

CASE REPORT

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A Distant-Range, Suicidal Shotgun Wound of the Back

ABSTRACT: The case being reported is one of a shotgun fatality with a thoracic back wound. A 23-year-old man was shot from a distance with trajectories going from back to front and on a nearly horizontal level. These findings observed in the autopsy could represent homicide, but scene investigation and police records were interpreted and it became clear that the case was suicide. Thus, this case shows that the determination of the manner of death requires a careful forensic investigation including autopsy findings, scene investigation, and reconstruction of the events.

KEYWORDS: forensic science, suicide, shotgun wound, forensic autopsy

In firearm fatalities, it is important to identify any factors that could raise suspicions of homicide. In forensic textbooks and reports (1–6), the determination of the manner of death is based on an integration of the circumstances and findings at the scene, the number of wounds, the characteristics of entrance wounds, and direction of the bullet or pellet path in firearm fatalities.

In this report, the authors present a case of an uncommon place of death, circumstances of death and scene investigation, and the anatomical region of the entrance wound.

Case

A 23-year-old man was found in a field with a slight gradient surrounded by a wooded area and bushy undergrowth. He was lying dead in a prone position (Fig. 1), with a shotgun wound of the back (Fig. 2). At the scene investigation, an over- and under barrel with a 12-gauge superpose shotgun was tied tightly to a tree with string (Fig. 3). Another string 2.5 m in length was tied to the trigger with two knots around the back of next tree, and then taken forward. The shotgun was 142 cm off the ground and 120 cm from the level of the victim's feet. The weapon had been fired from a distance using this string to pull the trigger. The free-end of the string was lying loose on a bush below the shotgun (Fig. 1). No additional string was found at the scene. The distance from the muzzle to the deceased was measured at 140 cm. The distance was approximately 500 m between the scene and his village. The victim walked to the scene, and there was no car nearby. The shotgun used belonged to the household where he lived and so was easily accessible to him.

Upon investigation, there was no history of psychiatric illness or suicide note in this case. However, he was in an acute emotional state following the death of his best friend who had died in a

road traffic accident. He had been struck by a truck belonging to the company that they both worked for.

At the autopsy, the posterior thoracic wound was found over the 11th intercostal space and to the left side of the midline. The entrance wound was localized about 120 cm above the heel level. The distant-range entry wound was circular in shape, measuring 3 cm in diameter, including the abrasion rim of a width up to 0.7 cm (Fig. 4). No powder tattooing was found around the entrance. There were bursting injuries in the left lung, the heart, and the liver. A plastic wad from a 12-gauge and No. 3 birdshot pellets were found under the skin below the sternum.

There was no shotgun residue in the analytic examination of the clothing in the crime laboratory. An identifiable fingerprint that matched the victim was seen on the shotgun. The entrance wound size was found to be consistent with the distance by the test-fires of the shotgun examination. An official reconstruction was also performed, and it was found to be consistent with the features of the case.



FIG. 1—The scene of the suicide. White arrowheads denote the string.

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FIG. 2—The shotgun wound of the back.

Analyses of the deceased's blood and urine were negative for alcohol and drugs.

Based on all information available, this case was considered a suicide.

Discussion

Our verdict of suicide in this death rests on the autopsy findings, scene investigation, a detailed history and reconstruction of the events.

With regard to choice of weapons, handguns are used more often than rifles or shotguns (1). A preference for handguns was found in studies from Germany (2,6), the U.S. (7), and Turkey (8), shotguns prevailed in Sweden (6) and Canada (9), and military rifles were responsible for almost all suicides in Iran (10). This difference may be due to historical, cultural, and legal reasons. However, in rural areas throughout the world, shotguns are more often used than handguns (1). Our autopsy case was a suicidal shotgun fatality.

As has been previously stated in the forensic literature (1–6,10), most suicidal firearm wounds are contact wounds, with a small but significant number of intermediate range. What we encountered in this case was a distant-range wound, thus making it a very unusual case of suicide.

The entry wound may assist in the determination of the manner in firearm fatalities. The most favored sites for suicide are the head, chest, or upper abdomen but uncommon sites such as the eye, ear, back of the neck, and head have also been encountered by

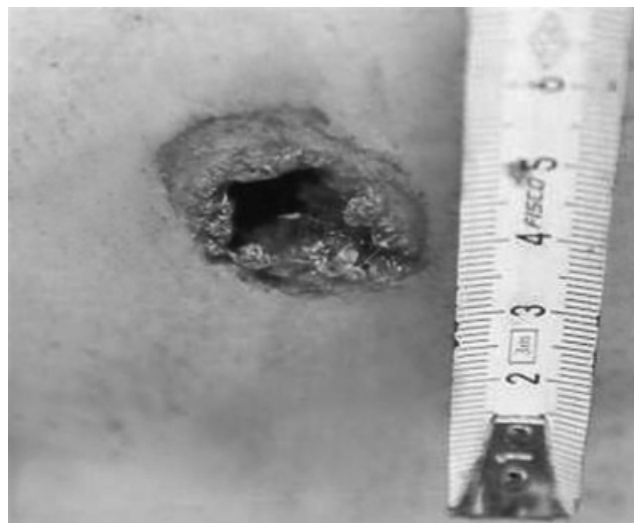


FIG. 4—The posterior thoracic wound.

forensic literature (1–3,5–14). An unusual suicide case was published by Hirsh and Adelson (15), describing a suicidal gunshot wound of the back. However, a suicidal, distant range shotgun wound of the thoracic back has never been identified in forensic literature prior to this case. The length of the string was consistent with the distant range of fire from the wound.

The majority of suicides occur at the victim's home, with the bedroom being the preferred scene (3,6,9,13); sometimes the place chosen may be quite bizarre such as in police cars, or as seen on television (1). In this case, the deceased shot himself in a rural area with a special scenario.

In most suicide cases, there is a history of psychiatric illness, often long-lasting depression. However, some suicides involve persons in an acute emotional state, such as this particularly concerned young man (3,7,11). Our autopsy case who shot himself was in an acute emotional state due to his friend's death. Most people who commit suicide with a firearm, like suicide victims in general, do not leave a note (1). A suicide note is left in only 28% of suicides (3). In this case, no suicide note was found.

In conclusion, this was an unusual autopsy case with the place of death, scenario, and the anatomical region of the entrance wound presented and discussed in the perspective of our experience with the manner of death.

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FIG. 3—The over- and under barrel with a 12-gauge shotgun.

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