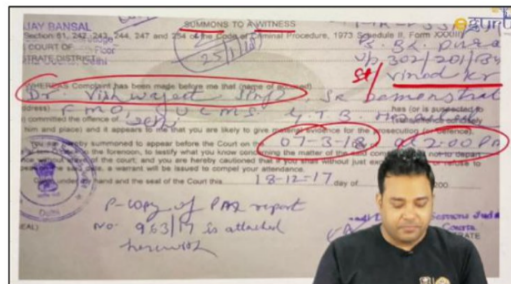


Legal System & Procedures, Negligence, Sexual Offence

Summon to a witness:



Subpoena [61-69 Cr PC]

Common witness

Examination:

Direct examination → Examination in chief

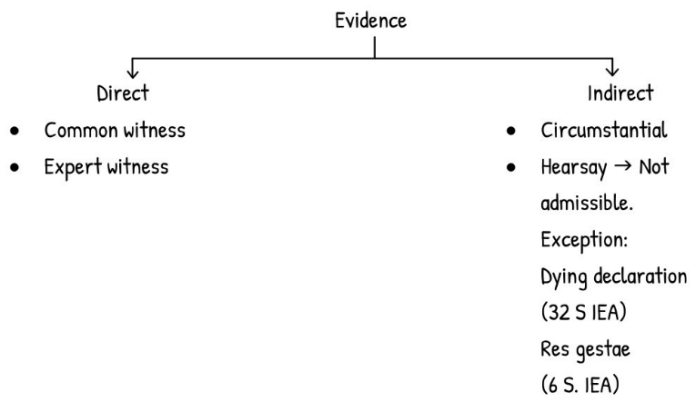
Cross examination → No time limit

Leading question allowed
(Yes / No)

Redirect examination →

Court questions → questions asked by judge.

Evidence





Legal System & Procedures, Negligence, Sexual Offences

Topic Notes: 12

Inside court:

- Oral
 - Documentation
- Oral > Documentation.

Inquest in case of death in police custody is done by

- A. Jail superintendent
- B. Executive magistrate
- C. Police inspector
- D. Superintendent of police

Ans: B. Executive magistrate

Executive magistrate – 176 (1)

Police – 174 CrPC

A public witness was ordered by court to come & record his evidence in court. What is correct about this.

- A. Oral evidence
- B. Hearsay evidence
- C. Subpoena
- D. Circumstantial evidence

Ans: A. Oral evidence

This act of an accused (x) killing a victim (y) was seen by a person (z) victim (y) was found dead with stab wound over chest. Recording of evidence of (z) as a public witness in courtroom was done. Which is correct about evidence given by (z):

- A. Direct evidence & oral evidence
- B. Indirect evidence & oral evidence
- C. Circumstantial evidence & oral evidence
- D. Hearsay evidence & documentary evidence

Ans: A. Direct evidence & oral evidence

Q. In court of law, examination of a witness is being done to develop new or old facts & to try to weaken the evidence by showing that evidence was biased, inaccurate, inconsistent by a lawyer during which of the following

- A. Direct examination
- B. Cross examination
- C. Redirect examination
- D. Court room examination

**Legal System & Procedures, Negligence, Sexual Offences**

Topic Notes: 12

Ans: B. Cross examination

During a certain procedure in the trial, the lawyer of defendant asked a leading question, and the opposite lawyer quickly raised an objection. The judge sustained the appeal and requested the defending lawyer to avoid leading questions as they can't be allowed in any of the following except

- A. Examination in chief
- B. Direct examination
- C. Cross- examination
- D. Dying declaration

Ans: C. Cross- examination

Privileged Communications means exception to the general rule

- A. Professional Negligence.
- B. Professional Secrecy.
- C. Products Liability.
- D. The Doctrine of Res Ipsa Loquitur.

Ans: B. Professional Secrecy.

Privileged communication seen in

CIVIC SIN (mnemonic)

Crime	Subsends employee
Infectious disease	In self interest
Venereal disease	Notifiable disease
In patient interest	
Court of Law	

False about informed consent

- A. Patient must be explained about all procedure.
- B. He must be told about the risks involved.
- C. Alternate procedure/treatment must be concealed
- D. Must be explained in the language he understands

Ans: C. Alternate procedure/treatment must be concealed

New Updates:

- Medical records of indoor patients to be preserved for 3 yrs.
If demanded by patient
Dr should provide M.R with in 5 days

Legal System & Procedures, Negligence, Sexual Offences

Topic Notes: 12

- Appeal against S.M.C decision made to

↓

Ethics & Mad. Reg. Board.

↓ If not settled

NMC

In a hypothetical situation, a female alleges that both kids in image were delivered together & belong to a particular male. On DNA analysis the alleged male was found to be the father of one kid. Which is true about this?



- A. Twins
- B. Superfecundation
- C. Superfetation
- D. Suppositious child

Ans: B. Superfecundation

If the alleged male was not the father of any, then the child is said to fictitious child. Blood for DNA analysis collected in E.D.T.A.

Q. A patient died because of doctor negligence but some other factors also were the reason of his death. This type of malpractice is known as

- A. Contributory negligence
- B. Res Ipsa loquitor
- C. Volenti non fit injuries
- D. Novus actus

Ans: A. Contributory negligence

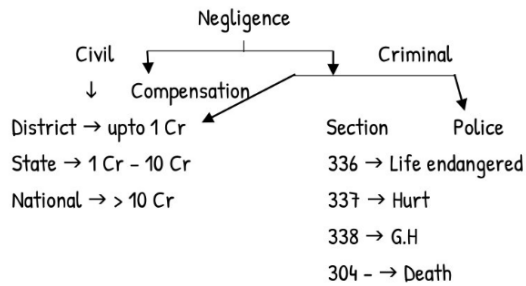
Q. Onus of proof in civil negligence case lies on
(Pt) vs. (Dr)

- A. Doctor
- B. Magistrate
- C. Police
- D. Patient

Legal System & Procedures, Negligence, Sexual Offences

Topic Notes: 12

Ans: D. Patient



4Ds of negligence

Duty
 ↓
 Dereliction
 ↓
 Direct cause
 ↓
 Damage

A man fell from 35 feet height. Eyewitnesses say that he landed on his feet. Which of the following injuries is possible

- Ring fracture of foramen magnum + Lumbar spine injury
- Pond fracture skull + Cervical spine injury
- Gutter fracture skull + Cervical spine injury
- Depressed fracture skull + Cervical spine injury

Ans: A. Ring fracture of foramen magnum + Lumbar spine injury

For Ring fracture, fall from height is m/c cause

Q. Dying declaration comes under

↓
 DOC. E

- Sec 30 CrPC
- Sec 32 IPC
- Sec 32 IEA
- Sec 61 CrPC

Ans: C. Sec 32 IEA



Acc. To (92) IPC

A patient comes to casualty with life threatening injuries. There was no time for consent and Dr started life saving surgery with all precautions. Death of patient occurred. Dr is not responsible under which doctrine

- A. Doctrine of anticipation
- B. Res ipsa loquitor
- C. Doctrine of conjugated consent
- D. Doctrine of extended consent

Ans: A. Doctrine of anticipation

Which one of the following diseases is covered under Rashtriya Bal Swasthya Karyakram (RBSK)? CHILD < 18

- (a) Rheumatic heart disease
- (b) Community acquired pneumonia
- (c) Systemic onset juvenile idiopathic arthritis
- (d) Nephrotic syndrome

Ans: (a) Rheumatic heart disease

Selected Health Conditions for Child Health Screening & Early Intervention Services

Defects at Birth

1. Neural tube defect
2. Down's Syndrome
3. Cleft lip & Palate / Cleft palate alone #
4. Talipes (club foot)
5. Developmental dysplasia of the hip
6. Congenital cataract
7. Congenital deafness
8. Congenital heart diseases
9. Retinopathy of Prematurity

Deficiencies

10. Anaemia especially Severe anaemia
11. Vitamin A deficiency (Bitot spot)
12. Vitamin D Deficiency. (Rickets)
13. Severe Acute Malnutrition
14. Goiter

Legal System & Procedures, Negligence, Sexual Offences

Topic Notes: 12

Diseases of Childhood

15. Skin conditions (Scabies, fungal infection and Eczema)
16. Otitis Media
17. Rheumatic heart disease
18. Reactive airway disease
19. Dental conditions
20. Convulsive disorders

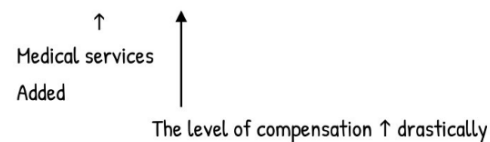
Developmental delays and Disability

21. Vision Impairment
22. Hearing Impairment
23. Neuro-motor Impairment
24. Motor delay
25. Cognitive delay
26. Language delay
27. Behavior disorder
28. Learning disorder
29. Attention deficit
30. Congenital Hypothyroidism, Sickle cell anemia, Beta Thalassemia

COPRA

Consumer Protection act

1986 → 2002 → 2019



- Defences for a Dr
 - Denial of duty
 - Calculated risk doctrine
 - Law of limitation = res indicata
 - Res judicata = doctrine of double jeopardy
 - Product liability
 - Medical misadventure = medical maloccurrence (both in civil & criminal)
 - Novus actus interveniens unrelaeated action
 - Volenti non-fit injuria



Legal System & Procedures, Negligence, Sexual Offences

Topic Notes: 12

- C.N (only in civil cases) ----- Exceptional to C.N
 - LCD → Last clear chance
 - ACR → Avoidable consequences rule
 - Good Samaritan doctrine one who assist.
- V.L = R.S = captain & ship doctrine
- B.S.D
- R.I.L → obvious fault by a Dr. → Burden of proof \bar{c} redards to innocence shifts to Dr.

An 11-year-old girl was found inattentive in class & also cried sometimes. On further inquiry Principal of school came to know that uncle of the girl had been touching her genitals inappropriately at home. Who should the principal inform first

- A. Police
- B. Magistrate
- C. Parents
- D. Child welfare officer

If child < 18y (Male or female)

POCSO act (2012-2019)

In this case → Sexual assault → Report to police

Ans: A. Police

A 16-year-old girl was brought to you by police with her mother for alleged case of What will be the first step done by you as a medical officer

- A. Start the examination & document injuries
- B. Take proper detailed history
- C. Preserve clothing
- D. Take consent from mother

Ans: B. Take proper detailed history

Consent \geq 12 yrs

Inform police

A 14-year-old girl comes to AIIMS emergency with her mother. History penovaginal penetration by neighbor was told to doctor. In addition, the patient refused to consent for medical examination. What will you do as a doctor?

1. Should not call police
2. Should counsel mother and daughter

**Legal System & Procedures, Negligence, Sexual Offences**

Topic Notes: 12

3. Should call police mmm
 4. Should do examination even after refusal
 5. Informed refusal to be documented
- A. 2, 3, 5 are true
 B. 1, 2, 3 are true
 C. 3, 4, 5 are true
 D. 2, 3, 4 are true
- Ans:** A. 2, 3, 5 are true

Alleged case of rape of 13-year-old has occurred. The female was brought by parents to hospital, but they are refusing any examination to be conducted by doctor. Which things should Dr go ahead with?

- A. Inform police
 B. Collect swabs
 C. Document refusal
 D. Conduct examination without consent
 E. Treatment to be provided
- Ans:** Option A, C, E.

Sexual gratification through obscene telephone calls is

- A. Scopophilia
 B. Scopophilia
 C. Scatologica
 D. Voyeurism

Ans: C. Scatologica

Remaining 3 comes under section 354 - C



- S. 354 force
 354-A Sexual Harassment
 354-B Disrobe
 354-C Voice calls
 354-D Stalking

Rape → <16 - 376 (3)

<12 - 376 AB

Gang - <16 - 376 DA

Rape - <12 - 376 DB



Legal System & Procedures, Negligence, Sexual Offences

Topic Notes: 12

Q. Excessive sexual desire in males is known

- A. Nymphomaniac
- B. Satyriasis
- C. Masochism
- D. Voyeurism

Ans: B. Satyriasis

Q. Sexual pleasure obtained by getting hurt by opposite sex is called

- A. Masochism
- B. Sadism
- C. Transvestism
- D. Exhibitionism

Ans: A. Masochism

Sadism: Sexual pleasure obt. By hurting opp. Sex.

Transvestism: Eonism → Cross dress

Exhibitionism: Display of private part in public (294 IPC)

Frotteurism: Rubbing of private parts in public

Rectal enema: Klismaphilia

Q. Legally a man will be guilty of rape when there is

- A. Rupture of hymen.
- B. Emission/ ejaculation of semen.
- C. Slightest penetration of penis within vulva.
- D. Extensive injuries around the external genital

Ans: C. Slightest penetration of penis within vulva.

→ FB/FINGER (11-)

Q. Common position of hymen tear after peno-vaginal intercourse

- A. 3 O'clock position.
- B. 7 o'clock position.
- C. 10 o'clock position. 5-7'
- D. 12 o'clock position.

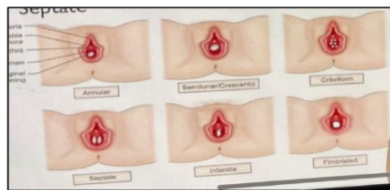
Ans: B. 7 o'clock position.

Legal System & Procedures, Negligence, Sexual Offences

Topic Notes: 12

Identify the type of hymen shown in image

- A. Annular
- B. Semilunar
- C. Imperforate
- D. Septate



The examination of a rape accused was being done in Forensic department. Which of the following test is used to identify the presence of vaginal epithelial cells on glans penis of the accused.

1. Barberis test
 2. Lugol's iodine test
 3. Florence test
 4. Precipitin test
- A. 1, 2, 3, 4
 - B. 1, 2
 - C. 1, 2, 3
 - D. Only 2

Ans: D. Only 2

Q. In case of rape small children hymen is usually

- A. Easily ruptured as It is very delicate
- B. Easily ruptured as it is situated superficially
- C. Not ruptured as it is highly elastic
- D. Not ruptured as it is deeply situated

Ans: D. Not ruptured as it is deeply situated

Sexual asphyxias are commonly associated with

- A. Partial hanging
- B. Complete hanging
- C. Smothering
- D. Strangulation

Ans: A. Partial hanging



Legal System & Procedures, Negligence, Sexual Offences

Topic Notes: 12

Q. Disclosure of identity of rape victim is protected under which of the following sections of IPC

- A. 298A
- B. 228A
- C. 226A
- D. 269A

Ans: B. 228A

Q. Punishment for rape on a 12 years old female comes under which section of IPC-

- A. 376 DB
- B. 376 (1)
- C. 376 (3)
- D. 376 AB

Ans: B. 376 (1)

Injuries & Medicolegal Aspects

Topic Notes: 19

Injuries and Medicolegal Aspects

Identify the manner injury as shown in image:

- A. Homicidal
- B. Suicidal – TENTATIVE / Hesitation cuts.
- C. Accidental
- D. Can't be determined

Ans: B. Suicidal – TENTATIVE / Hesitation cuts.



Identify the type of injury shown in image:

- A. Incised wound
- B. Lacerated wound
- C. Lacerated looking incised wound
- D. Incised looking lacerated wound

Ans: B. Lacerated wound



Identify the factor associated with the injury as shown in the image:

- A. Self – inflicted wounds
- B. Post-mortem cuts
- C. Hesitation cuts
- D. Defence wounds

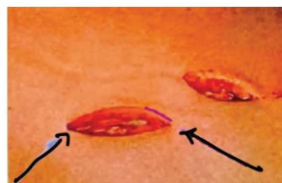
Ans: D. Defence wounds



Defence wounds

- Active (palmar surface)
- Passive (Dorsal surface)

Sharp weapon injuries



Blunt end

Sharp end.

Single sharp end wounds

Injuries & Medicolegal Aspects

Topic Notes: 19



Fish tailing of Wound → Single sharp edged weapon.



Spindle shaped wound → Double sharp edged weapon.

Acute angled edges at both end.



Abrasion
Reddish, Scabbed
12-24 hrs.



Reddish brown scabbed abrasion
1-3 days

← Injuries & Medicolegal Aspects

Topic Notes: 19



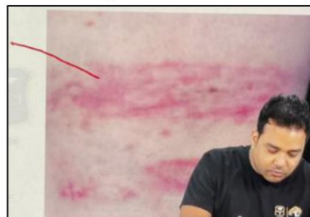
BBSA = (4)- 5d
Brownish black abrasion 4-5 days



Bruise age:

Red	< 3hr	Oxy - Hb
Blue	3H - 3D	Deoxy - Hb
Brown	4D	Hemosiderin
Green	5-6d	Biliverdin
Yellow	7-12 d	Bilirubin.

Identify the blunt injury shown in image:



- A. Abrasion
- B. Contusion
- C. Laceration
- D. Avulsion

Ans: B. Contusion

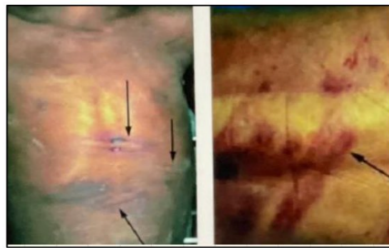
Injuries & Medicolegal Aspects

Topic Notes: 19



Batter baby syndrome
Caffey's syndrome
SBS

M/C cause of death = Subdural haemorrhage



Tram track appearance



Black eye



Battle sign

Injuries & Medicolegal Aspects

Topic Notes: 19

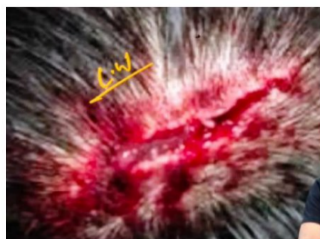


Avulsion

Identify the injury in the image



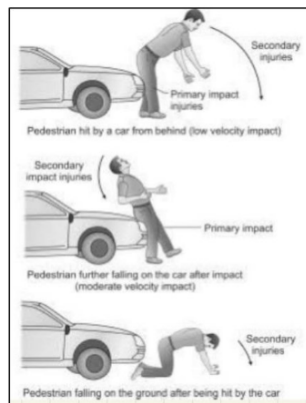
- A. Incised wound
- B. Incised looking lacerated wound
- C. Lacerated wound
- D. Lacerated looking incised wound



Lacerated wound

← Injuries & Medicolegal Aspects

Topic Notes: 19



Marshalls triad & Classification of bomb blast injuries:

- 1) PRIMARY - d/t shock wave or barotrauma
- 2) SECONDARY - d/t flying objects acting as flying missiles
- 3) TERTIARY - d/t blast wind - collisions, fall of building
- 4) QUARTERNARY - d/t complication of explosion - fire, fun

A + B + L

Identify the type of bomb blast injury shown in image:



- A. Primary
- B. Secondary
- C. Tertiary
- D. Quarternary

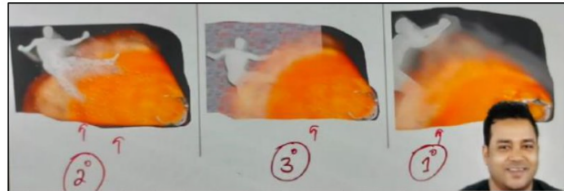
Ans: B. Secondary

Q. Injuries caused by the flying objects generated by the blast is known as

- A. Primary blast injury
 - B. Secondary blast injury
 - C. Tertiary blast injury
 - D. Quaternary blast injury
- Ans: B. Secondary blast injury

Injuries & Medicolegal Aspects

Topic Notes: 19



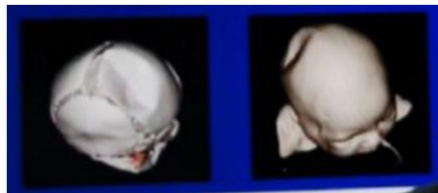
Fissured (linear) fracture.

Linear fissured #



Pond or indented fracture

Pond # =
Indented #



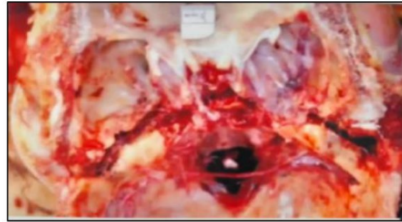
During autopsy, the fracture of base of skull was noted as shown. Such fracture known as:



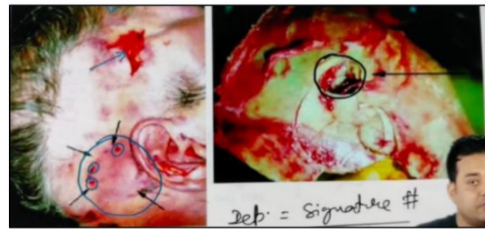
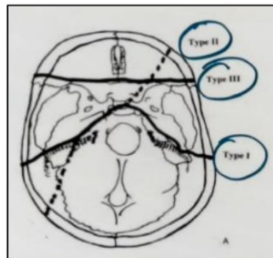
- A. Type 1 hinge
 - B. Type 2 hinge
 - C. Type 3 hinge
 - D. Ring
- Ans: A. Type 1 hinge

Injuries & Medicolegal Aspects

Topic Notes: 19



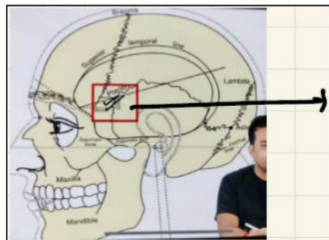
Types of Hinge #



Case of road traffic accident presented with EDH. Where will be impact of collision?

- A. Pterion
- B. Angle of mandible
- C. Lambdoid suture
- D. Forehead

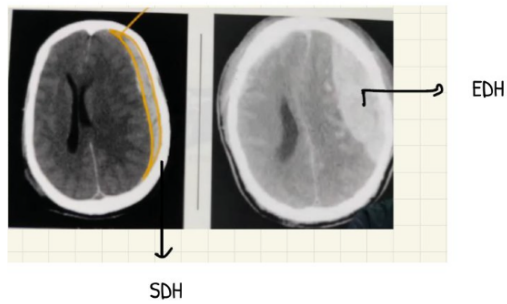
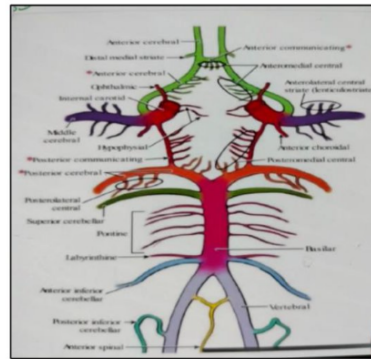
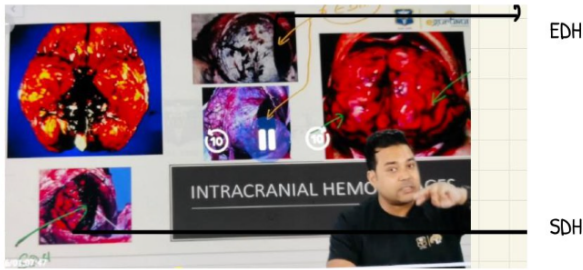
Ans: A. Pterion



Pterion

Injuries & Medicolegal Aspects

Topic Notes: 19



Chop Wound

← Injuries & Medicolegal Aspects

Topic Notes: 19

A patient was brought to emergency with GCS score 3. He was intubated and sent for NCCT, which was found normal by the doctor. What is the most likely diagnosis.

- A. SAH → TAI of ≥ 4 AXONAL REGIONS
- B. EDH
- C. Cerebral contusion
- D. Diffuse axonal injury

Ans: D. Diffuse axonal injury



Bite Mark Analysis

- 1) M/L PHOTOGRAPH c̄ a 'L' shape scale
- 2) PRESERVE - DRY
2 SWABS - WET
- 3) F.S.L
↓
EXACT Replica

Which one of the following is used to estimate the surface area of burn injuries in children less than 15 years of age?

- a) Berkow body surface area chart
- b) Rule of Nines
- c) Lund and Browder chart
- d) Parkland formula

Ans: c) Lund and Browder chart

Injuries & Medicolegal Aspects

Topic Notes: 19



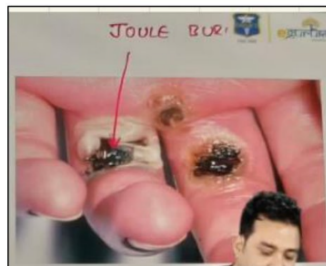
Ante mortem flash burn



Post mortem burn



Pugilistic attitude



Joule Burns.

Injuries & Medicolegal Aspects

Topic Notes: 19

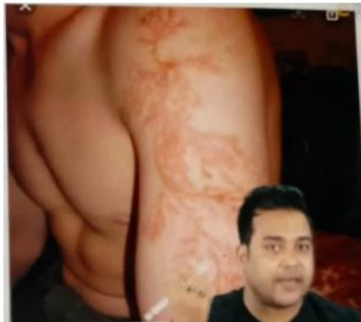
True about injury shown in image:



- A. Lightning burn
- B. Low voltage electric burn
- C. High voltage electric burn
- D. Flame burn

Ans: C. High voltage electric burn

True about burns as shown in image are associated with



- A. Lightning burns
- B. Scald burns
- C. Seen in electrical burns
- D. Associated with thermal flame burns

Ans: A. Lightning burns

A driver wearing seat belt, suddenly applies brakes to avoid a collision. Which of the following body part is most likely to be injured

- A. Spleen
- B. Mesentery
- C. Liver
- D. Abdominal aorta

Ans: B. Mesentery

← Injuries & Medicolegal Aspects

Topic Notes: 19

A patient comes with injuries in hospital OPD. The examining Dr. notices a lacerated wound of size 4 x 0.5 cm x bone deep with blood clots over scalp along with linear abrasion of size 2 x 0.5 cm. Which is correct regarding mechanism of the lacerated wound

- A. Soft tissue is sandwiched between the weapon and underlying bone
- B. Overstretching of skin & subcutaneous tissue
- C. Shearing force
- D. Impact by semi-sharp object with heavy force

Ans: A. Soft tissue is sandwiched between the weapon and underlying bone

A patient comes to OPD with saddened (WET) burn injury over his right thigh with erythema. Blisters & line of demarcation. Which of the following is true of this case

- A. Moist burn
- B. Chemical burn
- C. Dry burn
- D. Electric burn

Ans: A. Moist burn

A daily wage labourer who was working in field in hot weather condition collapses with loss of consciousness. The patient was brought to hospital and attending doctor measured his body temperature to be about 106°F. Which of the following is least likely to be present

- A. Hypotension
 - B. Tachycardia
 - C. Hot skin
 - D. Sweating
- } >41°C
Classical Heat STO

Ans: D. Sweating

Q. Quetelet's Rule related to

- A. Anthropometry.
- B. Blood grouping.
- C. DNA fingerprinting.
- D. Dactylography.

Ans: D. Dactylography.

319. def HURT

320-Grievous Hurt (all G.H are cognizable offences)

- Emasculation.
- Permanent privation of the sight of either eye.

Injuries & Medicolegal Aspects

Topic Notes: 19

- Permanent privation of the hearing of either ear
- Privation of any member or joint.
- Destruction or permanent impairing of the powers of any member or joint.
- Permanent disfiguration of the head or face.
- Fracture or dislocation of a bone or tooth.
- Any hurt which endangers life or which causes the suffers during the space of twenty days in severe bodily pain on follow his ordinary pursuits

IPC	PUNISHMENT FOR	YEARS OF IMPRISONMENT POWER OF JUDGE	
323	Voluntarily causing HURT	1	2 nd class JM
324	Voluntarily causing HURT by dangerous weapon / means	3	1 st class JM
325	Voluntarily causing GRIEVOUS HURT	7	CJM
326	Voluntarily causing GRIEVOUS HURT by dangerous weapon / means	10	Assistant session court

- 326 A - Causing grievous hurt by throwing or administering acid ----- 10 yrs - LI + fine
- 326 B - Attempt to throw acid ----- 5-7 yrs + fine
- 334 - Vol. causing hurt on provocation ---- 1 month +/- 500 rs
- 335 - Vol. causing grievous hurt on provocation ----- 4 years +/- 2000 rs.
- 350 - Use of criminal force on other person to cause injury, fear, annoyance - eg examination of a patient without consent.
- 351 - def ASSAULT = making a gesture (even without touching) so that other person believes that criminal force will be used.

→ Without consent

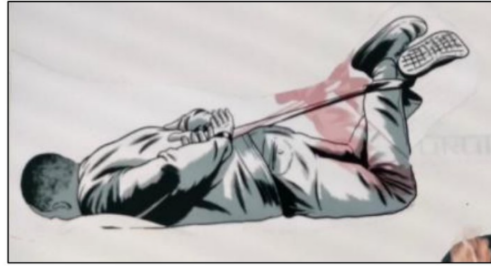
← Injuries & Medicolegal Aspects

Topic Notes: 19

A person in police custody was placed in prone position with his wrist & ankles bound behind his back and secured by a cord. This method is called

- A. Falanga
- B. Carotid sleeper hold
- C. Hog - tying
- D. In choke holds

Ans: C. Hog - tying



Types of Torture:

Breathing (M.C)

- On soles = Falanga or bastinado
- On ears = Telefona
- Chepuwa
- El quirofano

Suspension

- By wrist = la bandera
- By feet = el murcielago
- Parrot's perch = both

Near suffocation

- Dry & wet submarine

Forced posture

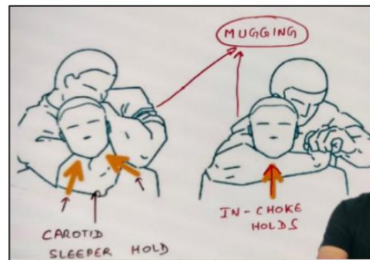
- El planton - prolonged standing
- Saw horse

Injuries & Medicolegal Aspects

Topic Notes: 19

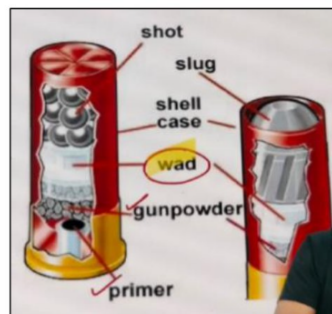
Thermal

- Cattle prod - electric shock to genitalia
- Black slave = heated rod in anus



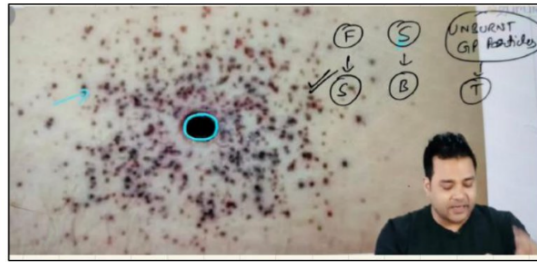
Types of Cartridge

- Shotgun Cartridge
- Rifle Cartridge



Injuries & Medicolegal Aspects

Topic Notes: 19



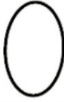



Q. Figure given below is of gun shot injury, what is the range gun shot



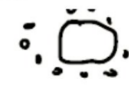

- A. Contact
- B. Close ×
- C. Distant
- D. Intermediate

Entry Wound

Rifle		Short gun
Head  Abd → Round	Contact	Head →  Abd → Oral
Singing, Blackening (B) Tattooing (T)	Close	: 
T ± B	Intermediate	Rate hole entry 

Injuries & Medicolegal Aspects

Topic Notes: 19

No effects	Distant	<p>>2m</p>  <p>>4m</p> 
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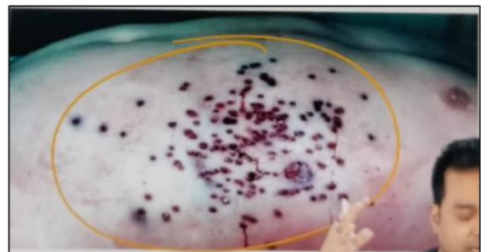


Exit

Entry

BEVELLING

Correct about the range of shot gun injury is:



- A. < 30 cm
- B. 30 - 180 cm
- C. > 200 cm
- D. > 400 cm

Ans: D. > 400 cm

Q. Poisoning caused by retained bullets is
SOUVENEIR

- 1. Lead poisoning
- 2. Arsenic poisoning
- 3. Cadmium poisoning

Ans: 1. Lead poisoning

← **Injuries & Medicolegal Aspects**

Topic Notes: 19

Friction b

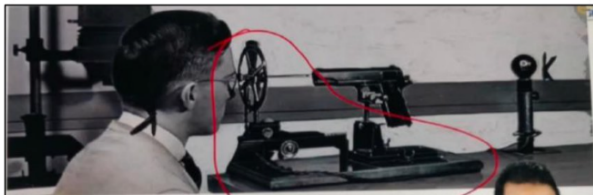
Brush burn is

= GRAZED

- A. Burn produced by lightening
- B. Burn produced by high voltage
- C. A type of abrasion
- D. Burn at firearm

Ans: C. A type of abrasion

Q. Identify the instrument used to examine interior of barrel of a firearm weapon



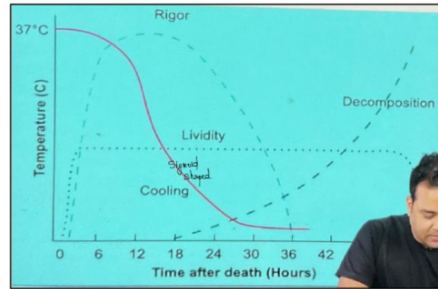
- A. Maltese cross
- B. Helixometer
- C. Glaister keen rod
- D. None of the above

Ans: B. Helixometer

← Thanatology, Fetal Death, Asphyxial Death

Topic Notes: 11

Thanatology, Fetal Death, Asphyxial Death



Q. Which of the following is incorrect in relation to post-mortem findings

- A. In drowning case PMS is seen over limbs
- B. Greenish discoloration over subhepatic space can be seen 18 hrs
- C. Adipocere can be seen in drowning case (Hot and Humid)
- D. Cadaveric spasm is seen in one group of muscles.

Ans: A. In drowning case PMS is seen over limbs

Flowing water → PMS absent

Still water → PMS → Chest, Neck, upper arm

Just before death, a person made efforts to save himself which led to contraction of one group of muscles and primary relaxation was absent. What is true about this

- A. Rigor mortis = CADAVERIC Rigidity
- B. Cadaveric spasm = INSTANT R.M = CATALEPTIC RIGIDITY
- C. Algor mortis
- D. Livor mortis

Ans: B. Cadaveric spasm = INSTANT R.M = CATALEPTIC RIGIDITY

An intern was creating graph of PM calorificity in relation to temperature which was taken every hour for 24 hours. What is correct about this

- A. Parabola .
- B. Sigmoid
- C. Reverse sigmoid
- D. Continuous decreasing

Ans: B. Sigmoid

← Thanatology, Fetal Death, Asphyxial Death

Topic Notes: 11

PM caloricity

- Septicaemia
- Strychnine
- Heat stroke

During autopsy, the finding shown corresponds to:



- A. Congenital pulmonary hypoplasia
- B. Cardiac tamponade
- C. Pulmonary embolism
- D. Pulmonary artery aneurysm

Ans: B. Cardiac tamponade

Beck's Triad:

- Muffled Heart sound
- Distended Neck Veins
- Hypotension



Cadaveric spasm

← Thanatology, Fetal Death, Asphyxial Death

Topic Notes: 11

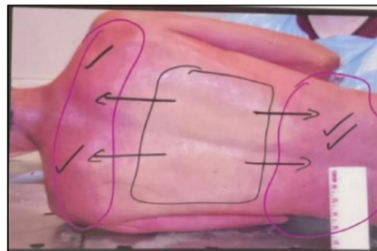


TACHE NOIRE

During autopsy, the doctor notices findings as shown in image. Which is true regarding the findings



- A. It is due to Sulph - haemoglobin pigment
 - B. This change is seen at 24 hours
 - C. It is nonbacterial
 - D. It is associated with lightning case
- Ans: A. It is due to Sulph - haemoglobin pigment



PM staining

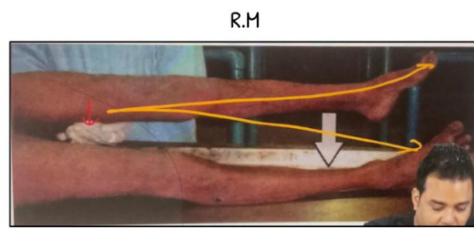
Match the following TSD

A - Marbling starts -2	1. 4-5 days
B - Adipocere starts	2. 5-10 days
C - Liquefaction of tissue	3. 2-3 days
D - Sphincter relaxation	4. 24 hours

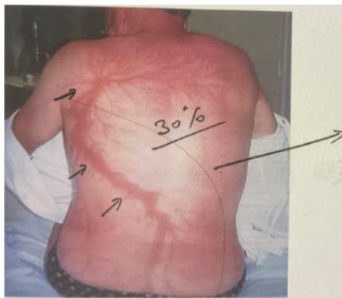
← Thanatology, Fetal Death, Asphyxial Death

Topic Notes: 11

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



Rigor Mortis



Patient surviving lightning Filigree pattern

Q. First structure to show rigor mortis

- A. Heart
- B. Eyelids
- C. Lips
- D. Jaw muscles

Ans: A. Heart

Post-mortem caloridity is seen in all of the following except -

- A. Heat stroke
- B. Pontine haemorrhage
- C. Strychnine poisoning
- D. Mercury poisoning

Ans: D. Mercury poisoning

 **Thanatology, Fetal Death, Asphyxial Death**

Topic Notes: 11

What is preserved in death due to inhalational anaesthetic agent

- A. Injection site
- B. Mesenteric fat
- C. Liver
- D. Spinal cord

Ans: B. Mesenteric fat

Under what circumstances dying declaration (dd) given by a person of sound mind becomes invalid

- A. If victim survives after recording DD
- B. DD was half recorded
- C. DD not signed by the dying person
- D. If DD recorded by doctor

Ans: A. If victim survives after recording DD

Sound mind

↓

Compos mentis

Rotten egg odour is associated with

- A. Arsenic – Garlicky
- B. Hydrogen sulphide
- C. Aluminium phosphide → G & Fishy
- D. Phosphorus → Garl

Ans: B. Hydrogen sulphide

Q. In assessing fetal deaths during autopsy, fodere's test involves

- A. Specific gravity of lungs
- B. Presence of air in stomach & intestine
- C. Weight of lungs
- D. Air in middle ear

Ans: C. Weight of lungs

Urine sample during autopsy is preserved in

- A. Rectified spirit
- B. Saturated saline
- C. Thymol

← Thanatology, Fetal Death, Asphyxial Death

Topic Notes: 11

D. Formalin

Ans: C. Thymol

Fishy odour is associated with which poisoning

A. Arsenic

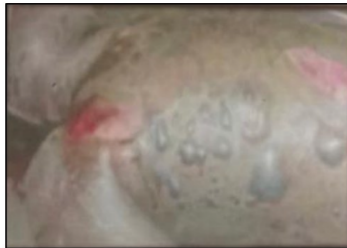
B. Zinc phosphide & Al.

C. Hydrogen sulphide

D. Chloral hydrate

Ans: B. Zinc phosphide & Al.

Q. In a patient tongue swelling, bloated face was noted along with findings as shown in image. What is the probable cause?



A. Electric burn

B. Crocodile burn

C. Scalds

D. Putrefaction

Ans: D. Putrefaction

Q. In assessing fetal deaths during autopsy, Wredin's test involves

A. Specific gravity of lungs

B. Presence of air in stomach & intestine

C. Weight of lungs

D. Air in middle ear

Ans: D. Air in middle ear

(Raygat's test: Opt A

SG > 1 Sink

SG < 1 Float.

← Thanatology, Fetal Death, Asphyxial Death

Topic Notes: 11

Ploquet's test:

$$\frac{\text{Wt of both lungs}}{\text{Wt of fetus}})$$

Two friends fought with each other over the issue of a female. One of the male pushed other & kept his feet over chest of other and put pressure over his airways with his hands. This suggestive of

- A. Burking - Homicidel
- B. Overlaying - Accidental
- C. Smothering
- D. Traumatic asphyxia

Ans: A. Burking - Homicidel



Smothering

A case of hanging has come to forensic department for autopsy. The autopsy Dr. notices a ligature mark covering about 1/3rd of neck, protruded tongue, salivary stains opened right eye, closed left eye, both pupils dilated. What is the probable reason for opened right eye

→ LE FACIEC sympathique

- A. Compression of IJV
- B. Compression of ICA
- C. Compression of Cervical sympathetic chain
- D. Compression of Vagus

Ans: C. Compression of Cervical sympathetic chain



Tear of ICA seen in judicial case "Amussat Sign"

← **Thanatology, Fetal Death, Asphyxial Death**

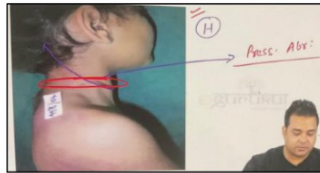
Topic Notes: 11



Garroting



Ligature strangulation



Pressure Abrasion



Typical Hanging



Manual strangulation

← Thanatology, Fetal Death, Asphyxial Death

Topic Notes: 11



Scratch Abrasion



Outward compression → Abduction fracture

Inward Compression



Throttling

HEMO CONC.

In a case of sea water drowning, which of the following abnormalities are noted

1. Hypernatremia
2. Hypercalcemia
3. Hypermagnesemia
4. Hyponatremia
5. Myocardial anoxia

A. 1, 2, 3, 4, 5

B. 1, 2, 3, 4

C. 1, 2, 3, 5

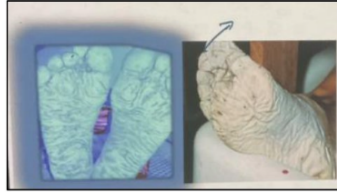
D. 1, 2, 3

Ans: C. 1, 2, 3, 5

← **Thanatology, Fetal Death, Asphyxial Death**

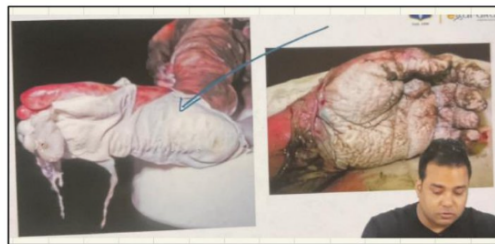
Topic Notes: 11

A dead body was recovered from near a pond by police. During autopsy, the finding as shown was noticed by the autopsy Doctor. This is suggestive of which of the following



- A. Post - mortem hanging
- B. Liquefactive necrosis
- C. Immersion in water for 36 hours
- D. Falanga

Ans: C. Immersion in water for 36 hours



Immersion in water for more than 1 week.

Drowning:

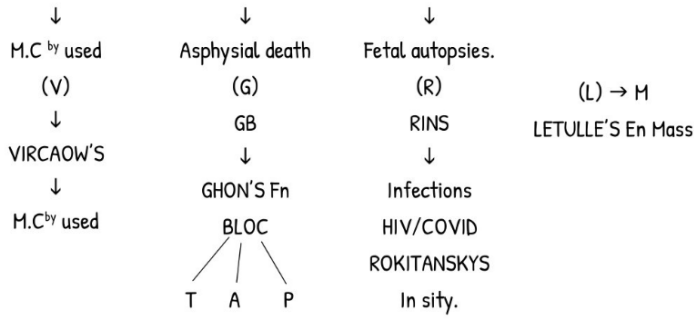
Freshwater	Saltwater
Hemodilution + Rupture of RBC	Hemoconcentration + shrinking of RBC
Hyperkalemia	↑↑ Na ⁺ , Cl ⁻
Hypo Na ⁺ Mg ²⁺ Cl ⁻ Ca ²⁺	↑ Mg ²⁺ , Ca ²⁺

Autopsy incisions:

- I shaped → M/c used
- Y shaped → Asphyxial death
- Mod. Y shaped → Fetal autopsies
- Inverted Y shaped

← Thanatology, Fetal Death, Asphyxial Death

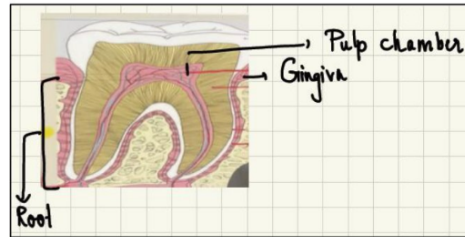
Topic Notes: 11



← Identification, Trace Evidence

Topic Notes: 10

Identification, Trace Evidence



Age from Teeth:

- Boyde's
- Stack's
- Gustafson - Johanson
 - S Secondary dentine
 - C Cementum opposition
 - R Root resorption
 - I Attrition
 - P Paradectosis
 - T Transperency of root
- Lamendins

Temporary teeth $\left\{ \begin{array}{l} 1^{st} \rightarrow L.C.I @ 6M \\ Last \rightarrow M_2 @ 2\frac{1}{2} Yr. \end{array} \right.$

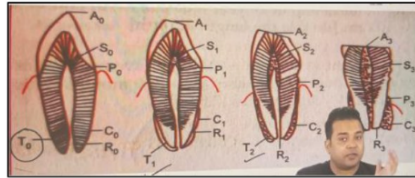
Permanent (Mnemonic)

Mummy	M ₁	6y	P.T	T.T	
is	CI	7y	= 4 + 20	= 24	} = 24
in	LI	8y	= 8 + 16	12 + 12	
pain	PM ₁	9y	16 + 8		
Papa	PM _L	10y	20 + 4		
can	C	11y	24 + 0		
take	M ₂	12y	28 + 0		
medicine	M ₃	17y	32 + 0	= 32	

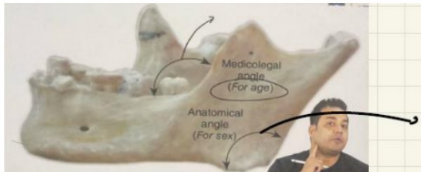
← Identification, Trace Evidence

Topic Notes: 10

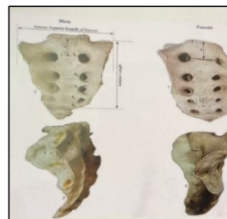
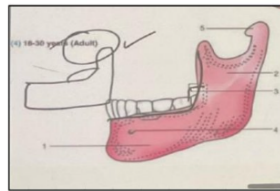
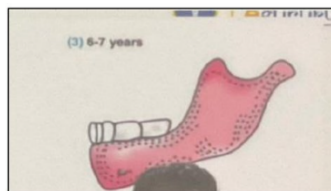
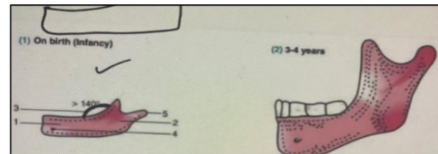
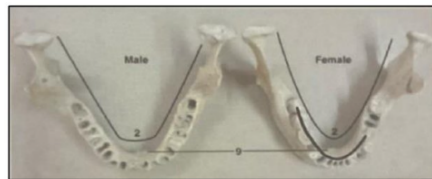
Gustafson method:



Mandible:



>125° → Female
 <125° → Male



← Identification, Trace Evidence

Topic Notes: 10

$$\text{CBI} = \text{Corporobasal Index} \rightarrow \frac{\text{Breadth of } S_1}{\text{Total breadth}} \times 100$$

>45 in Male
<40 in Female

All Parameters → LARGE WIDE in Female (except)

O – OBT. FORAMEN

S – S.I ARTICULATION

A – ACETABULUM.

Male pelvis brought by police was analysed in Forensic department. To consider this as male pelvis bone which features should be present:

1. Large obturator foramen
2. Large sacroiliac joint surface
3. Large acetabulum
4. Subpubic angle – V shaped
5. Ischial tuberosity everted
6. Prominent preauricular sulcus
7. Large & wide greater sciatic notch

A. 1, 2, 3, 4

B. 1, 4, 5, 6

C. 1, 2, 3, 6

D. 2, 3, 4, 6

Ans: A. 1, 2, 3, 4

- All param → LARGE in ↑ except
(F) & (P) EMINENCE
NASAL Aperture

Female skull brought by police was analyzed in Forensic department. To consider this as female skull bone which features should be present :

1. Prominent F & P eminence
2. Narrow mastoid
3. Small, smooth glabella
4. Square orbits
5. Prominent cheek
6. Round forehead

A. 1, 2, 3, 5

B. 1, 4, 5, 6

C. 1, 2, 3, 6

← Identification, Trace Evidence

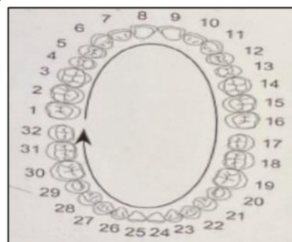
Topic Notes: 10

D. 2, 3, 4, 5

Sternum - Ashley's rule

Length of Manubrium & body of sternum → >149 mm → Male
 < 149 mm → Female

Q. The following image depicts which method of dental charting



- A. Palmers
- B. Hader-up
- C. Universal
- D. FDI

Ans: C. Universal

EDCBA	ABCDE	87654321	12345678
EDCBA	ABCDE	87654321	12345678

Palmar method.

HADER-UP			
Permanent			
+	8+7+6+5+4+3+2+1+	+1+2+3+4+5+6+7+8	
R	8-7-6-5-4-3-2-1-	-1-2-3-4-5-6-7-8	L
Different variations for temporary teeth:			
+	05+04+03+02+01+	+01+02+03+04+05	
R	05-04-03-02-01-	-01-02-03-04-05	L

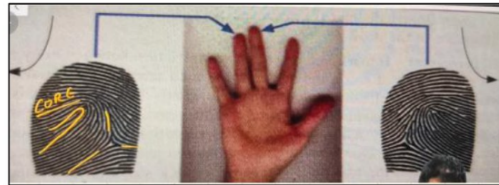
Hader-up method

← Identification, Trace Evidence

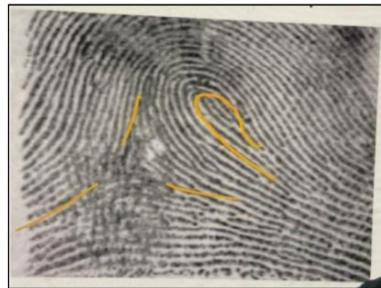
Topic Notes: 10

Permanent	
Upper right - 1	Upper left - 2
18 17 16 15 14 13 12 11	21 22 23 24 25 26 27 28
R	L
48 47 46 45 44 43 42 41	31 32 33 34 35 36 37 38
Lower right - 4	Lower left - 3
Deciduous	
Upper right - 5	Upper left - 6
55 54 53 52 51	61 62 63 64 65
R	L
85 84 83 82 81	71 72 73 74 75
Lower right - 8	Lower left - 7

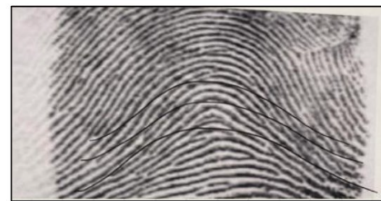
F.D.I Method



L.C.D = Loop → 1C + 1D



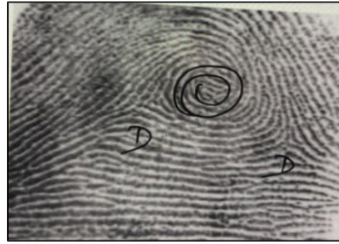
L.C.D



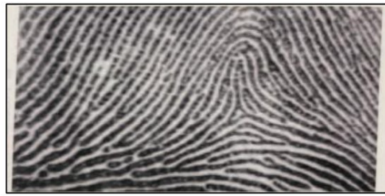
Plain Arch

← Identification, Trace Evidence

Topic Notes: 10



Whorled



Tented Arch

Blood grp.

L → L C D → O⁺ A⁺ AB

W → WD₂ → O⁻ A⁻ B

A — Plain
 Tented

C → Mixed

Match the following in relation to fingerprint changes

A - Pattern retained but change in distance b/w ridges	1. Acromegaly
B - Complete loss of pattern with ridges atrophy	2. Coeliac disease
C - Incomplete ridge atrophy	3. Dermatitis
D - permanent loss of fingerprint	4. Radiation burn
E - Ridge alteration	5. Scleroderm

A. A-1, B-2, C-3, D-4, E-5

B. A-4, B-1, C-3, D-2, E-5

C. A-4, B-1, C-2, D-3, E-5

D. A-1, B-4, C-3, D-2, E-5

Ans: A. A-1, B-2, C-3, D-4, E-5

← **Identification, Trace Evidence**

Topic Notes: 10

Q. All are features of male skull except

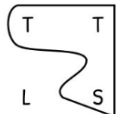
- A. Large mastoid
- B. Large foramen magnum
- C. Prominent supraorbital ridges
- D. Prominent frontal & parietal eminence & Nasal Aber

Ans: Option D

Q. First carpal bone to ossify

- A. Capitate ✓
- B. Hamate
- C. Scaphoid
- D. Triquetrum

H	⊙	T	T
P	T	L	S

H	C		
(3m)	(2m)		
P	T	L	S
(9-12m)	3y	4y	→ 4-5 y

Ans: Option A

Q. Corpro - basal index is

- A. Breadth of S1 * 100/total breadth of sacrum
- B. Breadth of S1 * 100/total length of sacrum
- C. Breadth of S5 * 100/total length of sacrum
- D. Breadth of S5 * 100/total breadth of sacrum

Ans: Option A

Cephalic index in Indians is

- A. 70-75
- B. 75-80
- C. 85-90
- D. 90-95

Ans: B. 75-80

C.I	70-74.9 = D	C	A	N
	75-79.4 = M	Ind	Chi	Eur
	80-85 = B	Mong.		

← Identification, Trace Evidence

Topic Notes: 10

A white clothe brought by police is exposed to Barberios testing. This test detects which of the following in sample

- A. Fructose
- B. Choline
- C. Spermine
- D. Acid phosphatase

Ans: C. Spermine

Q. Police goes to crime scene & finds some red color stains. After examination of sample under microscope, crystals were seen as dark brown color & rhombic shaped. These crystals are formed in which of the following test (T) (T)

- A. Teichman's
- B. Florence
- C. Barberios
- D. Takayama

Ans: A. Teichman's

Q. Police goes to crime scene & finds some white color stains. After examination of sample under microscope, crystals were seen as shown in image. These crystals are formed in which of the following test.

- A. Teichman's
- B. Florence
- C. Barberios
- D. Takayama

Ans: B. Florence

Microscopic crystals as shown is seen in which test



- A. Teichman
- B. Takayama
- C. Florence
- D. Barberios

Ans: B. Takayama



Identification, Trace Evidence

Topic Notes: 10

Q. Yellow color needle shape crystals are seen in microscopy in which test



A. Teichmann's

B. Barberios

C. Takayama

D. Florence

Ans: B. Barberios

Q. Which test is used to differentiate species of a blood sample/ whether sample belongs to human or animal

A. Teichman's

B. Takayama

C. DNA based methods / PRECIPITIN / Immunological

D. Barberios

Ans: C. DNA based methods / PRECIPITIN / Immunological

The examination of a rape accused was being done in Forensic department Which of the following test is used to identify the presence of vaginal epithelial cells on glans penis of the accused.

1. Barberios test

2. Lugol's iodine test

3. Florence test

4. Precipitin test

A. 1, 2, 3, 4

B. 1, 2

C. 1, 2, 3

D. Only 2

Ans: B. 1, 2

← Identification, Trace Evidence

Topic Notes: 10

Q. En bloc removal of organs during autopsy is done in which dissection method

- A. Virchow's
- B. Ghon's GB
- C. Rokitansky
- D. Letulle's

Ans: B. Ghon's

In a HIV infected dead body autopsy will be done by which dissection technique

- A. Ghon's
- B. Letulle's
- C. Virchow's
- D. Rokitansky's

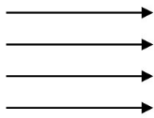
Ans: D. Rokitansky's

1) LINK

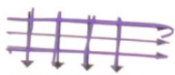


→ M.C by used

2) LINE



3) GRID



→ MOST EFFECTIVE

4) ZONE



→ CLOSED Apartment

5) WHEEL / RAY



6) Spiral



Water bodies

← Toxicology, Miscellaneous

Topic Notes: 13

Toxicology, Miscellaneous

A 5-year-old child is admitted to the hospital after ingesting pills he found in a cabinet at home. The child is rapidly becoming obtunded. Laboratory studies show a serum AST level of 850 U/L and ALT level of 1052 U/L. The child's respiratory and cardiac status remain stable. Which of the following drugs was most likely ingested?

- A. Acetaminophen
- B. Penicillin
- C. Aspirin
- D. Sulfamethoxazole
- E. Codeine

Ans: A. Acetaminophen

Hepatic Poisons:

PCM → Stage

- I (30 min - 1D) → GIT → Diaphor.
- II (1-2 d) → Asymptomatic, LFT Abnormal
- III (2-4 d) → Hepatic necrosis by NAPQT.

Antidote

- NAC → ↑↑ Glutathione
Inhibits NAPQ1 Binding.
- Methionine

Iron

Stage - I → 0-6 hrs → GIT → GI bleeding

Stage - II → 6-24 hrs → Recovery

Stage - III → 1-2 d → CNS, CVS, met. Acidosis

Stage - IV → 2-4d → Hepatic

Stage - V → 5d - week → GIT strictures.

Antidote: Desferoxamine Mesylate

In chronic: Deferipnone

Phosphorus:

Luminescent fecus & vomitus

Hepatic necrosis

Antidote: Vit. K.

 **Toxicology, Miscellaneous**

Topic Notes: 13

In Chronic poisoning: Phoscy Jaw

NAPQI

N - acetyl - p - benzoquinone imine is toxic metabolite of which of the following

- A. Aspirin
- B. Methanol
- C. Paracetamol
- D. Quinidine

Ans: C. Paracetamol

Drug of choice for management of muscarinic poisoning is

- A. Naloxone
- B. Atropine
- C. Flumazenil
- D. N-acetyl-cysteine

Ans: B. Atropine

A 40-year-old male is having acute loss of hair with loss of hair at lateral part of eyebrow. His wife noticed some behavioural abnormality in her husband and took him to Doctor. Dr notices something over his nails. What is the diagnosis

- A. Arsenic
- B. Lead
- C. Thallium
- D. Mercury

Ans: C. Thallium

Acute loss of hair → Madarosis in nails → Aldrich mees lines.

Antidote: Prussian blue.

Woman comes to ER with history of intake of 20 PCM tablets. According to Doctor on duty which drug should be started

- A. N-acetylcysteine
- B. Naloxone
- C. Naltrexone
- D. Chlorpromazine

Ans: A. N-acetylcysteine

← Toxicology, Miscellaneous

Topic Notes: 13

Case of opium poisoning comes in comatose state which respiratory distress in R.

Treatment to be given is

- A. Naloxone (opium withdrawal)
- B. Nalrexone
- C. Flumazenil - ↓↓ HR, RR, BP
- D. Chlordiazepoxide - MIOSIS

Ans: A. Naloxone

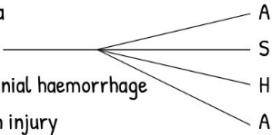
A 50-year-old male suddenly stopped alcohol consumption for 3 days and presents in hospital with agitation, altered sensorium, paranoid delusions and hallucinations. The most likely diagnosis is

- A. Wernicke's encephalopathy
- B. Korsakoff's psychosis
- C. Hangover
- D. Delirium tremens

Ans: D. Delirium tremens

Oral chlordiazepoxide I-V lorazepam / Oxazepam

Q. Gordon's classification is for

- A. Asphyxia
 - B. Hypoxia
 - C. Intracranial haemorrhage
 - D. Whiplash injury
- 

Ans: B. Hypoxia

Q. Blue colour of stomach mucosa is seen with which poisoning

- A. Cresol
- B. Phenol
- C. Arsenic
- D. Amytal capsules

Ans: D. Amytal capsules

Blue - Amytal capsules, CuSO_4 | Green → FeSO_4

Red velvety → Arsenic

Black charred → H_2SO_4

Buff white → phenol

Yellow → HNO_3

← Toxicology, Miscellaneous

Topic Notes: 13

- C. Dimercaprol = B.A.L → (i.m)
 D. Freshly prepared hydrated ferric oxide.
 Ans: Option (C)

A 40 year old patient of chronic arsenic poisoning has come to hospital. The doctor will notice which of the following clinical features in the above case

1. Aldrich mees line
 2. Rain drop pigmentation
 3. Peripheral neuritis
 4. Luminous vomiting
 5. Bone marrow depression
- A. 1, 2, 3, 4, 5
 B. 1, 2, 3
 C. 1, 2, 3, 5
 D. 2, 3, 4, 5
 Ans: ©. 1, 2, 3, 5

A 45-year-old female with history of alcoholism for about 10 years develops liver cirrhosis. Now she suddenly leaves alcohol and within 2-3 days presents in casualty with withdrawal symptoms in unconscious stage. Preferred treatment given is

- A. Diazepam
 B. Alprazolam
 C. Lorazepam
 D. Clonazepam
 Ans: C. Lorazepam

Q. A person got agitated, fainted and lost consciousness at airport. A bag full of enema & laxatives was recovered from him. During treatment x-ray abdomen showed a picture as shown. All of the following is true in this scenario Except



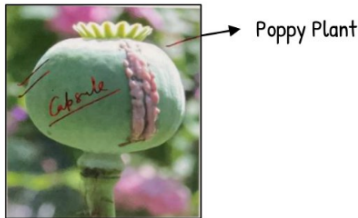
- A. Abdominal scan is indicated
 B. The person is malingering

← Toxicology, Miscellaneous

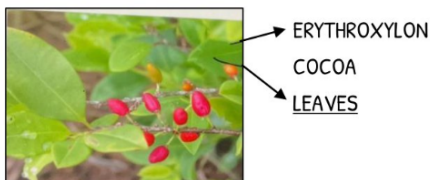
Topic Notes: 13

- C. He is at risk of poisoning
 - D. It's a case of body packers syndrome
- Ans: B. The person is malingering

Body stuffer's syndrome:
 ↓
 With drugs



What is this?



Monorocks is the combination of

↓

- A. Ecstasy + LSD → CANDY FLIPPING
- B. Ecstasy + sildenafil → SEXTASY
- C. Smoking - Cocaine + heroine → MOON ROCKS.
- D. i.v - Heroin + cocaine → SPEED BAIL
- E. i.v Heroin in one arm & i.v cocaine in another arm = STEREO SHOOTIN
- F. Ethyl alcohol + chloral hydrate Micky finn

← **Toxicology, Miscellaneous**

Topic Notes: 13

Identify the method of solvent abuse



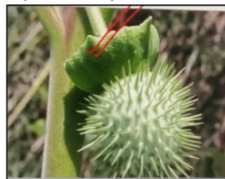
- A. Bagging
 - B. Huffing
 - C. Glading
 - D. Sniffing
- Ans: C. Glading

Identify the method of solvent abuse



- A. Bagging
 - B. Huffing
 - C. Glading
 - D. Sniffing
- Ans: A. Bagging

Q. The toxin extracted from the poisonous plant shown in image is

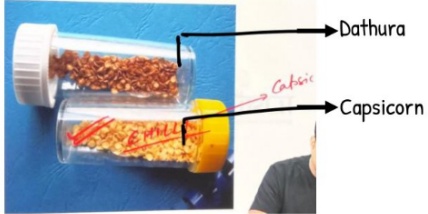


- A. Conine
 - B. Hyoscine
 - C. Thebaine
 - D. Tetrahydro - Cannabinol
- Ans: B. Hyoscine

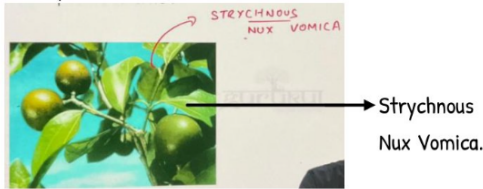
← Toxicology, Miscellaneous

Topic Notes: 13

Dathura seeds resembles with which SEEDS?



Which plant is this?



These seeds are?



A 45 years old man on herbal medication, developed generalized muscle spasm and arching backwards as shown in the image. He a history of consuming seeds a few days back. What is the toxin responsible for this abnormal Poisoning

- A. Datura Seeds
- B. Strychnine
- C. Abrus
- D. Ricinus

Ans: B. Strychnine

Strychine Poisoning

Sign & Symptoms-

- Risus sardonicus
- Opisthotonus
- Emprosthotonus
- Pleurosthotonus



← Toxicology, Miscellaneous

Topic Notes: 13

Tall peak T wave in ECG is associated with which snake bite

- A. Krait
- B. Nose humped pit viper
- C. Mesobuthus
- D. Chactidae } scorpion

Ans: A. Krait

Seeds



Semecarpus Anacardium



Abrus precatorium

Spanish fly = blister beetle = cantharides



Cantharides:

Blister → Viper bite, Co, 2° Flame burn, Scald,

Aphrodisiac

Priapism → Scorpion venom
 → Triazodone

Scorpion



- Q. As per MTP act 2021, opinion of two doctors is needed for
- 1 Dr → upto (20 wks)
 - Med. Board → > 24 w
- A. 12-20 weeks pregnancy + O/G

 **Toxicology, Miscellaneous**

Topic Notes: 13

- B. 20-24 weeks pregnancy † Pedia
 - C. 12-24 weeks pregnancy † Radio / Sorologist
 - D. 20-26 weeks pregnancy
- Ans: B. 20-24 weeks pregnancy

IPC 313 in relation to criminal abortion deals with which of the following

- A. Abortion with consent 312
- B. Abortion without consent 313
- C. Death of female d/t abortion ✖
- D. Causing death of quick unborn child while trying to kill mother 3/6

Ans: B. Abortion without consent 313

Q. Artificial bruise can be differentiated from true bruise by which following

- A. Presence of vesicles
- B. Colour change noted with time
- C. Diffuse irregular margins
- D. No itching

Ans: A. Presence of vesicles

A female comes to gynecologist for hysterectomy and discusses with Dr about advantages & disadvantages of the procedures available. Which type of consent is this

- A. Silent
- B. Blanket
- C. Implied
- D. Informed [written]

Ans: D. Informed [written]

Q. Grievous Hurt is said to be there if the person is in severe body pain/unable to follow ordinary pursuits for minimum how many days

←
CLAUSE (8)

- A. 16
- B. 18
- C. 20
- D. 25

Ans: C. 20

 **Toxicology, Miscellaneous**

Topic Notes: 13

Q. A substance abuser was found on roadside with pinpoint pupil. Which of the following should be suspected

- A. Morphine
- B. Cocaine & AMPH & DHATURA] MYDRiasis
- C. LSD
- D. Cannabis

Ans: A. Morphine

Pinpoint pupil seen in:

Opioids, phenol, OPC, Barbiturates, pontine haemorrhage

In a case of OPC poisoning, the treating Dr noted that during management with atropine & pralidoxime, the patient has become hyperthermic, which is associated with

- A. OPC poison
- B. Atropine toxicity
- C. Oximes toxicity
- D. Aspiration pneumonitis

Ans: B. Atropine toxicity

Q. In an injury, it is noticed under microscope that hair bulbs were crushed. Most likely the injury is

- A. Abrasion
- B. Incised wound
- C. Lacerated wound
- D. Stab wound

Ans: C. Lacerated wound

Q. A person was brought to OPD with history of snake bite 8 hours ago. Patient was noted to be in respiratory depression & HR-50 & drooping of eyelids was noted bilaterally. 10 vials antivenom was administered. In the hospital no ventilator was available. What will be next management?

- A. Give atropine + neostigmine
- B. Check for blood coagulation
- C. i.v hydrocortisone
- D. Inj Epinephrine

Ans: A. Give atropine + neostigmine

← Toxicology, Miscellaneous

Topic Notes: 13

A farmer was sleeping in his agricultural field when something bit him and he saw something moving away. He woke up with pain at bite site, drowsiness & uncontrollable bleeding at local bite site. This is suggestive of which bite

- A. Scorpion
- B. Cobra
- C. Viper
- D. Wasp

Ans: C. Viper

Q.A 40-year-old female who has been smoking cigarettes for few years, now wants to leave the habit of smoking. The drug used should be

- A. Bupropion
- B. Varenicline (most effective)
- C. Nicotine gum
- D. Clonidine

Ans: B. Varenicline (most effective)

TOXIC AGENT	ANTIDOTES
PCM (acetaminophen)	N-acetylcysteine
Anticholinergics (datura, atropine)	Physostigmine
Anticholinergic (antipsychotic, TCA)	Hypertonic NaHCO ₃
Anticholinesterases (OPC, carbamates, nerve gases) & cholinergic agonists like mushrooms (inocybe sp.)	Atropine
BZD	
Opioids	Naloxone & Nalmefene (i.v) Naltrexone - (oral - used for maintenance)
Cyanide & H ₂ S	Hydroxycobalamin or kit of (amyl nitrite + sodium nitrite + sodium thiosulfate)
Methanol & ethylene glycol	4-methyl pyrazole = fomepizole - (inhibits alcohol dehydrogenase)

POISONING	TREATMENT / ANTIDOTE
Valproate	Levocarnitine
Heparin	Protamine sulphate

**Toxicology, Miscellaneous**

Topic Notes: 13

Warfarin	Vit K
Arsenic	BAL = DIMERCAPROL
Lead For Lead encephalopathy or severe poisoning with BLL > 70 mcg/100 ml blood In renal impairment	Oral - DMSA (Succimer), Injetable - EDTA BAL + EDTA Only BAL (as excreted in bile)
Mercury - Acute	BAL
Mercury - Chronic	N-acetyl Penicillamine, (for organic add

Beta - blocker	→ Glucagon
Digoxin, foxglove, toad skin secretions	→ Digibond - Fab fragment (digoxin specific)
Isoniazid - INH	→ Pyridoxine (B ₆)
Scorpion sting	→ Scorpion antivenom, prazosin can be used
Meth Hb nemia	→ (Methylene blue + O ₂ supplementation)
Thallium	→ Prussian blue (potassium ferric hexacyano)
Aspirin (causes HAGMA with respiratory alkalosis + tinnitus & ketosis, increased excretion of Na ⁺ & K ⁺)	Activated charcoal, Alkaline diuresis, Hemperitoneal Dialysis.

Active principles-in vegetable poisons

- Abrus precatorius Abrin
- Semecarpus anacardium - Semecarpol & Bhilawanol
- Ricinus communis (castor) - Ricin (not present in castor oil, so oil is nontoxic)
- Croton tiglium (jamalgota)- Crotin (oil is toxic)
- Capsicum annum (chilli)- capsaicin, leads to HUNAN hands
- Calotropis gigantea (madar)- calotoxin, uscharin, calactin

Active Principles

- Strychnum nux vomica (FD- 1 CRUSHED Seed) - strychnine, brucine, loganin
- Gelsemium - gelsemine, scopoletin