

MEDICO-LEGAL ASPECTS OF INJURIES IN CRIMINAL CASES

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What is an Injury?

Legal Definition (Section 44 IPC):

Any harm whatsoever in nature caused illegally to body, mind, reputation, or property

What is a Wound?

Medical Definition:

Any breach in continuity of skin or mucous membrane is a wound

What is Hurt?

Section 319 IPC:

“Whoever causes bodily pain, disease or infirmity to any person is said to have caused hurt”

What is an Assault?

Section 251 IPC:

An offer of threat or attempt to apply force to the body of another in a hostile manner. It does not matter whether it injures him physically or not.

Penal Provisions

There are 82 Sections in IPC
dealing with Offences
against Human Body-
Section 299-377

Examination for Injury

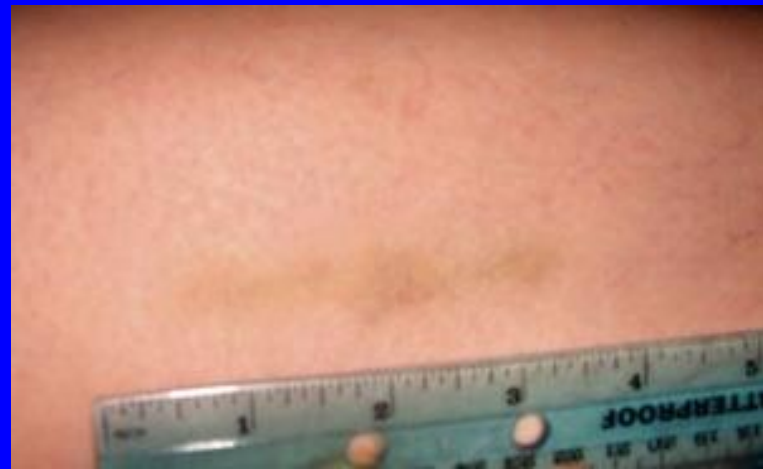
- Type of Injury
- Size and Shape of Injury
- Site/ Location of Injury
- Nature of Injury

Type of Injury

SOME COMMON TYPES OF INJURIES

- Bruise
- Abrasion
- Laceration
- Incised
- Penetrating
- Firearm
- Burn

BRUISE



Medico-legal Aspects of Bruises

- Patterned bruise: Indicate type of weapon
- Degree of violence: Number and size of bruises
- May appear latter if bruises are deep seated
- Over bony prominences indicate: Accident
- Bruise on top of head: Homicide
- Bruise over neck: Throttling

Medico-legal Aspects of Bruises

- Self-inflicted bruises are rare
- False bruises can be produced by applying irritants like juice of marking nut
- Railway track bruise: Lathi blow

ECTOPIC BRUISE



ABRASION



ABRASION- PRESSURE



PRESSURE IMPRINT ABRASION



SCRATCH ABRASION



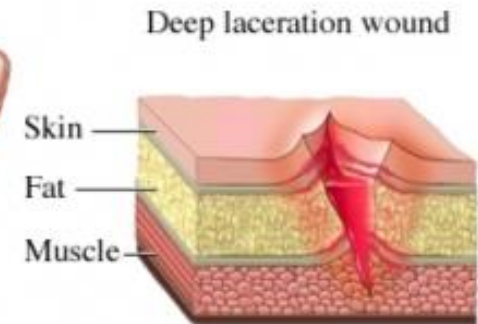
Medico-legal Aspects of Abrasions

- Generally simple injuries
- May be the indication of a serious internal injury
- Can indicate the type of weapon
- The direction of application of force and relative position of victim and assailant can be assessed
- Age of injury can be make out

Medico-legal Aspects of Abrasions

- Extensive graze abrasions: RTA, fall, train
- Abrasion over private parts, thighs and breast in female: Sexual assault
- Nail abrasions in Neck: Throttling
- Scratches around mouth and nose: Smothering
- Excoriations mimicking abrasion can be produced by Ants and Cockroaches

LACERATED WOUND



Medico-legal Aspects of Laceration

- Usually either accidental or homicidal
- Laceration over head top: Indicate homicide
- Place of infliction of injury: By presence of foreign substance like dust, sand, gravel etc.
- Incised looking lacerated wound
- Post-mortem lacerations: By land and aquatic animals

INCISED WOUND



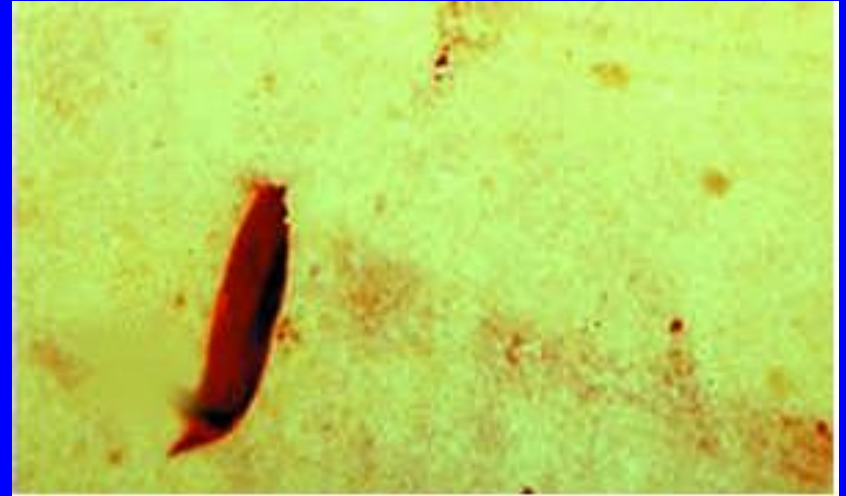
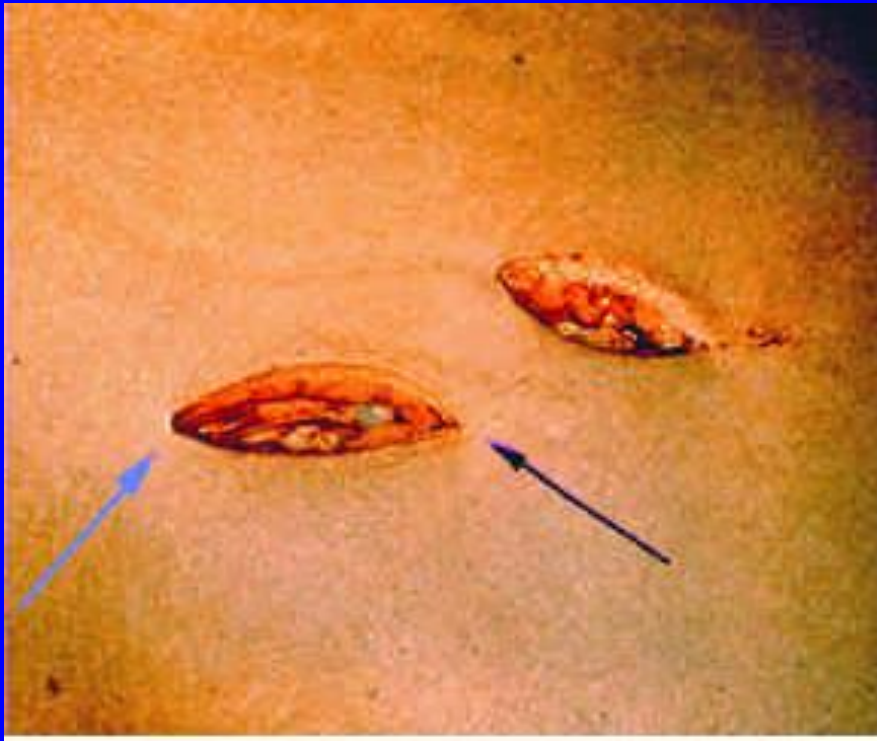
incised wound shows direction of force
which is determine by undermining of tissue



Medico-legal Aspects of Incised Wound

- Nature of weapon
- Direction of application of force
- Mode of production: By position and characters of wound
- Fabricated incised wounds
- Defence and tentative wounds
- Age of injury

STAB WOUND



Medico-legal Aspects of Stab or Punctured Wound

- Seldom suicidal
- Commonly homicidal and rarely accidental
- Indicate the type of weapon
- Indicate position of victim and assailant
- Direction of force
- More likely to be fatal

CHOP WOUND



RIFLED FIREARM INJURY



RIFLED FIREARM INJURY



GUNSHOT WOUND



SMOOTH BORE FIREARM INJURY



near range shot gun



distant wound shot gun

Medico-legal Aspects of Firearm Injuries

- Commonly homicidal, may be suicidal, rarely accidental
- Suicidal injuries: Commonly in the temple region followed by heart
- Number of wounds indicate mode of injury
- Distance of firearm
- Direction of projectile and relative position of victim and assailant

FLAME BURN









Size & Shape of Injury

- Size: L X B X D (usually in cm)
- Shape: oval, circular, linear, cre-centric, irregular, spindle, triangular, wedge, stellate etc.

Site/ Location of Injury

- Part of Body where injury is present
- Direction of Injury: vertical/ horizontal/ oblique
- Position from two fixed points

Common Medical Terminologies

- Thorax
- Pelvis
- Lower extremity
- Upper extremity
- Cervical
- Fore arm
- Arm/ Upper arm
- Chest area
- Area below umbilicus
- Leg below hip joint
- Arm- below shoulder
- Neck
- Elbow- wrist
- Shoulder- elbow

Common Medical Terminologies

- Carpal
- Tarsal
- Scalp
- Mandible
- Maxilla
- Sternum
- Clavicle
- Finger bones
- Feet bones
- Covering over skull
- Lower jaw
- Upper jaw
- Bone of mid chest
- Collar bone

Common Medical Terminologies

- Proximal
- Distal
- Anterior/ Ventral
- Posterior/ Dorsal
- Flexor
- Extensor
- Near to centre of body
- Away from centre
- Front
- Back
- Usually front
- Usually back

Nature of Injury

- Simple
- Grievous
- Dangerous

Simple injury

- Definition: *No legal definition*- injury which is neither extensive nor serious and heals with out leaving a scar.
- Injury that is neither grievous nor dangerous is a simple injury

Grievous Hurt (S.320 IPC)

1. Emasculation
2. Permanent privation of sight of either eye
3. Permanent privation of hearing of either ear
4. Privation of any member or any joint
5. Destruction or permanent impairing of power of any member or joint
6. Permanent disfiguration of head or face

Grievous Hurt (S.320 IPC)

7. Fracture or dislocation of a bone or tooth
8. Any hurt which endangers life or which causes the sufferer to be during the space of twenty days in severe bodily pain, or unable to follow his ordinary pursuits.

Dangerous Injury

- Definition: *No legal definition*- injury that poses an imminent or impending threat to life and is sufficient to cause death in ordinary course of nature.

Gray/ Difficult Areas

- Privation- loss, difficulty
- Permanent ?
- Member- limb (Loss of function of finger vis-a vis loss of function of kidney)
- Pain- Subjective feeling (No objective criteria to measure severity)

Opinion in MLC

- Vary from case to case, should include:
 1. No. of Injuries
 2. Duration of Injury
 3. Cause of Injury
 4. Nature of Injury

Duration of Injury

- Age in Injury
- Based on the changes that occurs in injury, if the person is alive after injury

Age of Bruise

- Fresh- Bright red
- Few hour -2 days- Bluish
- 2-3 days- Bluish black/ brown
- 4-5days- Greenish
- 7-12 days- yellowish
- 2 weeks- Normal

Age of Abrasion

- Freshly produced- Bright red lesion
- 12-24 hrs- Blood and lymph dries up and forms scab
- 2-3 days- Scab turns brownish
- 1 week- Scab dries and fall off

Age of Incised wound

- Immediate – Bleeding
- 12-24 hours- Coagulated blood
- 3-5 days- wound is approximated
- 6 days- scar is complete
- 2-4 weeks- falling off the scab

Age of Fracture

- Immediately- Hemorrhagic phase
- 1 day to one week- Proliferation phase
- 2 weeks- Callus phase
- 2-3 months- Consolidation phase
- 3-6 months- Remodeling phase

Mode of Injury

- Suicidal
- Homicidal
- Accidental
- Defence
- Fabricated/ self-inflicted

Whether Injury is Ante-mortem
or Post-mortem?

Difference Between Ante-mortem & Post-mortem Injury

Hemorrhage	Abundant, copious	Slight or absent
Signs of spurting	Present on body & clothes	No evidence
Coagulation	Firmly coagulated blood	No clotting or soft clot
Extravasated blood	Infiltrate in and around injured tissues and resist	Tissues are not deeply stained; can be easily

Difference Between Ante-mortem & Post-mortem Injury

Wound edges	Swollen, everted and retracted	Do not gape and edges are closely approximated
Vital reaction	Signs of inflammation and repair present	Absent

Peri-mortem Injury

Can a fatal internal injury be present without any external injury?

Which of the injuries caused death?

How long did the victim survive and could he have carried out any voluntary acts after receiving the injury?

**Can the wounds be altered from
their original appearance?**

MEDICINE IS ART OR
SCIENCE?

MEDICINE IS AN ART
PERFORMED IN SCIENTIFIC
WAY



Thanks for your time
and
active participation