary)  | Injuries from being thrown by the blast wind ✓              | Fractures blunt trauma, amputations                                |
| Level IV ( Quaternary) | All other effects burns, inhalation psychological           | Burns, crush injuries, toxic gas exposure, PTSD                    |

**Q73. A 40-year-old male was brought dead after a road traffic accident. On autopsy, the following injury was noted on the face as shown in the image. What type of injury is shown below?**

- ☒ a. Avulsion
- b. Laceration
- c. Incised wound
- d. Contusion

Degloving!



**Q74. An adult patient involved in a high-speed road traffic accident had a normal CT scan on admission but died within 3 hours. Autopsy reveals retraction ball appearance and petechial hemorrhages in the corpus callosum. What is the most likely diagnosis?**

- a. Diffuse vascular injury
- b. Cerebral contusion
- c. Intracerebral hemorrhage
- ☒ d. Diffuse axonal injury

↓  
D.A.I  
\* NCCT: (h)  
\* S-W-MRI

**Q75. A man kills his office colleague and later claims he was experiencing delusions of persecution and other psychotic features at the time of the act. He now asserts that he is not guilty by reason of insanity. What is the most appropriate next step under medico-legal protocol?**

- a. Refer for psychiatric evaluation to assess if he is fit for trial**
- b. Enroll in an Anger management program
- c. He should be sent directly to jail
- d. Declare him not guilty and release immediately

Q76. A 68-year-old female presents with breathlessness, declining health, and is found to have multiple metastases. She is awake, alert, and visibly anxious.  
The medical team assesses that aggressive chemotherapy, radiotherapy, ICU care, and mechanical ventilation would not improve her condition and may cause harm. Despite this, the patient's daughter insists on pursuing all possible life-prolonging measures, including ICU admission. What is the most appropriate next step for the physician in managing this case?

- a. Convene a family meeting and consider the patient's values, preferences, and goals of care
- b. Admit the patient to ICU and initiate aggressive life-prolonging treatment
- c. Discharge the patient and shift to home-based palliative care(HOSPICE)
- d. Start on Placebo treatment

**Q77. A Doctor issuing a false medical certificate will be charged under which BNS Section?**

- a. 197
- b. 198
- ☒ c. 234
- d. 235

- BNS 234 :Doctor/authority issuing a false certificate knowingly
- BNS 235 :Any person using that false certificate knows it to be false



**THANK YOU**