**Characterization and Evaluation of injuries**

Injuries by bullets- Speed being 350 – 450 m/s

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Contact Shot** | **Close Distance** | **Near Close Distance** | **Distance Firing** |
| **Distance** | 0 cm | 15 – 30 cm | 30 – 45 cm | 50 cm and beyond |
| **Shape** | Stellate Shaped wounds aka Explosive wound | Circular shape | Circular/ oblique/ oval due to yaw of bullet | Either oblique or oval wounds, no circle formation |
| **Appearance** | Muzzle imprints (Full in homicide, lower portion in suicide) | Ecchymosis and lacerations  | Inverted margins | Dirt collar/ Greece collar (blackish- brown) |
| **GSR** | Blackening, scorching, foul smell of burning, gases | Blackening, tattooing, scorching, singeing of hair | Blackening, tattooing | Dirt collar is mix of GSR particles and dirt from surroundings |

Injuries by pellets- Speed being 400 – 600 m/s

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Contact Shot** | **Close Distance** | **Near Close Distance** | **Distance Firing** |
| **Distance** | 0 cm | 0 – 15 cm | 15 – 30 cm | 50 cm and beyond |
| **Shape** | Explosive wound | Star shape | Rat hole | Fragmented |
| **Appearance** | Muzzle imprints (Full in homicide, lower portion in suicide) | Incomplete dispersion  | Partial dispersion, irregular margins | Multiple wounds |
| **GSR** | Blackening, scorching, foul smell of burning, gases | Blackening inside the wound, tattooing, scorching, singeing of hair | Blackening, tattooing | Black collar mixed with GSR particles and dirt from surroundings |
| **Wads** | Top and air cushion wads penetrated in the skin | Wads may penetrate or fall down or may even leave imprints | Wads are found either below the wound or imprints are found below it | Imprints may be present |