



BTR Forensic Medicine - 23-10-2025

Dr. Zainab Vora

1. A young girl refuses to go to Mathematics class everyday citing abnormal excuses. It was discovered by the principal that the mathematics teacher was touching her genitalia inappropriately. The duty of the principal is to report this to?



A. Magistrate.

B. Police

C. Child Welfare Committee

D. Parents

POCSO

2. A 45-year-old male patient presents with symptoms of increased lacrimation, salivation, sweating, and urinary incontinence. Which of the following is likely to be responsible for the above symptoms?

A. Arsenic X

B. Strychnine X

~~C. Pesticides~~

D. Datura

atropine

secretion (↑)

→ cholinergic

OP Carbamate

AChE (-)

3. Which of these steps is included in the management of snake bite?



1. Wash with water and spirit

X X

Dog bite

2. Debride to avoid the spread

XX

3. Kill the snake

XX

4. Wound-site anti-venom administration

XX

Rabies,

5. Immobilization

✓

6. Apply a broad firm bandage

✓

IV

A. 1, 2, 3

B. 1, 4, 5

C. 5, 6

D. 2, 5

4. You are performing an autopsy on a fetus born dead at 6 months. Which of the following is least likely to be seen in this case? 

A. Mummification

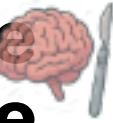
B. Adipocere

C. Decomposition

D. Hydrops

Rigor mortis

5. A patient was brought to casualty with acute onset severe seizures. He was conscious in between the episodes. During the episodes, he had arching of his back. What is the likely cause?



A. Strychnine

B. Tetanus

C. Nerium odorum

D. Datura

→ post synaptic

(x) conscious → presynaptic

glycine

6. A 28-year-old man comes to the emergency department due to anxiety, weakness, dyspnea, and headaches. He is a graduate student in chemistry and was accidentally exposed to nitrites in his research laboratory. Physical examination is notable for cyanosis that is not improved by administration of supplemental oxygen via facemask. What is the best antidote for this patient?



A. Methylene blue

B. Lille's kit

C. PAPP-A

D. BAL

} cyanide - vit B12
→ Hg / As / Pb
CI

MethHb

7. The temperature of a body of a deceased person is found to be 39 degrees Celsius. Which of the following is the least probable reason?



A. Cyanide poisoning

B. Septicaemia ✓✓

C. Heat stroke ✓✓

D. Pontine hemorrhage ✓✓

postmortem

cellularity

8. G5L4 woman has 4 daughters. She comes for USG examination and requests for sex determination of her fetus. What will you do? 

- A. Do USG check for congenital abnormality, gestational age and sex. But don't tell the sex to mother
- B. Do USG check for congenital abnormality, gestational age and sex and reveal sex to mother
- C. Do USG-check for congenital abnormality, and gestational age. Neither check for sex or reveal to mother
- D. Refer patient to another hospital

PCPNDT

9. 15 kg of tension in the ligature around the neck is enough to occlude which of the following structures? 

A. Jugular vein

2kg

B. Jugular vein + Carotid artery

5kg

~~C. Jugular vein + Carotid artery + Trachea~~

15kg

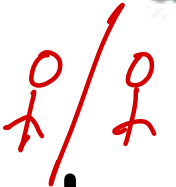
D. Jugular vein + Carotid artery + Trachea + Vertebral artery

30kg

10. Identify the correct statements

1. ~~Superf~~etation results in the birth of twins that can have different fathers and are born at the same time.

Supertendalin



2. "In camera" refers to a closed proceeding in court where only selected individuals are allowed to be present. (T)

3. Adipocere formation occurs due to the saponification of fats through an enzymatic process, primarily under warm, moist, and anaerobic conditions. (T) *facial features* (+)

4. A body is deemed abandoned after 72hrs of a car accident. (T)

A. ~~1, 2, 4~~

B. ~~1, 3~~

C. 2, 3

D. 2, 3, 4





- The hospital authority can utilize **an unclaimed body** (a person who dies in hospital, prison or public places, which has not been claimed by any of his near relatives or personal friends within the prescribed timeline **of 48 hours**).
- Dead body is declared **unclaimed for the purposes of organ retrieval after 48 hours** as per the **Transplantation of Human Organs Act 1994** (Act No. 42 of 1994).
- **As per the Police Manual** the dead body is declared unclaimed **only after 72 hours**.
- **In Road Traffic Accident**, body is declared **unclaimed only after 72 hours**.

11. Identify the image shown below:



A. Contact range rifle

B. Close range rifle

C. Near range Shotgun

D. Intermediate range Rifle

Cherry red / ◊ crenate

Distant
near - ✓ T

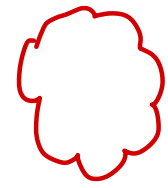
Contact

Shotgun

close

BBT

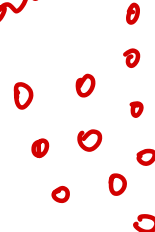
near



int



distant



close rifle range

B B

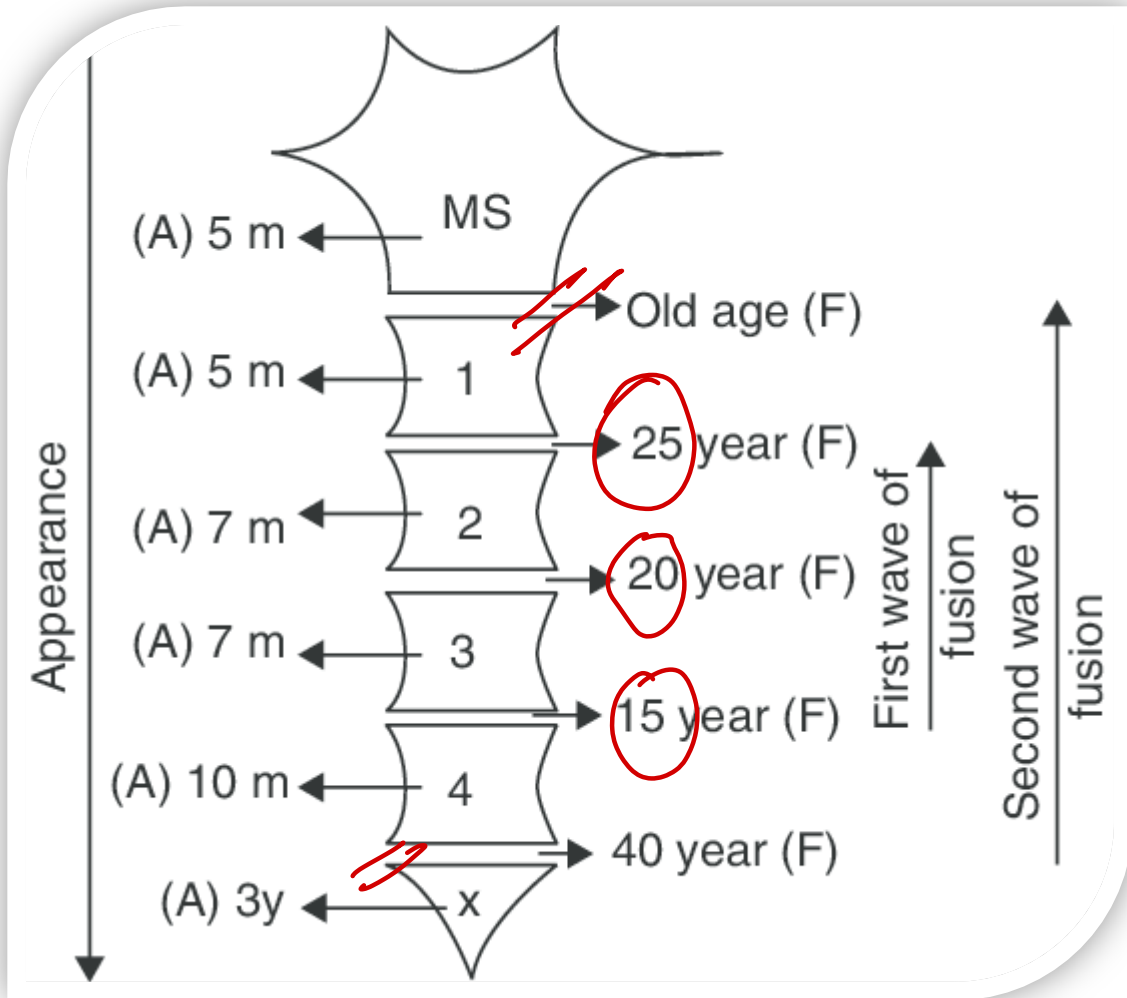


12. What is the approximate age of a person in whom the medial end of the clavicle is not fused and inferior most part of body of sternum is fused 

↓
22yrs

15yr

- A. 18 yrs
- B. 25 yrs
- C. 10 yrs
- D. 45 yrs



13. Arrange the organs in order of putrefaction (early to late)



1. Larynx
2. Kidney
3. Skin
4. Brain
5. Prostate

A. 1-2-3-4-5

B. 5-1-4-2-3

C. 1-4-2-5-3

D. 4-1-2-3-5

14. Which of the following poisons cause bluish discoloration of the stomach mucosa on postmortem examination? 

A. Oxalic acid ~~XX~~ $\downarrow \text{Ca}^{2+}$

B. Sodium amytal CuSO_4

C. Soneryl ~~X~~

D. Atomic number 33 = As

15. What is the likely mechanism of toxicity in the following plant?

- A. Muscarinic receptor blockade *Dateneron*
- ~~B. Inhibiting sodium potassium ATP pump~~
- C. Persistent activation of voltage-gated sodium channels *Azonie*
- D. Activation of nicotinic acetylcholine receptors (nAChRs) in the brain and muscles *Nicolone*

Digoxin = Foxglove



16. Identify the test which follows the principle 'Prior knowledge of the events/activity will influence the suspect's reaction'?



A. Truth Serum *xx Thiopentone*

B. Polygraph

C. Hypnosis *xx*

D. Brain mapping

Pyo

17. Burden of proof lies of the following parties except



A. Criminal negligence: Prosecution

= State

B. Res ipsa loquitur: Government

- De - innocent

Defendant

u de


C. Civil negligence: Plaintiff

" facts speak for

D. Contributory negligence: Doctor

themselves"

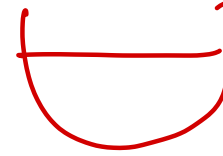
Plaint

18. A critically ill patient who is a registered organ donor collapses even after resuscitative measures. All of the following tests can be used to check the cessation of circulation, except: 

A. Diaphanous test

B. Winslow's test

- wind - respir



C. Magnus's test

D. Icard's test

19. Match the postmortem findings and their time of appearance

A. ~~A-4~~, B-1, C-2, ~~D-3~~

B. ~~A-3~~, B-1, C-2, D-4

~~C. A-4~~, B-2, C-1, ~~D-3~~

D. ~~A-1~~, B-2, C-3, D-4

A. Adipocere formation	1. 24 hrs
B. Relaxation of urethral sphincter	2. 2-3 days
C. Marbling of veins	3. 4-5 days
D. Liquefaction of tissues	4. 90days

36-48 hrs

Controversial

20. Which of the following is the best test for seminal stains in suspected cases of azoospermia? 

A. Acid phosphatase

B. Spermine ✓

C. Barberio ✓

D. CPK staining

BSP picric acid
'yellow
needle

→ old stains

Choline - Brown
Florence

21. A 34-year-old woman comes to the emergency department due to bloody emesis. She had 2 episodes of vomiting bright red blood and feels lightheaded and dizzy. The patient was recently diagnosed with factitious disorder after being hospitalized multiple times for a myriad of symptoms and undergoing several invasive procedures. Physical examination shows scattered ecchymoses. Rectal examination shows maroon-colored, guaiac-positive stool. After much questioning, she admits to having ingested rat poison several days ago. Immediate treatment of this patient should include which of the following?



A. Prothrombin Complex Concentrate (PCC)

B. Cryoprecipitate

C. Fresh frozen plasma

D. Vit K injection

warfarin

(2) / 7 / 9 / 10

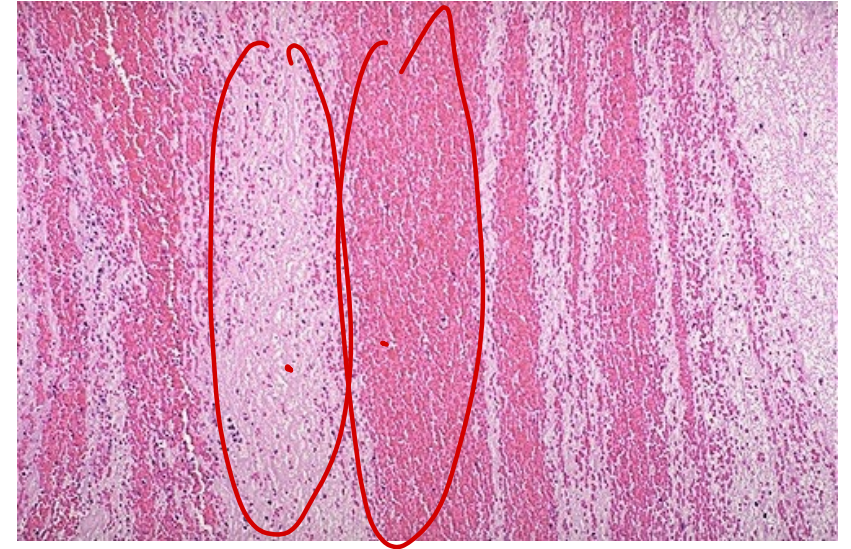
(-)

PCC > FFP > vit K

22. A forensic pathologist is examining a venous specimen. Microscopy reveals laminations with alternating light and dark bands as shown below. What can be commented about the clot?



- A. Antemortem clot formation
- B. Postmortem clot formation
- C. Clot age cannot be determined
- D. Refer to a specialised forensic pathologist



Lines of Zahn

23. Treatment of choice for acute arsenic poisoning is?



~~A. DMSA~~

B. Penicillamine → Cu

C. Activated charcoal

D. Dimercaprol

DMSA > dimercaprol

24. After eating some unidentified deadly seeds, a farmer experienced discomfort and vomiting. His lower limbs soon became paralysed, and it eventually progressed to the muscles controlling his breathing, leading to his death two days later. Determine the most likely cause:

- A. Abrus precatorius ~~XX~~
- B. Solanum Lycopersicum ~~XX~~
- C. Conium maculatum = Hemlock
- D. Strychnine nux vomica ~~XX~~

asc paralysis

25. Match the following:



py8

- A. ~~A-3~~, B-4, C-2, D-1
- B. ~~A-1~~, B-2, C-3, D-4
- C. A-2, B-1, C-4, D-3
- ~~D. A-2, B-1, C-3, D-4~~

POISON	SITE OF ACTION
A. Eonism	1. Rubbing genitals against another person
B. Frotteurism	2. Wearing clothes of opposite sex
C. Troilism	3. <u>sexual activity involving three participants.</u>
D. Passive Algolagnia	4. Gratification from experiencing pain

26. Match the following:

A. A-1, B-3, C-2, D-4

B. A-3, B-4, C-1, D-2

C. A-3, B-2, C-1, D-4

D. A-2, B-3, C-4, D-1



py8

Tooth	Age of eruption
A. Canine	1. 6-7 years
B. Lateral incisor	2. 8-9 years
C. First molar	3. 11-12 years
D. Third molar	4. 17-25 years

27. Sameer was tried in a court in the case of Sanjay's murder in the park. Sahil appeared in court and stated that he saw Sameer with an axe in his hand while passing the park. What is this evidence known as?

A. Hostile

~~B. Indirect~~

C. Direct

~~D. Hearsay~~

Circumstantial

Sanjana



28. Which of the following features may be in favor of antemortem bruise?

1. Discoloration predominantly over the dependent parts. *PM*
2. Ill-defined margins that merge with the surrounding. ✓
3. Deep reddish-black discoloration of subcutaneous tissues. ✓
4. The surface appears swollen. ✓

A. 2, 3, 4

B. 1, ~~4~~

C. 2, 3

D. 1, ~~2~~, 3



Feature	Antemortem Bruise	Postmortem Hypostasis
Margins	Ill-defined, irregular	Well-defined, sharp line of demarcation
Color	Reddish to bluish-black	Bluish-purple or dark red
Tissue on incision	Blood infiltrates tissues	Blood fluid, easily wiped away
Surface	Swollen	Flat
Location	At site of impact	Dependent parts of the body

29. Identify the incorrect statement with respect to alcohol intoxication:

A. 30-80mg/dl: Decreased cognitive function

B. 150-200mg/dl: Incoordination

C. 250mg/dl: Alcoholic blackouts

~~D. 150mg/dl: Nystagmus~~ *> 300 mg/dl*



30mg/dl - 40I

Blood Alcohol Level (mg/dl)	Clinical Effects
30-80	Mild euphoria, impaired judgment
80-150	Slurred speech, loss of coordination → Flocculonodular
150-200	Marked incoordination, ataxia
200-250	Nausea, vomiting, memory blackouts
>300	Stupor, coma, possible death (respiratory depression) Nystagmus

150mg/dl → critical

30. During fetal autopsy, what is the order of examination to differentiate between live and stillbirth?



- A. Thorax > Abdomen > Thorax
- B. Abdomen > Thorax > Head
- C. Head > Abdomen > Thorax
- D. Head > Thorax > Abdomen

Abdo > Thorax

chaphragin

Head



31. Identify the correct statements:

1. The fusion of the basiocciput with the basisphenoid occurs at around 18-22 years of age. (T)
2. Edmond Locard is best known for his study of poroscopy. (T)
3. A posthumous child is defined as a child who is born after the death of one of their biological parents, typically the father. (T)
4. Gastric lavage is contraindicated in cases of ~~carbolic acid~~ poisoning. (T)

- A. 1, 2, 3, 4
- B. 2, 3
- C. 1, 4
- ✓ D. 1, 2, 3

theory of exchange

leathery

32. A 40-year-old female consumed a white colored rodenticide powder and presents in an unconscious state. ECG is shown below. What is the suspected poison?

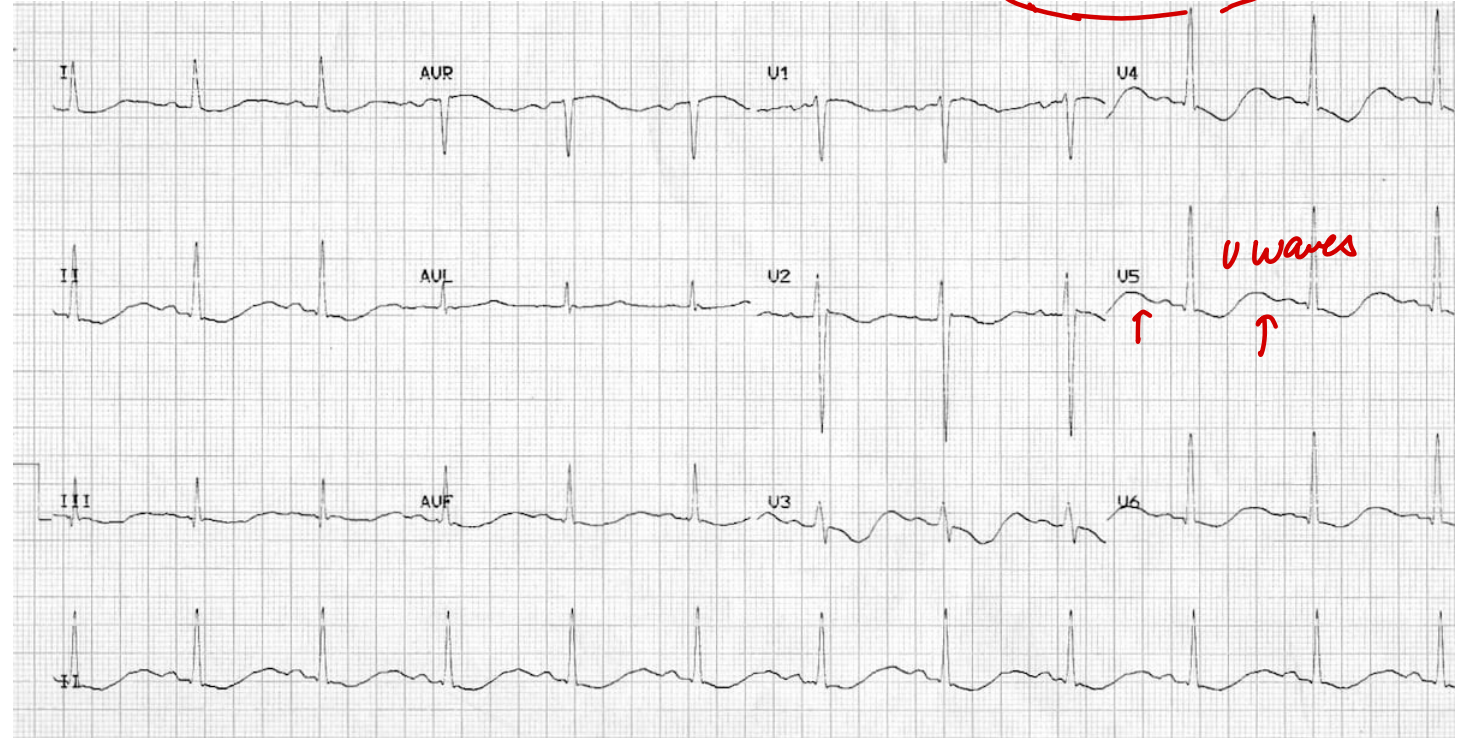



↓ K⁺

PyQ

- A. Aluminum Phosphide
- B. Zinc Phosphide
- C. Barium Carbonate**
- D. Warfarin

Q2



33. A doctor used the same needle used in a patient with HIV to inject in another patient. The latter patient on testing found to be infected with HIV. The doctor is punishable for this negligence according to which BNS (Bharatiya Nyaya Sanhita)? 

A. 271

B. 272 → adulterⁿ food / drink

C. 273 → sale of noxious food / drink

D. 274 → adulterⁿ of drugs

Infu → negligence

34. After visiting a village temple with his grandmother, a 5-year-old boy began crying intensely during the return trip. Within three hours, he was brought to the emergency department. He displayed symptoms such as altered consciousness, cold and sweaty extremities, heightened salivation, and excessive sweating. Physical examination revealed paleness and priapism, along with vital signs as follows: blood pressure of 140/78 mmHg, heart rate of 152 beats per minute, respiratory rate of 36 breaths per minute, and oxygen saturation of 96%. Considering his condition, what treatment approach would you choose for his management?

- A. Anti-snake venom
- B. Methylprednisolone
- C. Prazosin**
- D. Adrenaline

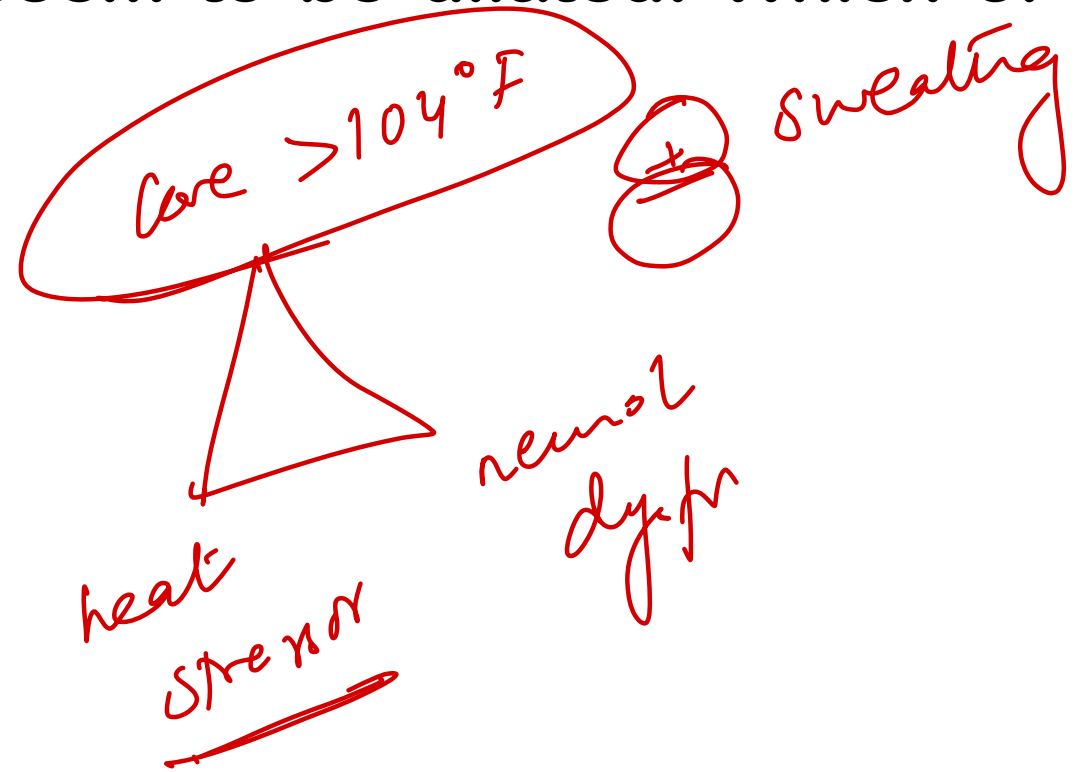
Secm ↑
priapism
autonomic storms
Sedation

35. A man running a 40-kilometre marathon on a hot summer afternoon suddenly collapsed before completing his race. On examination, his body temperature was 102 degrees and was profusely sweating. His pupils seem to be dilated. Which of the following is the likely diagnosis?



- a) Heat exhaustion
- b) Classical Heat stroke
- c) Heat cramps
- d) Exertional heat stroke

$> 104^{\circ}\text{F}$



36. Identify the incorrect pair of BNS:

88 - ✓



- A. ~~313~~ - Criminal abortion without the consent of mother
- B. 28 - Invalid consent
- C. 22 - McNaughten's rule of insanity
- D. 227 - Definition of Perjury

89

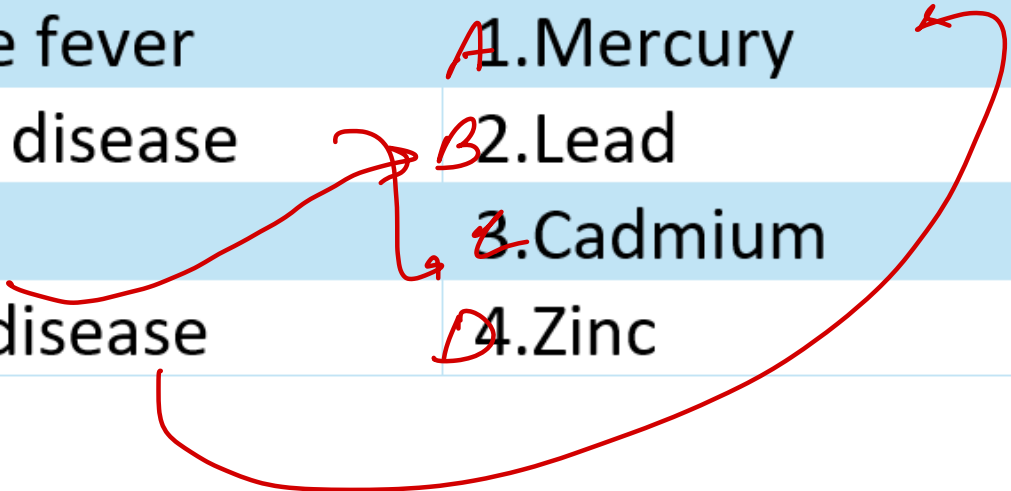
37. Match the following –



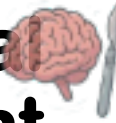
- A. 1-A, 2-B, 3-C, 4-D
- ~~B. 1-D, 2-C, 3-B, 4-A~~
- C. 1-B, 2-C, 3-D, 4-A
- D. 1-D, 2-A, 3-B, 4-C

1. Metal Fume fever	A. Mercury
2. Ouch-Ouch disease	B. Lead
3. Devon colic	C. Cadmium
4. Minamata disease	D. Zinc

pyq

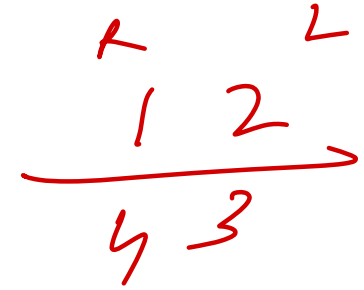


38. A 19-year-old student presented with sustained dental injuries in a street fight. Examination reveals that his permanent lower right canine tooth was missing. According to the FDI system, what dental numbering would you give to this tooth while writing his case sheet?



- A. 43
- B. 21
- C. 33
- D. 75

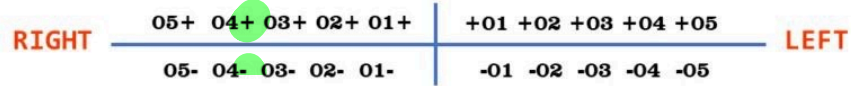
43



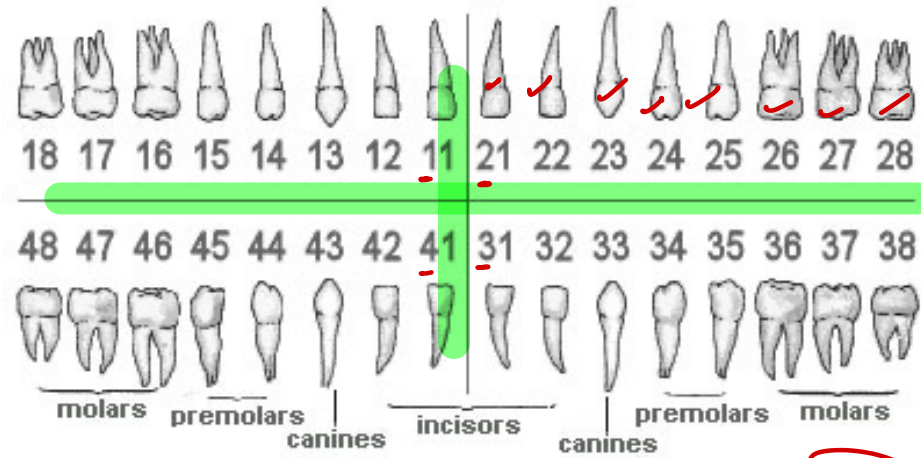
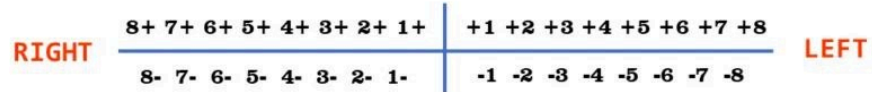
Haderup Dental Notation System

ForensicReader.com

A. Deciduous (Temporary) Teeth



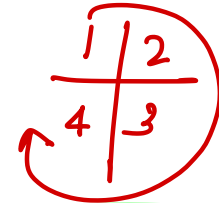
B. Permanent Teeth



F D I



Right	1	2	Left
	4	3	
Right	5	6	Left
	8	7	



Palmer

Universal

Zsigmondy system

	Deciduous										
Right	V	IV	III	II	I	I	II	III	IV	V	Left
	V	IV	III	II	I	I	II	III	IV	V	

	Permanent																
Right	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	Left
	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	

Telegram: @brainandscaipel
t.me/brainandscaipel

A. Deciduous (Temporary) Teeth



B. Permanent Teeth



> Symbols Represents **Upper Teeth** from **Right and Left Quadrant** respectively.
Example: **A** represents upper left first deciduous incisor.

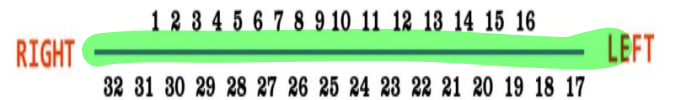


> Symbols Represents **Lower Teeth** from **Right and Left Quadrant** respectively.
> Example: **1** represents lower right permanent canine.

A. Deciduous (Temporary) Teeth



B. Permanent Teeth



39. The following documents are exceptions to oral evidence in court except: 

~~A. Postmortem reports.~~

B. Dying declaration. ✓

C. Reports of Fingerprint Bureau ✓

D. Chemical Examiner's reports. ✓



Exceptions to oral evidence:

1. **Dying declaration.** ✓ India (X) oath (X) cross-examⁿ
2. Deposition of a **medical witness** taken in a lower court
3. Evidence given by a witness in a **previous judicial proceeding**
4. Report of certain government scientific experts: **Chemical Examiner; Chief Controller of Explosives, Director of Fingerprint Bureau, and Director of a Central Forensic Science Laboratory**



40. Identify the correct statements:

1. Fingerprints begin to form between 12 to 16 weeks of intrauterine life (T)
2. Mode of death in hydrocution is vagal inhibition. (T)
3. HF poisoning can lead to hypomagnesemia $\downarrow Ca$ (T)
4. In 18th century British East India company used to transport opium to China. (T)

~~A.~~ 1, 2, 3, 4

B. 1, 3, 4

C. 2, 4

D. 1, 3

41. Identify the false statement regarding teeth and ethnicity?



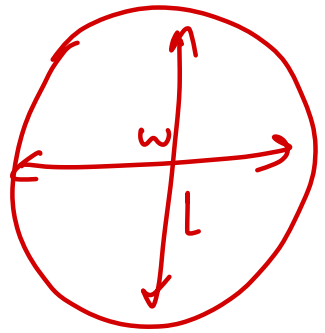
PYQ

- A. In Africanoids, a ~~marrow~~ⁿ and elongated skull with square orbits is seen
- B. Caucasians have small nodules on the lingual surface of maxillary molars
- C. Mongolians have brachycephalic skulls T Carabelli cusp.
- ~~D. Mesaticephalic skull is found in Africanoids~~
Dolicho



Brachycephalic Dolichocephalic Mesaticephalic

Females	> 83	< 75	75 to 83
Males	> 81.1	< 75.9	76 to 81
Meaning	“Short-headed”	“Long-headed”	“Medium-headed”
	Mongolions	Africans	Caucasians



> 80

< 75

75-80

$$\frac{W}{L} \times 100$$

42. A 20-year-old girl was brought to the OPD. Genital examination revealed the findings as given below:

- Labia majora - separated
- Labia minora- flabby
- Fourchette tear present
- Roomy vagina seen with intact hymen

pyq

What is true about this girl from the options below?

A. True virgin

B. False virgin

C. Premenstrual stage *XX*

D. Molestation *XX → nonpenetrative*



S.No	Feature	True Virgin	False virgin
1.	Sexual intercourse	Not experienced	Experienced
Genital signs			
2.	Hymen	Intact, rigid, inelastic, edges distinct and regular. Admits tip of little finger only	Intact, but loose, elastic, thick, tough and fleshy. Easily admits two fingers
3.	Labia majora	Adjacent to each other and in opposition. Completely close the vaginal orifice	Separated, not opposed to each other, vaginal orifice may be seen between them
4.	Labia minora	Small, pinkish, In contact with each other; covered by labia majora	Enlarged, pigmented, not in contact with each other, not covered by labia majora
5.	Vagina	Narrow and tight; mucosa rugose and reddish; sensitive to touch; walls approximated	Large and roomy; vaginal rugae less marked [they only disappear completely after first birth]; vagina lengthened, especially towards the posterior fornix. Full length of examining finger can be passed into the posterior fornix.
6.	Fossa navicularis	Intact	Disappears
7.	Fourchette	Intact	Torn. May show a healed scar
8.	Vestibule	Narrow	Gaping, spacious, wide
9.	Clitoris	Small	Enlarged
10.	Posterior commissure	Intact	Generally torn
Extragenital signs [Breasts]			
11.	Size, shape, feel	Small, hemispherical, firm	Large, pendulous, flabby
12.	Areola	Pink	Pigmented
13.	Nipples	Small and pink	Enlarged, pigmented

(2) **Posterior commissure and fourchette** – intact. They are usually torn after violent and forcible sexual intercourse [ch 25] or childbirth. A single act of intercourse does not cause much alteration in genitalia, except rupture of **hymen**.

43. A 13-year-old girl is brought to the hospital by her mother. She complains of pain in the abdomen. On examination her UPT is positive. What will be first step done by you as a medical officer:



A. Inform police

B. Start examining ✗

C. Preserve clothing ✗

D. Take consent from mother ✗

Rape

44. Which of these is not suggestive of domestic violence in child?



A. Wormian bones

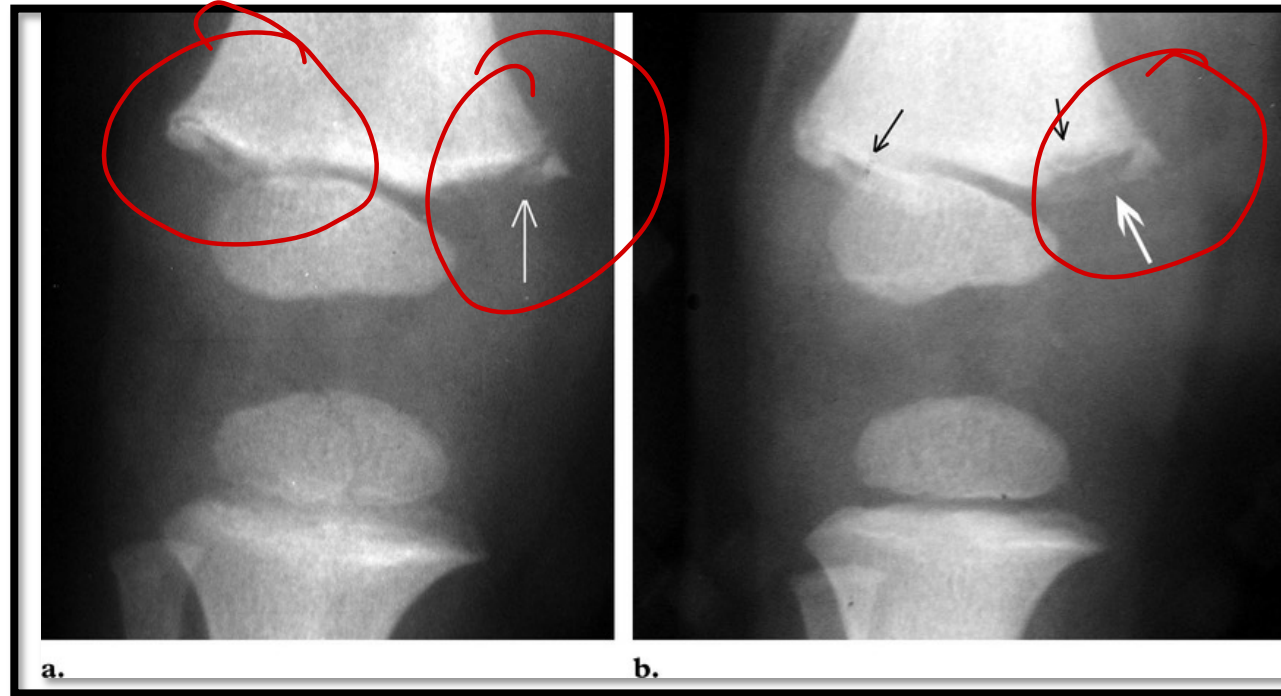
intracranial bones

- OI / achondroplasia

B. Microfractures in the sub-epiphyseal region

C. Corner fractures

D. Bucket handle fractures of metaphyses



45. Match the following with the respective ages of fusion:

pyq



A. A-1, B-2, C-3, D-4

B. A-4, B-1, C-2, D-3

C. A-4, B-3, C-1, D-2

D. A-1, B-4, C-3, D-2

A) Medial end of clavicle	1. 22-25 years
B) Sacrum as a single bone	2. 50 years
C) Crista scapulae	3. 45 years
D) Lambdoid suture	4. 21-25 years

46. Match the following poisons and their probable mechanism of action:



PYQ

A. A-2, B-4, C-1, D-3

B. A-4, B-3, C-2, D-1

C. A-4, B-2, C-1, D-3

D. A-2, B-3, C-4, D-1

A. Zinc chloride	1. Abortifacient
B. Chloral hydrate	2. Irritant
C. Quinine	3. Corrosive
D. Potassium carbonate	4. Stupefying

47. A 10-year-old male child came to the casualty with difficulty in walking and pain in the perianal region. On subjecting the specimen from the perianal region to a test, following appearance is seen under the microscope. What is the test done?

A. Barberio's test

B. Florence test X

C. Teichmann test X brown

D. Acid phosphatase test




B S P
- - =

48. Identify the type of physical restraint given in the picture  below:

- A. Choke/carotid hold
- B. Carotid sleeper hold
- C. Hog tie**
- D. Bar arm



49. A 25-year-old female is brought to a forensic clinic following reported sexual assault. The nurse is preparing to collect evidence as part of a sexual assault examination. As the nurse assembles the necessary equipment, what does the acronym 'SAFE kit' stand for in this context? 

- A. Sexual assault female examination kit
- B. Sexual assessment forensic examination kit
- C. Sexual assessment Forensic evidence kit
- D. Sexual assault forensic evidence kit**

50. All the following are true about Chronic starvation except?



A. Exhaustion =

B. Hyperthermia

C. Heart Atrophy

D. Hypotension =

Hypothermia
→ "brown"

=

51. A 17-year-old girl with a history of depression is brought to the emergency department after attempting suicide. Her parents report that she consumed 2 bottles of insecticide after having an argument with her sister approximately 2 hours prior to the presentation. The patient's symptoms include nausea, vomiting, abdominal pain, and copious watery diarrhea. Her breath has a faint garlic odor, and she has numerous healing linear scars on her forearms. Which of the following medications should be administered immediately?



A. CaNa, EDTA → Pb

B. Deferoxamine → Fe

C. Dimercaprol BAL Hg As Pb

D. Hydroxycobalamin — cyanide

AS

52. A 57-year-old man is brought to the emergency department due to lethargy and altered mental status. His family suspects a suicide attempt. Medical history is significant for dilated cardiomyopathy and major depressive disorder. On arrival, blood pressure is 76/46 mm Hg, pulse is 38/min, and respirations are 16/min. Pupils are 3mm and reactive. Oropharynx is normal. Examination shows bilateral wheezing. There is no peripheral edema. Capillary refill is 3 seconds. There is no diaphoresis. Which of the following categories of medication did this patient most likely ingest?



- A. Beta blocker
- B. Cardiac glycoside
- C. Opioid
- D. Organophosphate

HR ↓
RR ↓ X

↓ BP

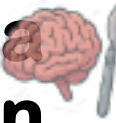
wheezing

↓ HR

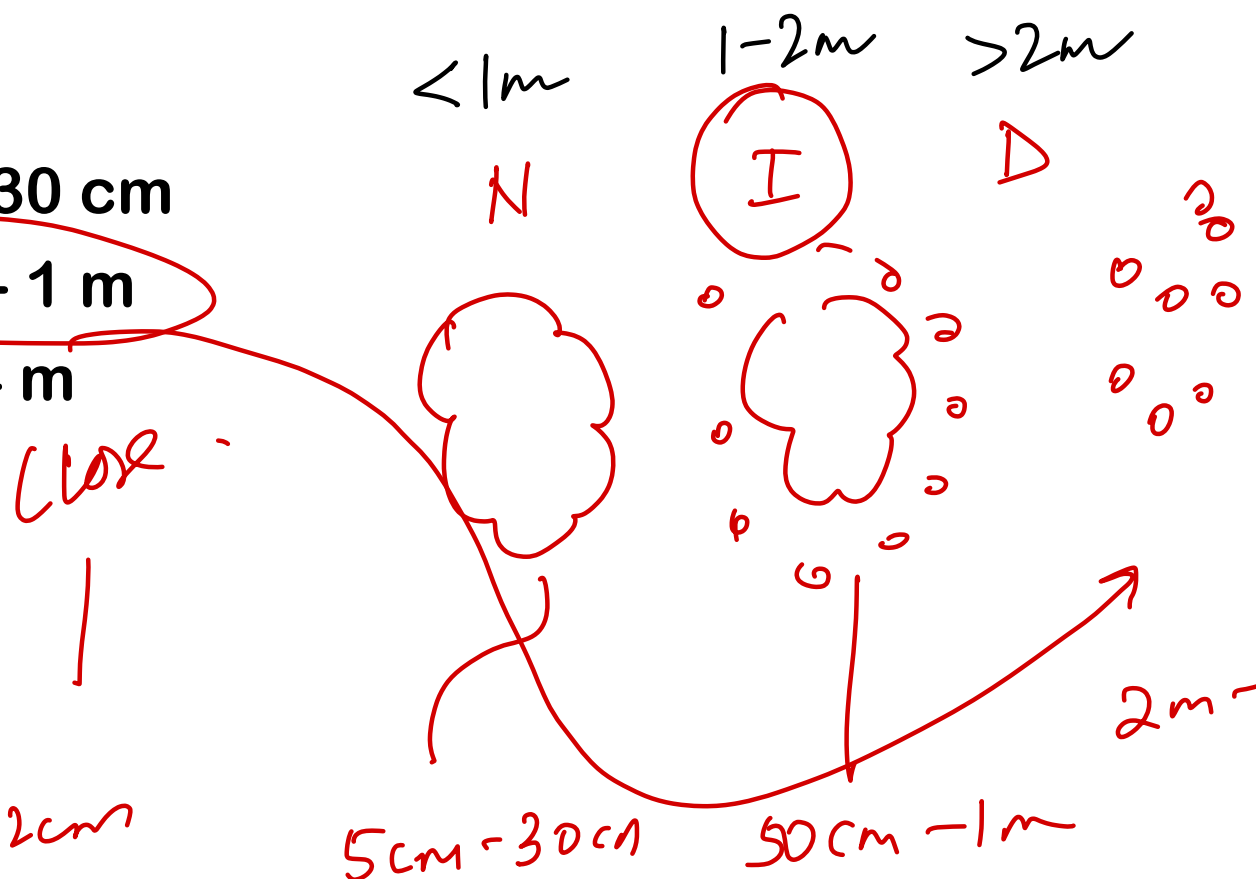
cholinergic

secret ↑

53. You are a forensic expert evaluating a gunshot wound on a victim brought into a district hospital. Using your expertise in ballistic injuries, you recognize these wound patterns as indicative of a certain range of firing distance. What is the most likely distance between the victim and the firearm based on the wound characteristics presented in the image?



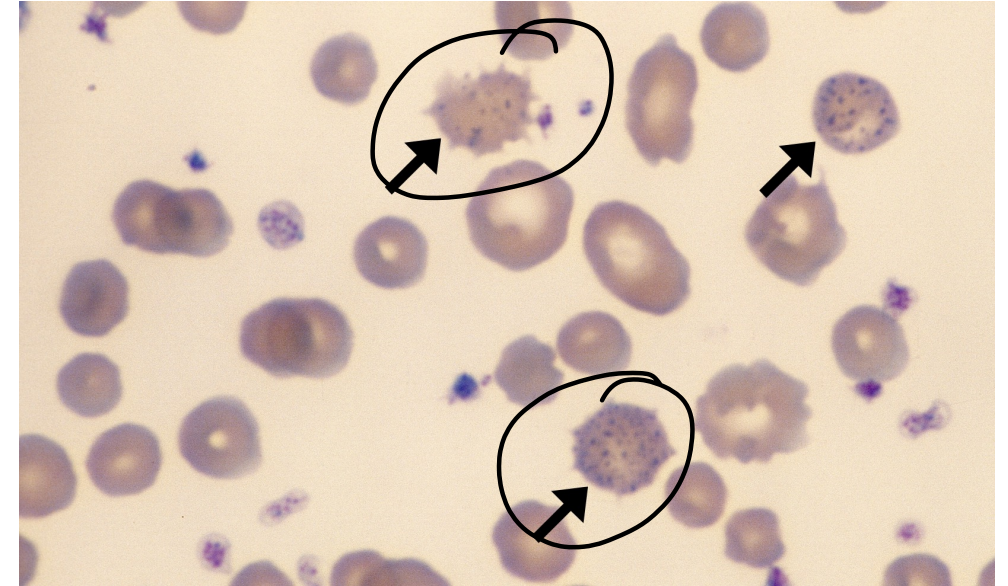
- A. < 2 cm
- B. 5 cm - 30 cm
- C. 30 cm - 1 m
- D. 2 m - 4 m



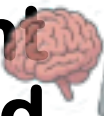
54. The peripheral smear of a patient with suspected heavy metal poisoning is as shown below. What is the mechanism responsible for this? 

- A. Inhibition of ALA synthase
- B. Inhibition of ferrochelatase
- C. Inhibition of ALA dehydratase
- D. Inhibition of pyrimidine 5' nucleotidase

Pb



basophilic stippling

55. A 26-year-old man is brought to the emergency department with the following injuries on face. The patient is alert and oriented. Which of the following is the most likely cause of the patient's facial injuries? 

A. Gunshot injuries ✗

B. Stab injury of face ✗

C. Vitriolage ✗

D. Windshield glass injury

sparrow
crow's feet : burn



56. Which of the following is true about Rigor Mortis?



- A. It involves only ~~a~~ group of voluntary muscles
- B. It is dependent on ~~nervous~~ innervation
- C. It does not occur in a fetus <7 months old
- D. Muscle protein ~~coagulation~~ is the underlying mechanism

↳ Heat stiffening

57. A patient with a history of severe asthma is involved in a car accident. Emergency medical services arrive promptly and provide initial care at the scene. However, during transport to the hospital, the ambulance is involved in an accident due to the negligence of another driver. As a result of the second accident, the patient sustains a severe head injury and is left with permanent brain damage. The legal and ethical implications regarding liability and causation would need to consider which of the following?

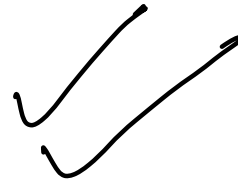
A. Novus actus interveniens

B. Res ipsa loquitur - facts

C. Res judicata judgement

D. Vicarious liability

mens



58. Identify the injury from the image:

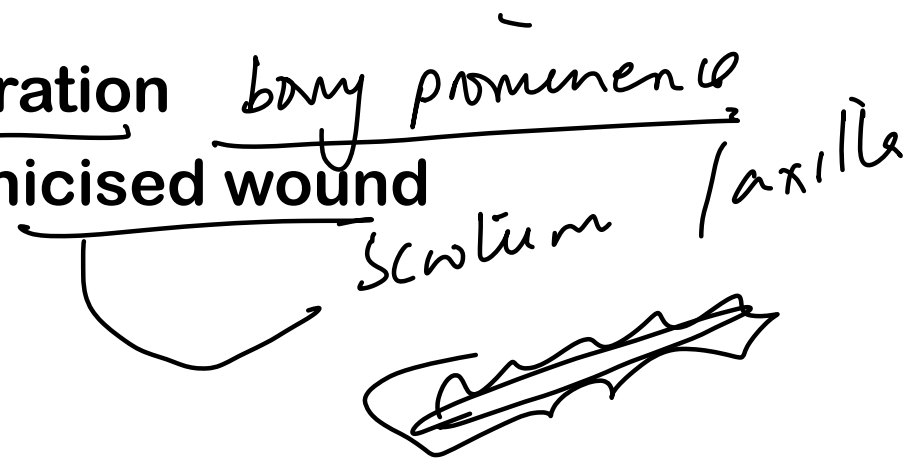


A. Incised wound ~~XX~~

B. Lacerated wound

C. Incised looking laceration bony prominence

D. Laceration looking incised wound



img

59. A 15-year-old boy is brought to the emergency department due to worsening rash and profuse sweating for the past week. Symptoms began gradually, and the patient first noticed the sweating on a cold day, which he thought was unusual. He has also felt generally unwell, with difficulty sleeping and sensitivity to light. Physical examination shows an anxious-appearing boy with obvious hyperhidrosis. Temperature is 36.7°C (98.1°F), blood pressure is 170/96 mm Hg, pulse is 112/min, and respirations are 16/min. Skin examination is significant for an erythematous maculopapular rash over the torso, thighs, and upper arms, as well as pink macules over the palms and soles with associated desquamation. Neurologic examination shows a slight tremor. Excessive exposure to which of the following is most likely responsible for this patient's presentation?

- A. Inhalants X
- B. Lead X
- C. Marijuana X
- D. Mercury

pink D
sanbury shakes

60. Identify the correct statements:



1. Psychological autopsy is the assessment of the mental state of deceased person before death

2. Activated charcoal is ineffective in poisoning of ethanol.

3. Gastric lavage maybe done in ~~kerosene poisoning~~ *carbolic*

4. Loops are most common fingerprint in India


A. 1,2,4

B. 1,2,3,4

C. 3,4

D. 2,4

Activated charcoal does not adsorb small polar molecules like ethanol, methanol, lithium, iron, cyanide, or strong acids/alkalis.

61. Which of the following is not a treatment option in alcohol withdrawal delirium? 

A. Lorazepam *LOT*

~~B. Antipsychotics~~

C. Chlordiazepoxide / *BZD*

D. High calorie diet with multivitamins *B1* → *5% dextrose*

62. Arrange symptoms as in their order of appearance as seen in iron toxicity 

1. Pyloric stricture
2. Asymptomatic phase
3. Gastrointestinal bleeding
4. Liver failure and hypoglycemia

Pyq →

A. 2 -> 3 -> ~~1~~ -> 4

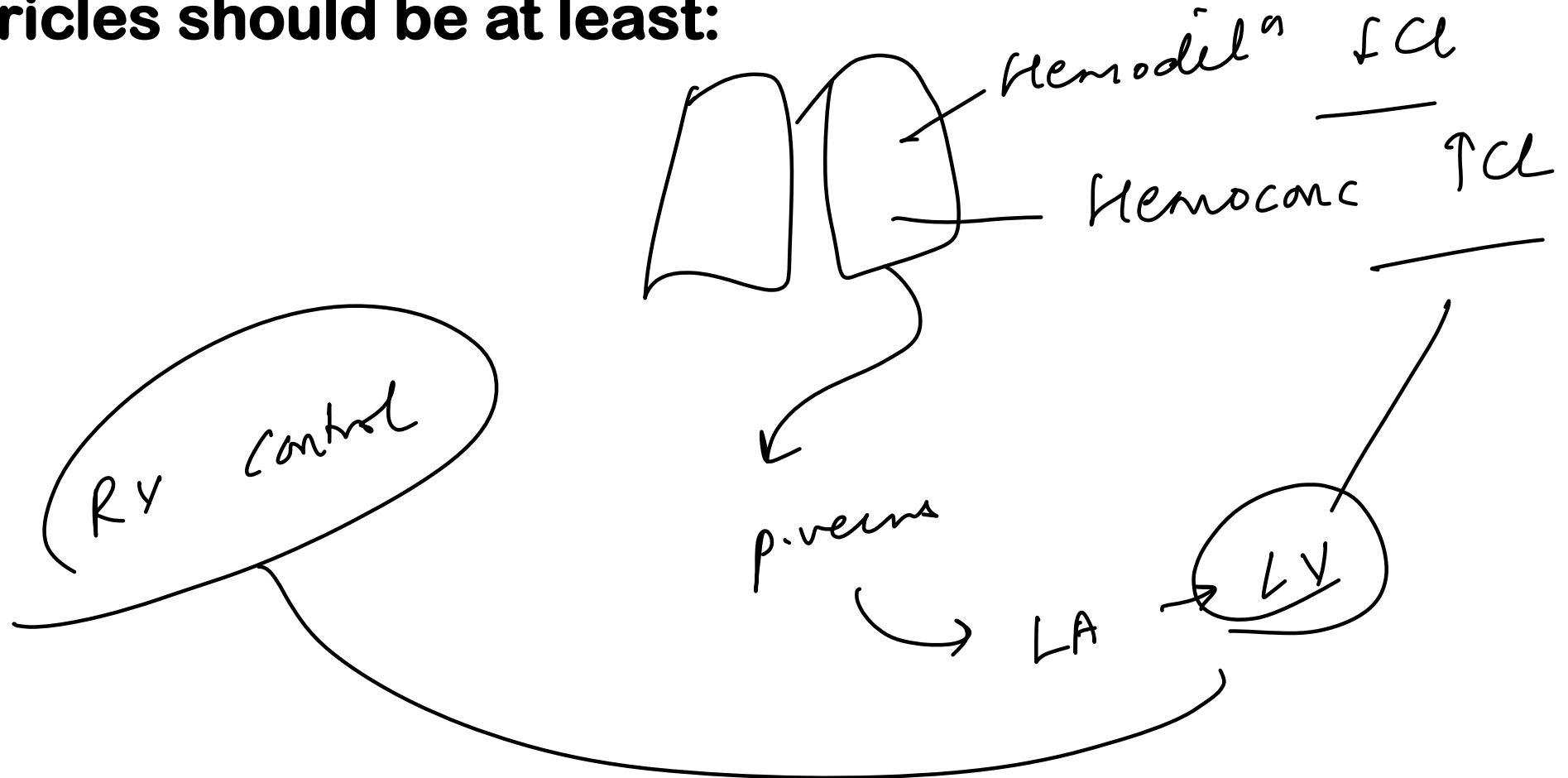
B. 2 -> 3 -> 4 -> 1

C. 3 -> ② -> ④ -> ①

D. 3 -> 4 -> ~~1~~ -> 2

63. In a forensic lecture, the instructor discusses the Gettler test a diagnostic tool used in the investigation of drowning deaths. The test measures chloride levels in the heart's ventricles. For the Gettler test to be considered significant in supporting a diagnosis of drowning, the difference in chloride content between the right and left ventricles should be at least:

- A. 15%
- B. 25%**
- C. 35%
- D. 40%



64. A 6-year-old girl is brought to the emergency department by her parents after they found her unresponsive in the basement. They report that her younger sister sprayed the patient with a bottle that had been filled with pesticide to help rid the house of insects. Temperature is 36.6°C (98°F), blood pressure is 110/60 mmHg, pulse is 58/min, and respirations are 42/min. On examination, the patient is lethargic and salivating. Which of the following medications should be administered first during treatment of this patient's current condition?



A. Atropine

B. Flumazenil B2D

C. Naloxone opioid

D. Neostigmine

OP / Carbamate
Cholin

65. All are included in Gustafsons method except?



A. Root resorption

B. Attrition

C. Primary dentition

D. Transparency of root - most cup

dentition

66. The structure marked in the image shown below helps to determine: 

- A. Age
- B. Sex**
- C. Stature
- D. Race



Barr body

Davidson body

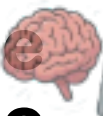
X X Lyonisation

67. Dr. Singh, a cardiologist in New Delhi, is under investigation after several complaints from patients regarding his prescription practices, which allegedly violate the nationally recognized medical code of ethics. He is accused of overprescribing medications in exchange for incentives from a pharmaceutical company. In the context of medical regulation in India, which authority(ies) is/are primarily responsible for issuing a formal warning to Dr. Singh?

- A. Central Government
- B. State Medical Council
- C. National Medical Commission
- D. Medical Council of India

Professional misconduct

68. A 45-year-old woman is brought to the hospital after she collapsed during a Coldplay concert on a hot summer day. The patient has a history of fibromyalgia and takes amitriptyline. Temperature is 40.5°C (104.9°F), blood pressure is 90/60 mmHg, pulse is 110/min, and respirations are 22/min. The skin is warm and red. She is disoriented. Neurologic examination shows no focal findings. If this patient's medication contributed to her current condition, which of the following mechanisms is most likely responsible?



A. Impaired cardiovascular response to heat stress

TCA

B. Impaired dissipation of body heat

C. Increased heat production by increasing muscle tone

anticholinergic

D. Increased peripheral vasoconstriction


tachycardia, sweating xx
sympathetic

69. A 12-year-old boy is brought to the emergency department due to a peritonsillar abscess. In preparation for incision and drainage, the patient is given a topical anesthetic, an anxiolytic, pain medications, and antibiotics. He develops a headache and becomes lethargic. Temperature is 38°C (100.8°F), pulse is 110/min, and respirations are 16/min. The lungs are clear to auscultation bilaterally. The lips and fingertips appear blue and the oxygen saturation is 84%. Supplemental oxygen is started but does not improve peripheral oxygen saturation. Which of the following is the most likely cause of this patient's hypoxemia?

- A. Bronchial occlusion due to aspiration ✗
- B. Carbon monoxide binding to hemoglobin ✗
- C. Glucose-6-phosphate dehydrogenase deficiency ✗
- D. Increased heme iron oxidation

Meth Hb

benzocaine
prilocaine
EMLA

70. During a complex murder trial, the defense attorney argue  that the local court overseeing the case lacks the authority to sentence their client to the death penalty, should they be found guilty. As a medical professional called to serve as an expert witness on the psychological state of the defendant, you're asked to familiarize yourself with the judicial power of sentencing in India. Which of the courts listed below is not authorized to pass a death sentence under Indian law?

- ~~A. Magistrate court~~
- B. Additional session court
- C. Session court
- D. High court ✓



HIERARCHY OF COURTS	Max punishment/fine
SC	death
HC	death ↵ death ↵
Sessions ^{addnl} fast track	death ↵ death ↵
Assistant sessions	10y - any fine
Chief JM	7y - any fine
JM - 1st class	3y - 50k
JM - 2nd class	1y - 10k

71. In a legal case involving a medical malpractice claim, the court requires specific documents and evidence from the hospital where the incident occurred, the court issues a 'Duces tecum' to the Hospital. What does 'Duces tecum' refer to in legal proceedings?

A. Summon

B. Panchnama *details*

C. Conduct money *witness*

D. Hostile witness.

72. Which of the following findings are seen in a non-poisonous snake? 

- A. Incomplete belly scales
- B. Compressed tail $\times \times$
- C. Long and canalized fangs \times
- D. Small head scaled \times

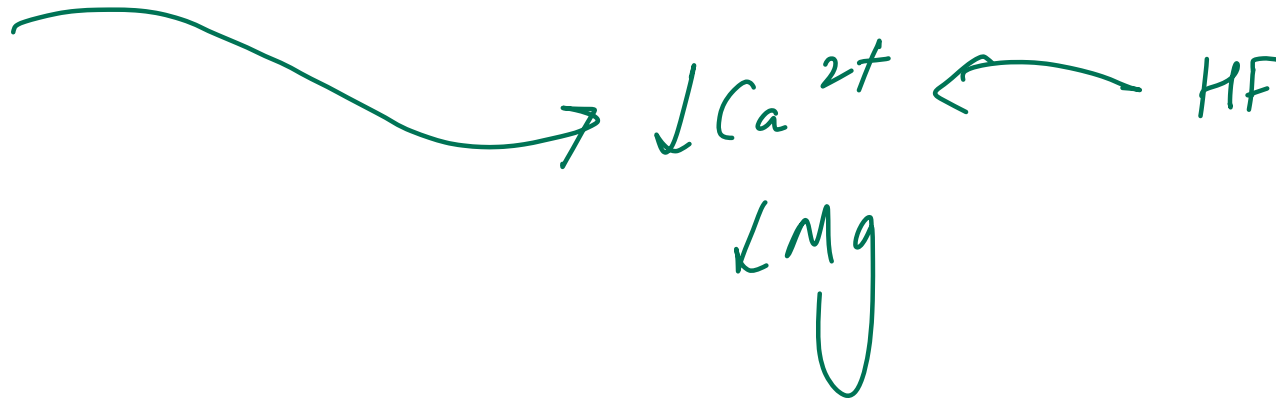


Feature	Poisonous snake	Non-poisonous snake
Belly scales	Large and it covers the entire belly	Small and do not cover the entire belly
Head scales	Small	Large
Fang	Long and canalised	Short and solid
Tail	<u>Compressed</u>	Not markedly compressed
Habits	<u>Nocturnal</u>	Not so
Bite	<u>Two fang marks</u>	A number of small teeth marks in a row

73. Casualty Medical Officer is examining a patient who is displaying symptoms of muscle twitching, numbness, and tingling in the extremities. The patient has a history of potential poisoning. Upon investigation, it is revealed that the patient was exposed to a toxic substance. What toxic substance is most likely responsible for the development of tetany in this patient?



- A. Oxalic acid
- B. Carbolic acid
- C. Sulphuric acid
- D. Nitric acid



74. 35-year-old man with a history of bipolar and substance use disorders comes to the emergency department due to depression, auditory hallucinations, and suicidal ideation. His medications include lithium and escitalopram. The patient has a history of 5 psychiatric hospitalizations and 2 past suicide attempts, including overdose on his medications and attempted hanging. The patient has been using "anything I can get my hands on" because his depression is unbearable. He is hospitalized and placed on suicide precautions. His dose of escitalopram is increased to target his depression, and risperidone is added to treat the hallucinations. His lithium level is 1.0 mEq/L. On the second day of hospitalization, the patient reports muscle pains, abdominal cramping, nausea, and diarrhea. His temperature is 37.2°C (99°F), blood pressure is 130/85 mm Hg, and pulse is 84/min. The patient is alert and restless, and his pupils are dilated bilaterally. Bowel sounds are hyperactive and neurologic examination is normal. Which of the following is the most likely explanation for his symptoms?

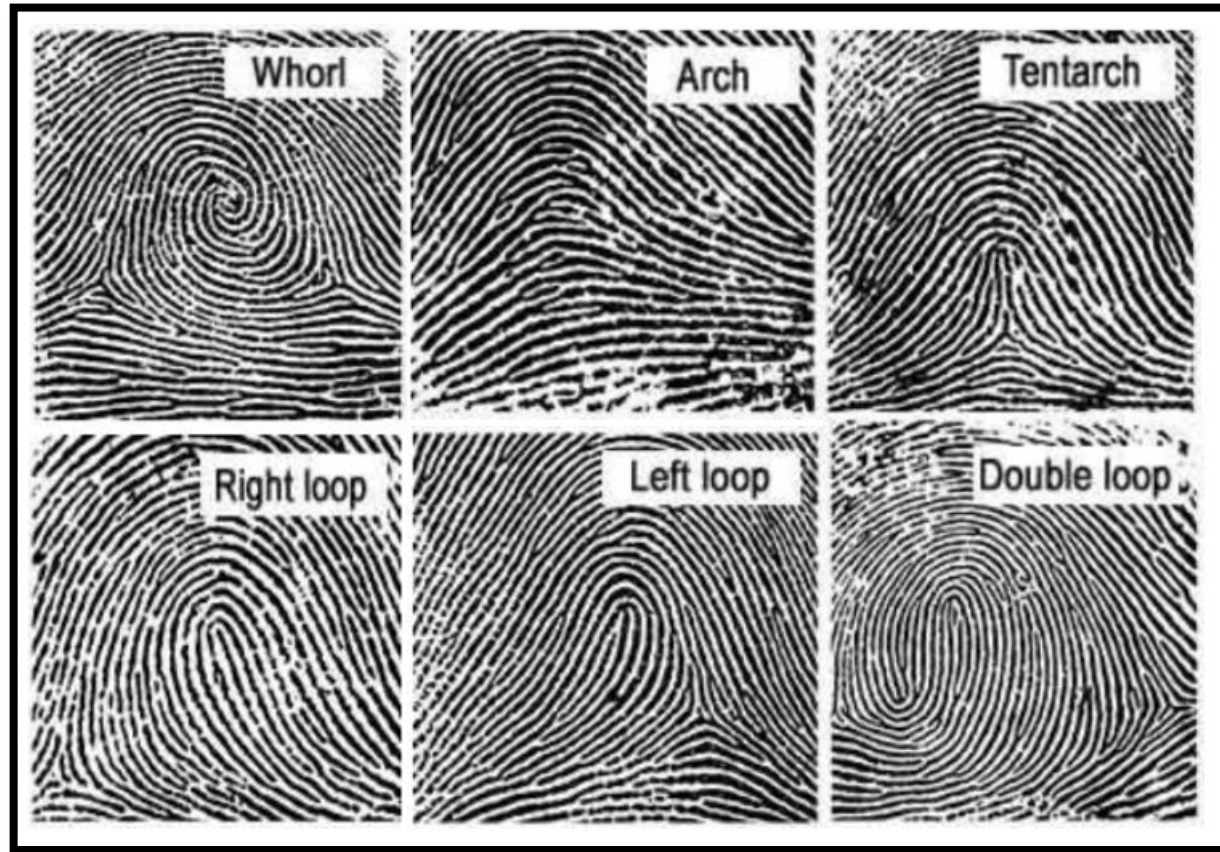
- A. Serotonin syndrome ^{CLONUS}
 - B. Cocaine withdrawal ~~XX~~ ^{crash}
 - C. Lithium ~~toxicity~~
 - D. Opioid withdrawal
- mydriasis*

75. Identify the human fingerprint shown below?



- A. Whorl ✗
- B. Arch
- C. Loop
- D. Composite







Thank You
