

# 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

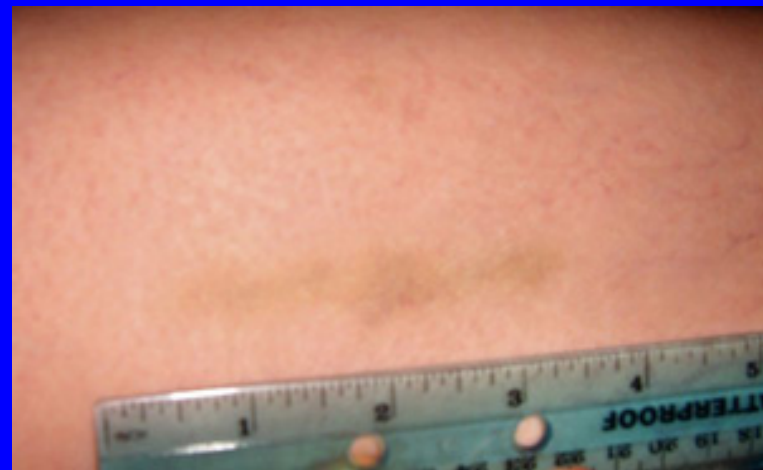
- Type of Injury
- Size and Shape of Injury
- Site/ Location of Injury
- Nature of Injury

# Type of Injury

## SOME COMMON TYPES OF INJURIES

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

# BRUISE



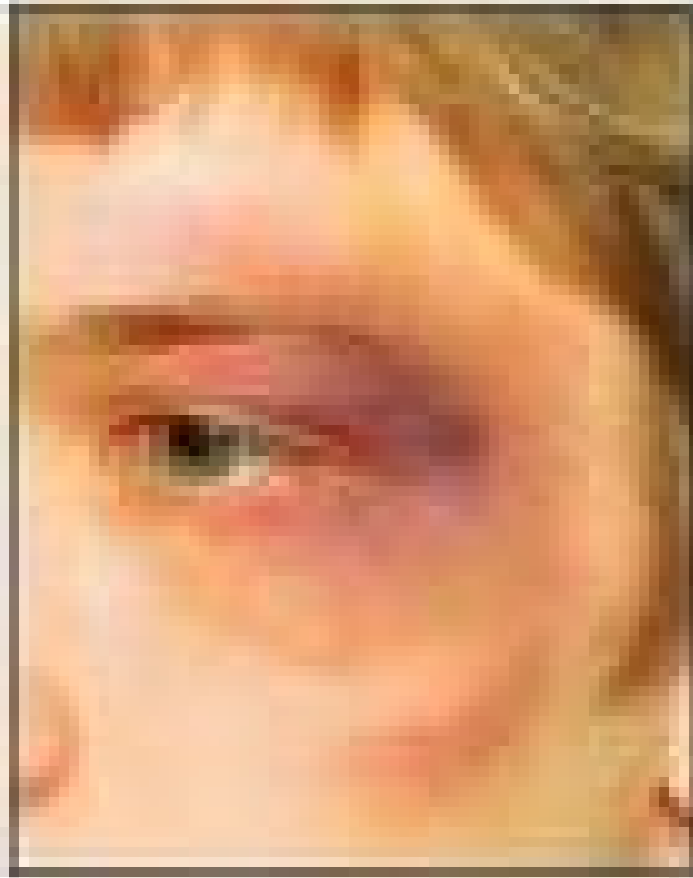
# Medico-legal Aspects of Bruises

- 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



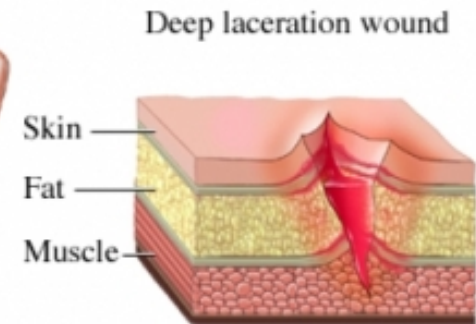
# Medico-legal Aspects of Abrasions

- 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

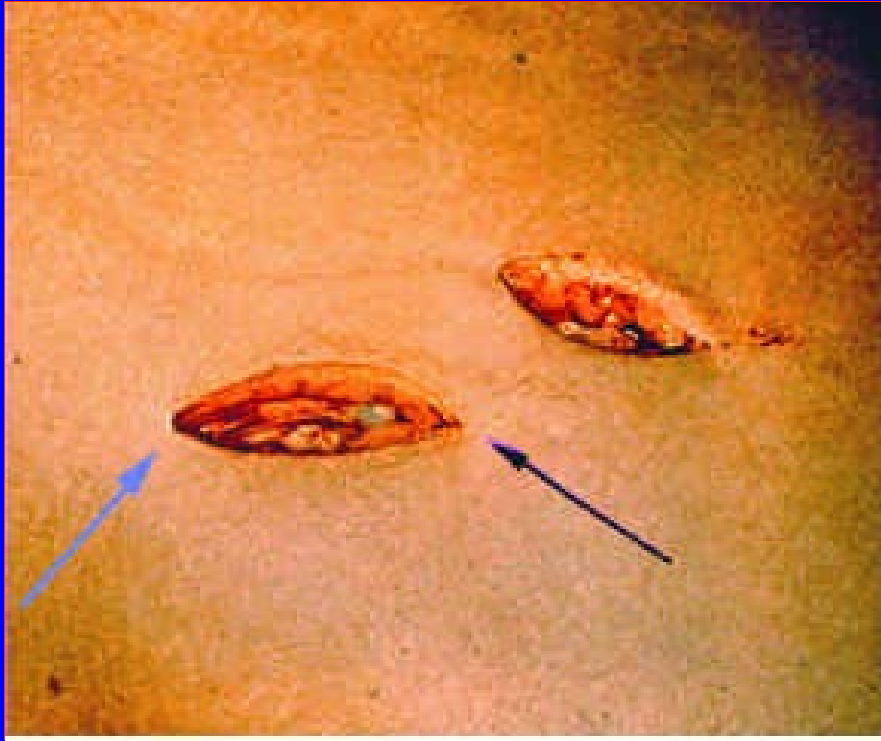
# INCISED WOUND



# 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



# 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