M.I.4. Abrasion of great toe

Gross

• An abrasion of size 3*2cm is present over medial aspect of great toe.

Mechanism:

- Grazes are caused by horizontal or tangential friction between the skin and the hard rough surface.
- Most common type of abrasion and commonly seen in road traffic accidents.

Types of abrasion:

- Scratch/linear abrasion:
- Graze abrasion
- Pressure abrasion
- Imprint abrasion

Age of abrasion:

- Fresh Bright red, oozing of serum and some blood.
- 2-24 h Exudation dries to form a reddish scab, comprising of blood, lymph and epithelial cells. Polymorphonuclear cells infiltrate (scab formation).
- 2-3 days Reddish-brown scab, less tender.
- 4-5 days Scab is dark brown in color.
- 5-7 days Scab is brownish black and starts falling off from the margins.
- 7-12 days Scab dries, shrinks and falls off, leaving depigmented area underneath.
- 12 days Epithelium becomes thinner and atrophic.

Differential Diagnosis:

- Post mortem insect bites of the skin.
- It may also resemble powder stippling (firearm injury).
- Excoriation of skin by excreta and diaper rash may be misinterpreted as abrasions
- Decubitus/pressure ulcers (bed sores):

Medicolegal importance:

- Abrasions give an idea about the site of impact and direction of force & causative weapon & scene of crime.
- Age of injury can be determined which helps to corroborate with alleged time of assault.
- Character and manner of injury may be known from its distribution.
- Position, number and direction of wounds may indicate manner of production i.e. suicide, accident or homicide.
- Section 320 IPC Grievous hurt.

