

Dead Bodies Do Tell Tales - Corpus Delicti - A Case Report

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ABSTRACT

Background: The case report highlights the importance of doing a thorough searching autopsy in all cases, and particularly in cases of homicide, as objects of valuable evidential importance can be found within the body, which form part of the "Corpus Delicti", providing clinching evidence towards guilt of the accused person and thereby ensuring conviction of the guilty.

Case Report: This case report describes the case of a person who was stabbed and the terminal portion of the knife broke and got lodged in his spine. At autopsy, the broken tip was recovered and showed to fit perfectly with the main part of the knife which was recovered by the Police from the scene of the crime, proving that the recovered weapon was indeed the weapon of offence. Further, the blood group of the blood stains over the knife recovered at the scene of crime and that of the victim matched.

Conclusion: A match between a broken tip of a knife recovered from the body of stab victim and the main part of the knife recovered from the scene of crime is almost equal to a ballistics match in significance, with regard to establishing whether a given knife was the particular weapon of offence in a certain crime or not. Hence, in cases where such a knife with a broken blade is found and suspected to be the weapon of offence, a careful search at autopsy should be made to locate the broken tip.

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1. Introduction:

Injuries to the external genitalia are often Stab wounds are of major importance in Forensic Pathology, as they are extremely

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common in homicide. A stab wound caused by a sharp weapon is basically an incised wound that is deeper than it is wide (1). In autopsies conducted in bodies of victims who have died of stab injuries, it is necessary to do a careful dissection of the stab wound(s) to determine the direction and depth of the track of the wound,

inorder to determine the structures injured along the path of the wound and in some cases to recover materials of evidential value from the depths of the stab wounds.

2. Case Report:

History

The incident was one of a quarrel between two individuals; one of whom was a security guard working at a Guest House, and the other was a waiter working at a beach Shack cum Restaurant; that took a violent turn, wherein the security guard stabbed the waiter to death. The two persons had been drinking at a bar, after which an argument ensued between the two, following which the since deceased person abused the assailant, and a scuffle ensued between the two. The latter, in a fit of rage stabbed the former with a knife, and the victim collapsed and died on the spot. During the crime scene investigation carried out by the police, a knife having the distal portion of blade broken off and missing was recovered and attached by the police. A thorough search was made by the Police to locate the missing distal portion of the blade of the knife at the scene of crime, but it was not found.

Autopsy findings

On examination of the dead body, following injuries were found over the dead body:

1. Boat shaped incised penetrating stab wound, 3.1cms long x 1 cm maximum breadth at the middle, vertically placed over the left side of the front of the chest, directed medially and upwards, passing internally through the left third intercostal space and through the pericardium and the anterior wall of the left ventricle of the heart.
2. Boat shaped incised penetrating stab wound, 3.1cms long x 1 cm maximum breadth at the middle, horizontally placed over the back aspect of the right side of lower chest directed upwards and laterally. Internally, it passed through the muscles of the back of



Fig. 1. It shows body of the deceased person.



Fig. 2. It shows back of the deceased's body showing stab injuries.



Fig. 3. Close up view of the stab wound through which the knife passed into the lumbar spine, showing one end being acute and pointed corresponding to the sharp edge of the knife and the other being rounded with bruising with slight bruising, corresponding to the blunt edge of the knife.

the trunk, through the right 10th intercostal space and through the thickness of the lateral part of the right lobe of the liver from posteriorly to anteriorly.

3. Boat shaped incised penetrating stab wound, 3.1cms long x 0.9cm maximum breadth at the middle, obliquely placed over the left paraspinal area of the lower trunk directed medially and upwards. Internally, it passed through the left side paraspinal muscles and through the intervertebral disc between the 3rd and 4th vertebral bodies and partly through the body of the third lumbar vertebra. A portion of the metallic blade of a knife was found lodged in the intervertebral disc between the third and fourth lumbar vertebrae and partly within the body of the third lumbar vertebra.
4. Boat shaped incised penetrating stab wound of 3.1cm x 1cm maximum breadth at the middle, vertically placed over the anterolateral aspect of the proximal most part of the left thigh, directed medially and upwards for a distance of 10cms through the muscles.
5. Reddish incised wound 0.6cms long x 0.1cm broad at the middle x 0.1 cm deep, vertically placed over lateral aspect of left lumbar area of the abdomen.

The clothes cuts of the deceased showed that were corresponded with the stab injuries on the body.

The cause of death was certified as due to hemorrhagic shock consequent to stab injuries to the heart and the liver which were necessary fatal collectively and caused by sharp, pointed, penetrating, cutting edged weapon.

The Weapon

The broken off portion of the knife blade that was recovered by the author during autopsy was sealed in an envelope and handed over to the Police.



Fig. 4. Close up view of dissected tissues of stab injury showing broken portion of blade of knife lodged in the spine. Surrounding extravasation of blood in the tissues is visible.



Fig. 5. The main part of the knife with the broken portion placed side by side.



Fig. 6. The main part of the knife and the broken portion of the blade placed in apposition showing a perfect fit.

The main part of the knife that had been recovered by the Police from the scene of



Fig. 7. It shows the knife found at the scene of crime by the Police.



Fig. 8. It shows the body found at the scene of crime.

crime was forwarded by the Police to the author for examination and opinion. The knife had a black plastic handle, with a metallic blade having one sharp edge and one blunt edge. The blade was 2.8cms broad at the base of the blade at the junction with the handle, which remained uniform for the initial 12cms, and thereafter the two edges curved. The length of the blade was 15.5.cms at which point, a break was visible in the blade and the distal portion was missing. The width of the blade at the terminal broken off part was 2.4cms and the “wedge-triangular shape” of the blade’s cross section was well-appreciable. The cross sectional thickness of the blade at the blunt edge was 1.5 mm. Reddish brown blood stains were present over the blade.

The broken piece which had been sealed and handed over to the police soon after recovery from the body at autopsy was re-submitted to the author by the Police for correlation with the main part of the knife and opinion as to whether the broken portion of the knife recovered from the body was of the same knife that had been recovered at the scene of crime and as to whether the stab injuries over the body of the deceased victim had been caused by the knife found at the scene of crime.

The appearance of the type of metal of the broken portion of the blade matched well with that of the main knife. The width of the broken piece at the broken edge was 2.4cms. The cross section was “wedge triangular” in shape and there was one blunt edge and one sharp edge, which

curved to meet in the pointed tip. The contour along the line of break in the main blade of the knife corresponded exactly with that of the broken piece, which was confirmed by opposing both portions, when an exact fit and match was observed beyond any doubt. The measurements along the line of break of both parts matched perfectly and the contours of the sharp and blunt edges also matched perfectly in the two parts.

Hence, it was concluded that the broken piece recovered from the dead body of the deceased belonged to the knife with the broken blade that had been recovered by the police from the scene of crime. It was opined in the weapon examination report that all the stab injuries found over the dead body of the victim were consistent with having been caused by the same said weapon, as the dimensions of the blade of the knife corresponded well with the dimensions of the stab wounds over the dead body of the deceased victim. In each of the stab wounds, one of the angles was markedly acute; corresponding to the sharp edge of the knife and the other angle was rounded with bruising at the edges, corresponding to the blunt edge of the knife.

The knife along with the broken piece were then re-sealed and re-submitted back to the police for onward submission to the Forensic Science Laboratory for determination of the blood group (A Rh positive) of the blood stains over the main part of the knife, which was found to match the blood group (A Rh Positive) of

the deceased victim of homicide (The blood group of the accused was O positive).

4. Discussion:

The term "Corpus delicti" means the body of the offence or the body of the crime. In a case of homicide, it not only includes the body of the victim itself, but also any other evidence which is conclusive of death by foul play (2). Though the Supreme Court has laid down that in law, a conviction for an offence does not necessarily depend upon the "corpus delicti" being proved (3), nevertheless, where such evidence is indeed available; it conclusively establishes the occurrence of the crime and the guilt of the accused. Hence, during autopsy, a proper search must be made in order to recover any possible evidential materials which would form part of the Corpus delicti.

A positive match between the blood group of the stains found over the knife and the blood group of the victim was strong presumptive evidence of the fact that the knife recovered at the scene of crime was indeed the actual weapon of offence in the said crime, but recovery of the broken portion of the blade of the knife found impacted in the body of the victim during autopsy, which corresponded well with the main part of the knife found at the scene of the crime provided conclusive evidence beyond any doubt. As such, the broken portion of the knife blade found at autopsy formed part of the Corpus Delicti, which was established beyond doubt. In most cases of deaths due to stab injuries, one can never definitely link a knife to a wound. In most cases, the most one can do when presented with a knife and asked if it was the weapon that produced a specific wound is to state that it "*could have been*". However, when the tip of the knife has embedded itself in the body and broken off as in the instant case, the tip can be matched to the knife and such a physical match in such a case is as valid as a ballistics match of a bullet (4). A stabbing instrument is likely to break when

it passes through the sternum or skull or enters a vertebra (5). Thus, if any broken fragment of the weapon is found, it will identify the weapon or will connect an accused person with the crime (6).

An idea of the force that has been used in inflicting a stab injury can be obtained depending upon the resistance of the tissue which has been penetrated by the given knife. Penetration of bone which is a tough structure requires much greater force than that required for penetration of soft tissues or organs (4). The fact that the knife blade entered the lumbar spine and got lodged in the bone on penetrating the body gives an indication that the amount used by the assailant in stabbing the victim was "*severe*" (7), which indicates both aggression as well as an intention to cause significant harm on the part of the assailant. Van Dellen and Lipschitz suggested that the prognosis is worse for patients in whom the knife blade is removed by assailant. It was postulated that under these circumstances the blade is rocked and twisted more to remove (8).

A positive correlation between the dimensions of the blade of the knife and the stab injuries over the victim's body as well as positive correlation between the shape of the stab injuries all of which were "boat shaped" with similar dimensions, with one angle being pointed and acute corresponding to the single sharp edge of the knife and the other angle being rounded, corresponding to the blunt edge of the knife provide further corroboration that all the stab wounds on the victim's body were caused by one and the same single sharp edged knife.

Cases have been reported wherein portions of knife blades have got impacted in other parts of the body. Bhootra has reported a case in which a man was stabbed on the head with a knife. The blade from the handle of knife broke and penetrated the cranial cavity and remained embedded in the frontal lobe of brain. This resulted in intra-cranial bleeding and brain oedema, as a consequence of which the victim died after 5 days (5). Lesieur *et al* have reported

the case of a 22 year old man who had a knife blade deeply retained in the right temporal lobe of the brain following an assault in a drunken state. The blade was surgically removed and the victim survived (9).

Knife injuries to the spinal cord are infrequent and presented as case reports in the literature. A 17-year-old boy with a history of reactive airway disease presented to the emergency department after sustaining a stab wound to the mid-thoracic spine. Computed tomography (CT)-angiography with contrast and 3-dimensional reconstruction revealed that the knife traversed the left T8 lamina and terminated in the anterior portion of the T7 vertebral body (Figure 2). Axial CT revealed the blade in the middle of the thoracic spinal cord (10).

In our case, during the criminal trial, it could not be proven that the accused had caused the stab injuries to the victim “with the intention of causing his death”; but had rather acted in a fit of anger and passion, “with the knowledge that he was likely to cause death”; and hence, he was acquitted of the charge of “murder” (S. 302 Indian penal Code) but was held guilty of “culpable homicide not amounting to murder” (S. 304 part II Indian Penal Code) and was convicted.

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