M.I.8. Stab injury of heart

**Gross** – the given specimen shows 2x1x1cm penetrating stab injury of heart over left ventricle

**Clinically, stab wounds are of two types:**

- Penetrating - wound of entry.
- Perforating - through and through punctured around

**Characters:**

- Margins: Edges of the wound are clean cut, usually no abrasion or bruising of the margins
- Length: Length is slightly less than the width of the weapon because of stretching of the skin. For measuring the length of stab wound, the edges of the wound should be approximated.
- Breadth: It is more than thickness of the blade due to gaping. Approximation of the edges is needed to get the actual measurement.
- Depth: Depth is the greatest dimension of a stab wound. Depth corresponds to the length of the blade of the weapon entering the body, when the whole length of the weapon enters the body, but has not produced any wound of exit.

**Track of stab wound:**

- A piece of pliable tubing may be introduced gently, and if it goes in easily may reveal the true track.
- Later, the tubing can be made more rigid and straight by inserting a probe into it.
- Dissection in the tissues parallel to, but away from the wound, will reveal the track.
- Radio-opaque material or dyes can be injected into stab wound to demonstrate the wound track by X-rays.

**Medicolegal importance:**

- Shape of the wound may indicate the type of weapon which may have caused the injury.
- Depth of the wound will indicate the force of penetration.
- Direction and dimensions of the wound indicate the relative positions of the assailant and the victim.
- Age of injury can be determined.
- If a broken fragment of weapon is found, it will identify the weapon or will connect an accused person with the crime.
- Position, number and direction of wounds may indicate manner of production i.e. suicide, accident or homicide.
- Section 320 IPC Grievous hurt.