

# Death due to homicidal firearm injury and concealment of crime: A case series



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## ABSTRACT

A firearm is a dangerous weapon used by a person in self-defense and to kill another person because of various reasons. It is also used by the defense personnel for the safety and security of citizens of a country and other reasons. Unlicensed firearm weapons are used by many persons with ill intentions, such as robbery, threat, kidnapping, and murder. Injuries due to firearm weapons can be homicidal, suicidal, and accidental. In many cases, a person is killed by the assailant by firearm weapon, and then the body is disposed of at various places to conceal the crime. In the present case series, the authors present three cases of death due to firearm injuries where the disposal of the body by the assailant was done at different places to conceal the crime. However, on meticulous postmortem examination of the deceased, exact cause of death, manner of death, nature of injury (antemortem/postmortem), type of weapon, and time since death was opined helps the investigating agency to solve the crime and delivery of justice to the family of the victim.

**Key words:** Homicide; Firearm injury; Concealment of crime

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## INTRODUCTION

A firearm is any weapon that discharges a missile by the expansive force of the gases produced by the burning of an explosive substance.<sup>1</sup> Injuries due to firearms not only cause physical harm but also result in severe psychological and social consequences. The adverse emotional and mental impact on victims and their families in specific communities as a whole is very significant. Severe morbidity and mortality may be caused by injuries due to firearm weapons. The severity of firearm injury inflicted upon the victim depends mainly on the type of firearm weapon used, the distance between victim and shooting of firearm weapon, or range of firearm weapon. Injuries due to firearms could be homicidal, suicidal, and accidental in nature. The number of firearm wounds and site of injuries over the body, place of recovery of the body, crime scene report, and other

circumstantial evidence helps in determining the manner of infliction of injuries over the body. Usually, multiple firearm wounds arouse suspicion of homicide. In the case of multiple firearms, the wound tracks, relative lethality, and incapacitation need to be assessed to determine the manner of death.<sup>2</sup> Further, the identification of a dead body is essential for the establishment of crime. In homicidal cases, the body is usually recovered away from the home as disposed of by the assailant to conceal the crime. The firearm weapon is usually not recovered from the place of recovery of the body with the intent of the assailant to destroy the evidence related to the crime. However, meticulous postmortem examination of the deceased, proper history, crime scene reports, circumstances of the case, and thorough investigation related to the case help in the establishment of crime and justice for the family of the victim.

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## CASE NO. 1

The dead body of a male individual was recovered from a cemented canal away from his place of residence (Figure 1). Fired bullets were recovered from the place of recovery of the body (Figures 2-6). Live bullets were also recovered from the same location (Figures 7 and 8). The body was brought for a postmortem examination by the police at our institute. As per the statement of family members enclosed in the police inquest report, the deceased was a wrestler. A day prior to the recovery of the body, an individual claiming known to the deceased, visited to his home to take the deceased along with him. As the deceased was not present at home at that time, he went to meet that person after his arrival; however, he did not return back in the night. On the next day, his body was recovered from the above-mentioned place. The apparent cause of death by the police was mentioned as murder. The body was wearing blue jeans and a pair of socks. Along with the body a shirt, a langot, and two other pieces of cloth were recovered. The shirt was torn in places and soaked with blood. Only the collar and

2<sup>nd</sup> uppermost buttons were found intact and the rest were found missing. There were multiple irregular holes over an area of  $5.5 \times 5$  cm on the front of the shirt on the left side. The fibers of the holes were directed inward. There was an irregular hole of size  $7 \times 5$  cm over the left side of



**Figure 1:** Place of recovery of dead body



**Figure 2:** Fired bullet



**Figure 3:** Fired bullets



**Figure 4:** Fired bullet



**Figure 5:** Fired bullet





**Figure 6:** Fired bullet

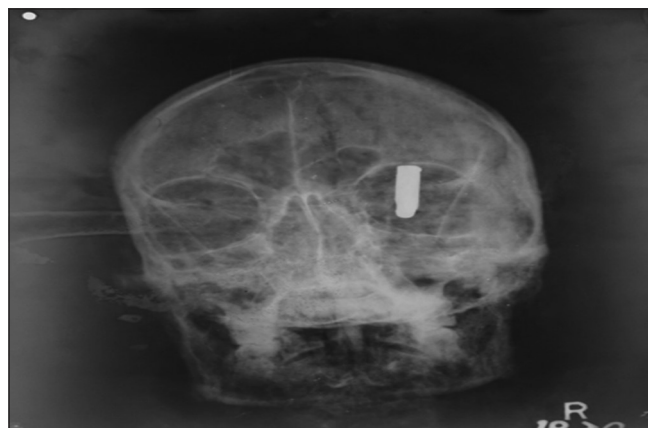


**Figure 7:** Live bullet

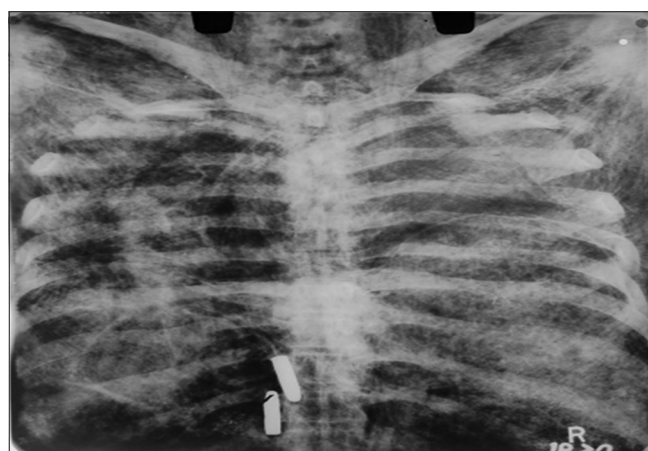


**Figure 8:** Live bullet

the back of the shirt. The fibers of the holes were directed outward. X-ray of the body was done before postmortem examination. One metallic density shadow (bullet) was seen on the right side of the cranium (Figure 9). Two metallic-density shadows (bullets) were seen on the left side of the



**Figure 9:** Bullet in X-ray of the skull



**Figure 10:** Two bullets in X-ray of the chest

chest (Figure 10). The following injuries were noted during postmortem examination.

1. An antemortem firearm entry wound of size  $2 \times 1$  cm was present over the lateral margin of the right eyebrow situated 169 cm from the right heel. The wound was directed downward, obliquely, and outward. The margin of the wound was reddish and inverted with a tattooing effect. A corresponding hole of size  $2 \times 1$  cm was present in the temporal bone with an effusion of blood in the trabeculae of bone. A brownish metallic bullet was recovered from inside the cranium from the right middle cranial fossa
2. An antemortem firearm entry wound of size  $2 \times 1$  cm was present over the front of the chest on the left side in the mid-clavicular line situated 6 cm away from the midline and 130 cm from the left heel. The margins of the wound were reddish and inverted with a tattooing effect. On dissection, the wound was found to be directed oblique and downward with penetration of the lower part of the upper lobe of the left lung from where the brown metallic bullet was recovered
3. An antemortem firearm entry wound of size  $2.5 \times 1.5$  cm was present over the front of the chest

on the left side, situated 5 cm away from the midline and 127 cm from left heel. The margins of the wound were reddish and inverted with a tattooing effect. On dissection, the wound was directed oblique and slightly downward with penetration of the lower lobe of the left lung and lower half of the heart through the subcutaneous tissues which were ecchymosed. A deformed brown metallic bullet was recovered from para-vertebral tissues near the posterior articulating ends of the 10<sup>th</sup> and 11<sup>th</sup> ribs adjacent (left) to the 10<sup>th</sup> thoracic vertebrae. The intervening subcutaneous tissues were ecchymosed

4. An antemortem firearm entry wound of size  $3.5 \times 2$  cm with a corresponding exit wound of size  $4 \times 2$  cm was present over the upper part of the left side of the chest and in the inter-scapular region of the back of the left side of the chest, respectively
5. A circular antemortem firearm entry wound of diameter 1 cm with a corresponding exit wound of size  $3.5 \times 2$  cm is present over the front of the chest on the left side
6. An antemortem firearm entry wound of size  $1.5 \times 1$  cm with a corresponding exit wound of size 2.5 cm in diameter was present over the front of the chest in the midline and over the front of the chest over the right.

The opinion regarding the cause of death was given as injuries over the head and chest, which were antemortem in nature, homicidal in manner, sufficient to cause death in the ordinary course of nature, and caused by rifled firearm ammunition.

## CASE NO. 2

A male deceased recovered from bushes near a road between two canals was brought for postmortem examination by the police. The case was referred by the board of doctors of the district Civil Hospital. The missing complaint of the deceased was filed by the family members in the concerned police station as the deceased left the home in the morning, 4 days before the recovery of the body. The deceased has a licensed firearm weapon, which was recovered from his car that was found on GT Road, away from his resident village. Three live firearm cartridges were recovered from the back pocket of his jeans (Figure 11). The apparent cause of death by the police was described as a firearm. The body was emitting a foul smell. Maggots of size 0.5–1 cm were crawling all over the body at places. Scalp hairs were peeled off and only a few tufts of black hairs were present. The scalp and the skin over the body showed dark discoloration in places. Facial features were not identifiable due to putrefaction. Bilateral

hands and feet were degloved. The chest was tense. The abdomen was distended. X-ray examination of the body was conducted before postmortem examination, and a radio-opaque foreign body was observed in the abdominal cavity on the left side.

The following injuries were noted during postmortem examination:

1. A firearm entry wound of size  $1 \times 1$  cm was present over the left side of the back at the lumbar region (Figure 12). The wound was directed posterior to anterior. On dissection, a through and through defect of size  $2 \times 1.5$  cm was seen over the descending colon of the large intestine. On further exploration, the yellowish–brownish color metallic bullet was recovered from the left side of the abdominal cavity
2. An antemortem firearm entry wound of size  $2.5 \times 2$  cm with a corresponding exit wound of size  $1.5 \times 1.5$  cm was present over the right temporal and left temporo-parietal region of the scalp, respectively (Figures 13 and 14, respectively). A bony defect of size  $1.5 \times 1.3$  cm and  $1.5 \times 1.5$  was seen underlying the scalp defect of the entry and exit wound, respectively (Figures 15 and 16, respectively). A radiating fissured



**Figure 11:** Live firearm cartridge wound firearm cartridge recovered from the pocket of jeans

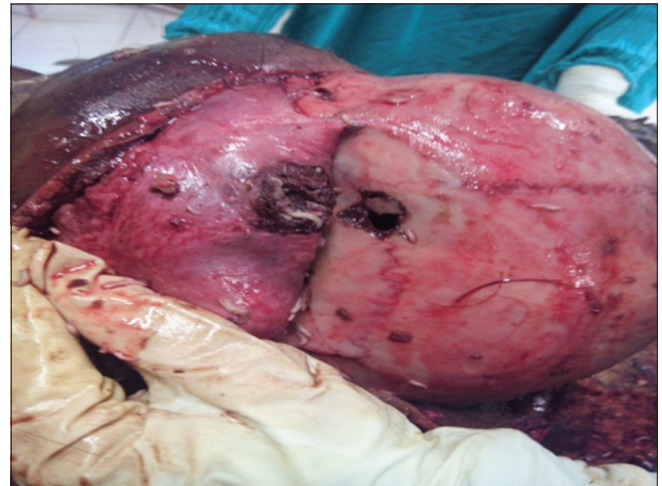


**Figure 12:** Firearm entry over left lumbar region





**Figure 13:** Firearm entry wound over scalp wound



**Figure 16:** Firearm exit wound over the skull



**Figure 14:** Firearm exit over the scalp



**Figure 15:** Firearm entry wound over the skull

fracture of the right temporo-parieto-frontal bone is seen. Another radiating fissured fracture involving the right temporo-parietal and bilateral occipital bones of the skull was seen. Right and left temporo-parietal sutures were loosened. Bony trabeculae showed blood infiltration at the fractured sites. Beveling of the inner

and outer table of entry and exit wounds, respectively, was seen.

The opinion regarding the cause of death was given as firearm injury described, which was antemortem in nature, homicidal in manner, and sufficient to cause death in ordinary course of nature.

### CASE NO. 3

The dead body of a known male individual was referred to our institute for postmortem examination from the General Hospital of the District of Haryana State. As per the police inquest report, the body was recovered from a water drain. As per the statement of family members enclosed in the police inquest report, the deceased was kidnapped and murdered. The deceased was away from the home since the night of the 4<sup>th</sup> day from the recovery of the body in the drain. The apparent cause of death by the police was mentioned as due to a firearm. X-ray examination of the body was done before postmortem examination. The radio-opaque foreign body was noted in the cranial cavity in the X-ray film of the skull. The body was in a state of putrefaction and not identifiable.

On postmortem examination, a firearm entry wound of size  $1.5 \times 1.2$  cm was observed over the right temporal region of the scalp. The margins of the wound were reddish, irregular, and inverted with tattooing effects. A bony defect of size  $1.2 \times 1$  cm was found underneath the said entry wound in the temporal bone of the skull. On exploration, the wound was found directed from right to left, downward and forward passing through the dura, brain matter then piercing the right middle cranial fossa (fracturing the greater wing of the sphenoid in the cranial cavity), posterior aspect of right orbit in the anterior cranial

fossa from where a brown metallic slightly deformed bullet was recorded. Further, a radiating linear fracture was present extending from the inferior margin of the right orbit up to the alveolar margin of the maxilla at the level between the 1<sup>st</sup> and 2<sup>nd</sup> upper right incisors. In addition to the above fracture, a linear radiating fracture was also present at the lateral end above said bony defect at the right temporal bone. Brain matter was found hemorrhagic. The bony trabeculae showed blood infiltration at the fractured sites.

The opinion regarding the cause of death was given as firearm injury described which was antemortem in nature, homicidal in manner, recent in duration, and sufficient to cause death in the ordinary course of nature.

## DISCUSSION

Firearm weapons in India are issued to a particular person on request as per rules and regulations after approval from the competent authority. Further, its possession without a license is unlawful. However, unlicensed firearm weapons are used frequently by criminals to commit a crime. Firearms are mostly used for homicidal as well as suicidal purposes because of the very easy and quick method of death. Firearm weapons become a weapon of choice because it provides a person can be killed without any physical contact and also provide an opportunity for escape by the offender.<sup>3</sup> The increased incidence of homicidal injuries due to firearm weapons can be due to the fact that these weapons are typically used either impulsively or in a pre-meditated manner during a planned attack by the assailant. Obtaining a license for firearm weapons and carrying unlicensed weapons is not easy due to legal restrictions and strict laws related to their illegal possession. Hence, these weapons are usually the choice of weapon in casual confrontations or assaults, instead commonly used in intended acts of homicide or suicide. Victims of firearm injuries are usually male. In a study conducted by Meral et al., out of 213 cases, 182 (854%) were male.<sup>4</sup> In another study conducted by Dutta et al., males (89.57%) outnumbered females (10.43%), with males: female ratio of about 8.9:1.<sup>5</sup> Patowary conducted a study on the pattern of injuries in homicidal firearm injury cases. Out of 108 cases, 96 (88.9%) were males.<sup>6</sup> Kumari et al., in the study on medicolegal aspects of firearm injury cases in the Agra region, also observed that males (90%) outnumbered females, and the homicidal nature of firearm injuries was 80%.<sup>7</sup> Males are generally more active members of society and usually engage more in outside activities than females, being a head of family in most of the cultures of society. Further, they generally have more aggressive

tendencies and behaviors of revenge. This explains the male preponderance in studies related to firearm injuries. Here also, in all three cases, victims are male. In a study conducted by Pargi et al., it was observed that the majority of the incidences of gun-shot injuries were homicidal in nature (78.26%), followed by accidental episodes (16.52%).<sup>3</sup> In another study conducted by Thube and Chikhalkar on 43 cases of a fatal gunshot injury, it was observed that 74% (32 cases) of gunshot injuries were homicidal in nature.<sup>8</sup> In the present cases, the multiplicity of firearm shots, distribution of firearm injuries over the body, place of recovery of the body, and other circumstances of the case help in the establishment of the manner of death as homicidal.

## CONCLUSION

Country-made firearm weapons (Desi Katta) are used mostly in cases of crime by firearm weapons as there are strict rules to get licensed firearm weapons. Implementation of strict laws related to the production and possession of country-made firearms weapons may help in the reduction of crime related to firearm weapons. Rules regarding the issuance of licensed firearms weapons should be made more strict. Regular mental health check-ups should be made compulsory for the person to whom licensed firearm weapons were issued.

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