



Learning Objectives

- By the end of this session the learners will be able to:
 - Define and classify abrasion
 - Explain types of abrasion and mechanism of production
 - Differentiate between antemortem & postmortem abrasion.
 - Describe the medico legal aspects of abrasion

Injuries Classification

- Injury
- Wound
- Mechanical injury
- Classification based on causative factors
 - MET CR
- Medicolegal classification
- Classification based on time of infliction

Abrasions

- Definition
- Features
 - Involves epidermis
 - Bleeding slightly
 - No scar



Abrasions

- **Mechanism of production**

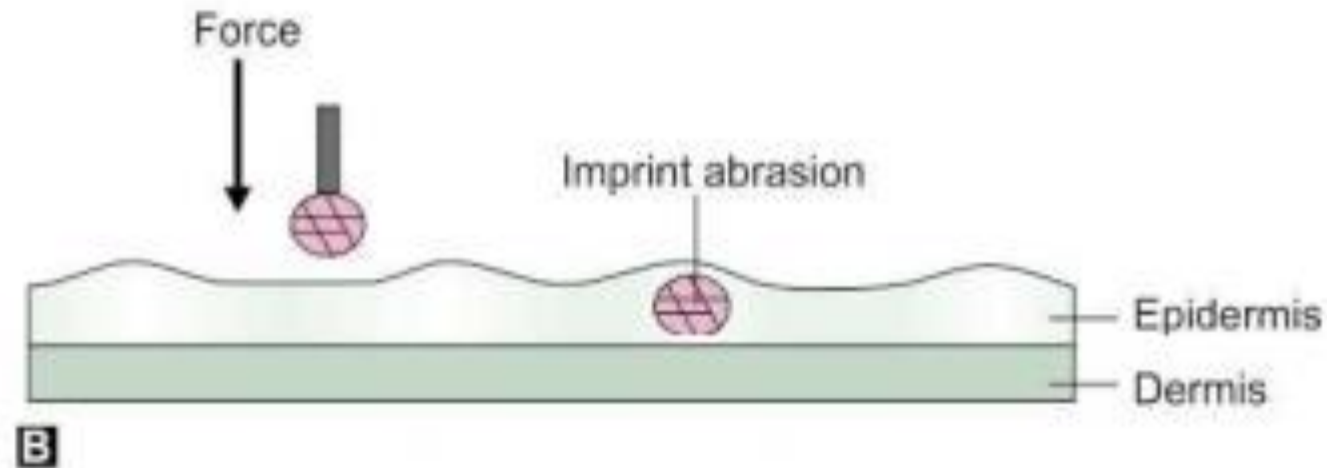
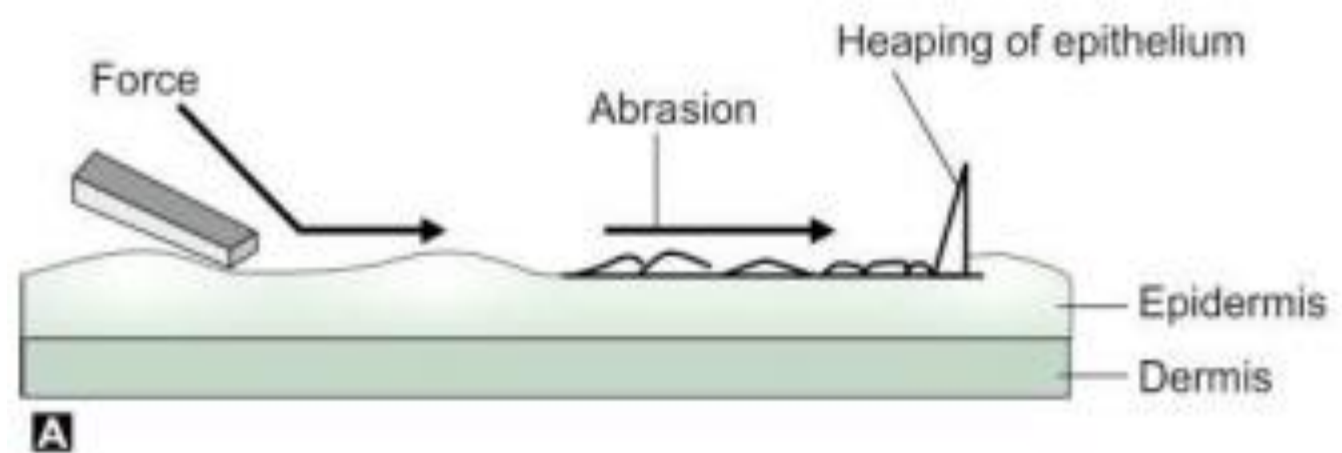
- Sliding force (friction)
- Compression force

- **Sliding force**

- Linear abrasion
- Graze abrasion

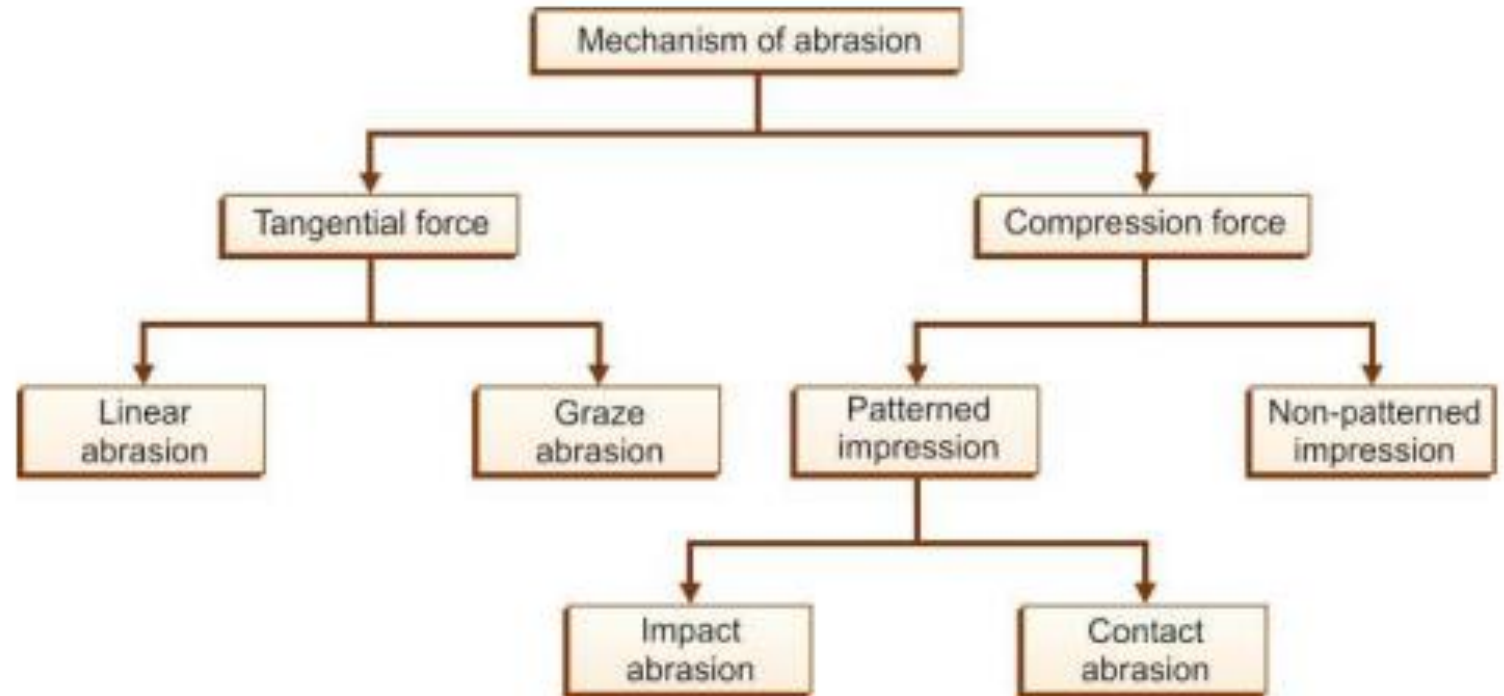
- **Compression force**

- Imprint abrasions, Perpendicular force
- Imprint of object on the skin, Radiator mark of vehicle
- Pressure abrasions, crushing of epidermis
- Imprint design, ligature mark



Types of Abrasions

- **Linear** abrasion
- Graze
- Pressure abrasion
- Imprint abrasion



Types of Abrasions

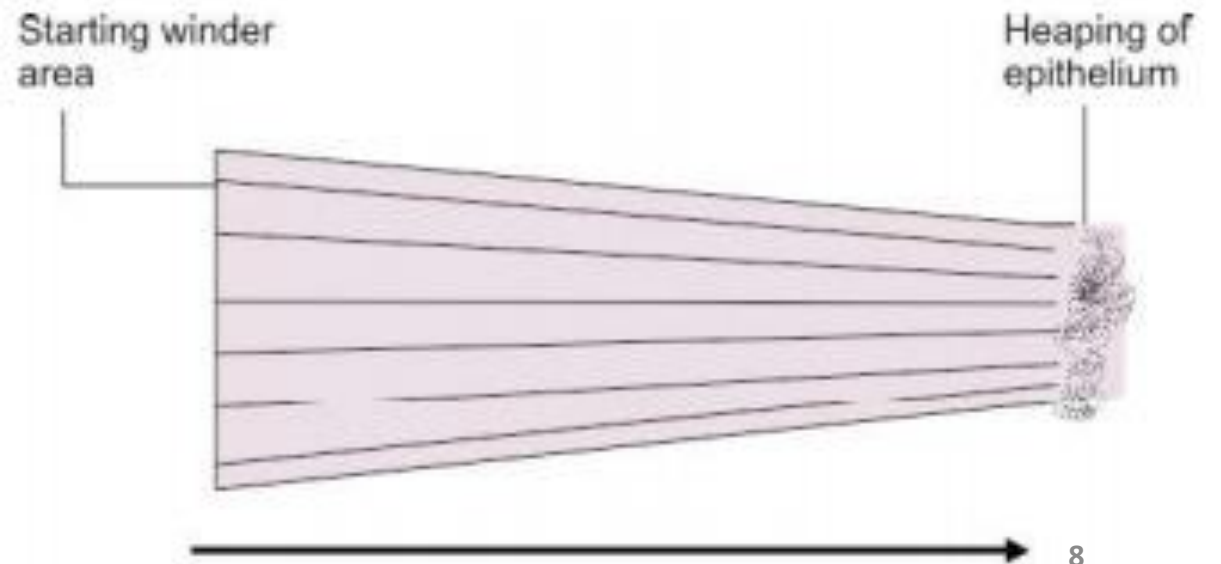
- **Linear abrasion**

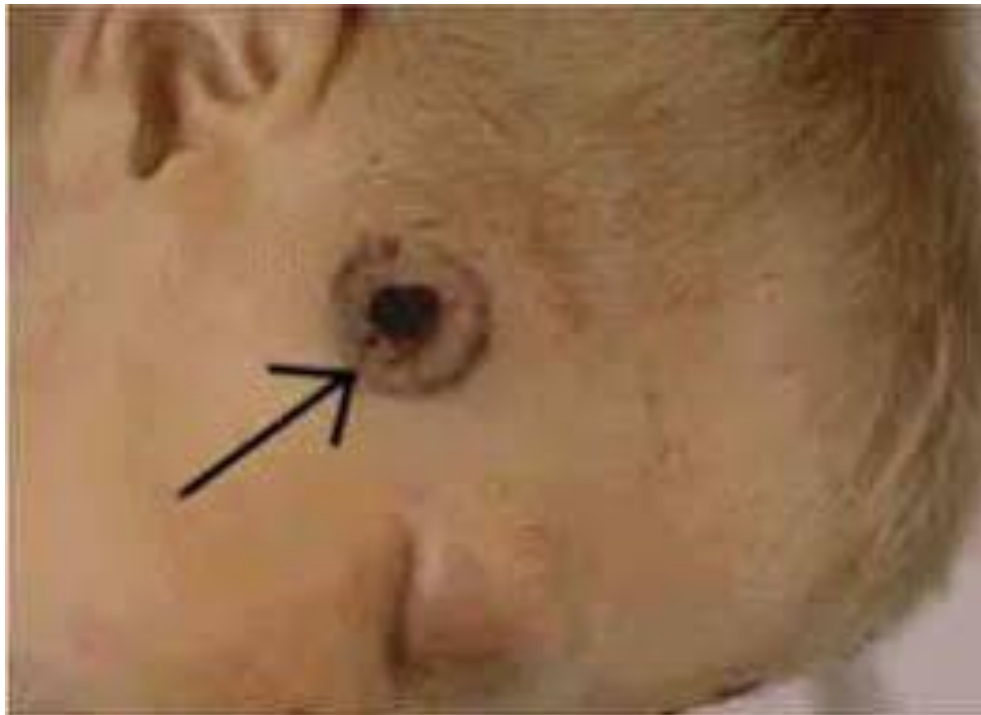
- Scratch
- Causation
- Features



Types of Abrasion

- **Graze abrasion**
 - Sliding, gliding, brush or scrape
 - How produced
 - Characteristics
 - Brush burns





Types of Abrasion

- **Imprint abrasion**
 - Impact, contact or patterned
 - Application of force
 - Causation
 - Examples

Types of Abrasion

- **Pressure abrasion**
 - Crush abrasion
 - Caused by direct impact
with movement
 - Examples



Age of Abrasion

- **Features**

- Reddish with no scab
- Dark red scab
- Reddish brown scab
- Blackish scab shrinks
- Scab falls off



Abrasion

- Contused abrasions & abraded contusions
- **Postmortem abrasion**
 - Pale white
 - Dry
 - Causation
 - **Differentiation from antemortem abrasion**
 - Site
 - Color
 - Covering
 - Margins
 - Vital reaction
 - Healing process



Postmortem Abrasion



Abrasions

- **Differential Diagnosis**

- Postmortem abrasions
- Postmortem injuries (erosions) produced by insects/ crustaceans
- Excoriation of the skin by excreta (fecal matter)
- Pressure sores



Abrasion

- **Healing of abrasion**
 - Contraction of the wound
 - Scab formation
 - Microscopically cellular infiltration
 - Epithelial regeneration



Abrasion

- **Medicolegal importance**
 - Site of impact
 - Type of weapon
 - Time since injury
 - Degree of damage
 - Type of offence
 - Internal injury
 - Association with scene of crime

