

Case Report

An Autopsy Case Report of Suicide by Multiple Self-Cutting and Self-Stubbing over the Chest and Neck

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A 27-year-old male with a clinical history of acquired immunodeficiency syndrome committed suicide by cutting and stabbing himself in his bedroom. During the scene investigation, the knife was recovered below his body and the room was not ransacked. The external examination revealed one deep incised wound with one superficial incised wound over the anterior aspect of the neck, three horizontal stab wounds with five superficial small incised wounds over the chest and two superficial incised wounds over the ventral aspect of the left wrist. They showed multiple hesitation wounds. Subsequent autopsy showed a cut wound of the thyroid cartilage penetrating trachea and a penetrating wound of the left lower lung with 500 ml fresh blood hemothorax. All findings lead to suspicion of suicide by multiple sharp forces.

Keywords: *Acquired immunodeficiency syndrome, Autopsy, Forensic, Medicine, Suicide, Wounds and injuries, Sharp force injuries*

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Suicide and suicide attempts are a major cause of death and morbidity worldwide⁽¹⁾. In Thailand, the average suicide rate during 1998-2003 was 7.9 per 100,000 with a male to female ratio of 3.4:1 and male suicide reached a peak for those aged 25-29 years⁽²⁾. Studies in Thailand and other countries show an increased rate of suicidal ideation, suicidal attempts, and completed suicide in individuals with human immunodeficiency virus infection or acquired immunodeficiency syndrome⁽²⁻⁵⁾.

In Thailand, hanging is the most common means of the suicide⁽²⁾ but the methods of suicide are variable. The sharp force is a rare suicide method constituting only 2-5% of all suicides in various countries⁽⁶⁻⁹⁾. In sharp force fatalities, distinction between homicide and suicide is a major issue for the forensic pathologist. A reconstruction of the events can be possible on the bases of a detailed analysis of available elements. Atypical injuries, as multiple wounds, require a careful forensic investigation. Such hard method of suicide can result from more than 90 stab wounds over the entire body⁽¹⁰⁾.

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The present case reports an acquired immunodeficiency syndrome patient who committed suicide by multiple sharp forces, which is rare in Thailand.

Case Report

The case of a 27-year-old Thai male with a clinical history of acquired immunodeficiency syndrome and tuberculosis who committed suicide was given to forensic division of Ramathibodi Hospital for scene investigation. At the crime scene, the information was given by the relatives that the patient was found alive, without clothing, in a pool of blood, with multiple wounds over his chest and neck, in his tiny bedroom, on the second floor of the house. He was then brought by the paramedics to the road outside the house on a sleeping mattress for resuscitation. However, they were not successful.

The crime scene showed a pool of blood on the deceased body and the mattress. A blood-soaked pocket-knife with a single-edged blade, 7 cm in length and a maximum width of 1.8 cm, was found below the deceased body. There was no history of psychiatric problem and no suicide note at the scene. The deceased was then sent from the scene for autopsy.

At autopsy, the external examination revealed one deep incised wound, 6 cm in length (wound label 1 in Fig. 1 and 2), and one superficial incised wound consistent with hesitation wound over left anterior aspect of the neck. Over the upper chest, there was one superficial horizontal stab wound restricted to the sternum (wound label 2 in Fig. 1 and 2). Over the left side of the chest, there was one superficial

horizontal stab wound restricted to anterior chest wall (wound label 3 in Fig. 1 and 3), one deep horizontal label 3 in Fig. 1 and 3), one deep horizontal stab wound that penetrated into the thoracic cavity (wound label 4 in Fig. 1 and 3), and five superficial small incised wounds restricted to the skin consistent with hesitation wounds. The chest wounds ranged from a few millimeters to 1.6 cm in length. The wound morphology was consistent with injuries caused by a small single-edged knife. Finally, there were two superficial incised wounds, hesitation type, over the ventral aspect of the left forearm.

The internal examination showed fresh blood hemothorax of about 500 ml in the left thoracic cavity. The left lower lobe of the left lung showed a penetrating wound. The thyroid cartilage showed one cut wound deep into the trachea. No major vessels of the neck were injured. The tracheobronchial trees showed minimal blood without obstruction. Other visceral organs were unremarkable changes.

Postmortem serum anti-HIV by ELISA method showed a positive result. The blood for common drugs and toxic screening revealed negative. The blood alcohol concentration was 0.0 mg%.

Discussion

In the presented case, the scene investigation was one of the most important items to distinguish between suicide and homicide. The weapon was consistent with wounds morphology, which could



Fig. 1 All wounds over the chest and neck



Fig. 2 Wounds over the neck and upper chest (black arrow: hesitation wound)

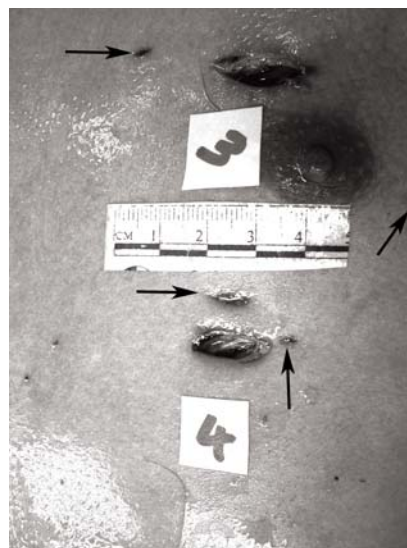


Fig.3 Wounds over the left lateral chest (black arrows : hesitation wounds)

help to exclude homicide. The place that the body was discovered was important too. Previous studies showed that the more frequent scene of death is at the victim's home^(11,12). The suicide notes commonly are found in suicidal cases but not always got along together. A study showed that the farewell notes to survivors were found in only 18% of all sharp force suicides⁽¹¹⁾.

The external examinations of the body help to distinguish many features. The presence and position of the clothing (raised or not) enable to lean toward homicide or suicide. In most suicides, the regions were exposed (clothing absent or raised) like in this case^(11,13-15).

The morphology, locations, patterns, and numbers of wounds are used to discriminate homicide from suicide. The patterns of hesitation wounds, superficial sharp weapon injuries that are confined to the epidermal or upper-dermal layer, are believed to be the most useful indication in the distinction of suicide from homicide. According to various studies, hesitation wounds were observed in most cases of suicide (62% to 88%)^(9,11,13,14). In the presented case, there were multiple hesitation wounds involving neck, chest, and ventral aspect of the left forearm, which are the most common location of hesitation wounds.

The locations of injuries provide useful clues for differentiation between suicide and homicide as well. In cases of suicide, sharp weapon injuries have to be located at anatomically possible sites of self-infliction. Sharp force wounds on the back and genitals strongly suggested homicide^(11,13,14). Self-inflicted cut wounds are usually found on the neck or wrist. In the presented case, the wounds were over the left aspect of the neck, left chest, upper chest, and left forearm. Those are all possible sites of self-infliction and the subject might be a right-handed individual.

The vertical or horizontal wounds can be used to recognize homicide or suicide as well. In addition, the orientation of chest wounds can be explained by the way the weapon is held. Commonly, people who commit suicide by stabbing themselves in the chest will hold the weapon in their palm and rotate their hand externally, with the elbow bent at 90° to the body. Therefore, it is likely that vertical wounds can be found in suicide cases^(11,14,15). In the present case, there was no vertical wound, therefore, this could not be used to confirm or exclude suicide.

The total number of wounds in this case was 11 wounds. This was not common in most suicide

cases. However, in some reported cases, more than 50 wounds have been reported^(7,10).

Finally, in the presented case, it is important to evaluate the cause of suicide. Serious chronic disease and psychiatric illnesses are the main cause of suicide. In a previous report, two cases of acquired immunodeficiency syndrome committed suicide by self-stabbing in the abdomen⁽¹⁶⁾. Acquired immunodeficiency syndrome patients that have serious chronic disease can commit suicide with rare methods among healthy people.

In conclusion, the demonstrated case can be an interesting example case of suicide by multiple self-cutting and self-stabbing. This demonstrates that the crime scene investigation and carefully examination of the deceased is very important, especially for exclusion of homicide. Suicide prevention programs should focus on human immunodeficiency virus infection patient as they have a strong tendency towards suicide.

Remarks

This article does not involve any lawsuits and it cannot be used to bring any lawsuits against any persons.

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รายงานศพคดี กรณีการฆ่าตัวตายโดยกรีดและแทงตัวเองหลายตำแหน่งบริเวณหน้าอกและคอ

สมิทธิ ศรีสนธิ, วิชาญ เปี้ยวนิม, อ่าง จิรจรรยาเวช

ผู้ชายอายุ 27 ปี มีประวัติป่วยเป็นโรคภูมิคุ้มกันบกพร่องได้ทำการฆ่าตัวตายโดยการกรีดและแทงตัวเองหลายตำแหน่งในห้องนอนของตนเอง การตรวจที่เกิดเหตุพบมีดอยู่ใต้ตัวผู้ตายโดยไม่พบร่องรอยการต่อสู้ การตรวจภายนอกบริเวณคอส่วนหน้าพบบาดแผลฉีกขาดขอบเรียบ 1 บาดแผล และบาดแผลฉีกขาดขอบเรียบตื้น ๆ 1 บาดแผล บริเวณหน้าอกพบบาดแผลถูกแทงตามแนวขวาง 3 บาดแผล และบาดแผลฉีกขาดขอบเรียบตื้น ๆ และตื้น ๆ 5 บาดแผล และบริเวณข้อมือด้านหน้า ข้างซ้ายพบบาดแผลฉีกขาดขอบเรียบตื้น ๆ 2 บาดแผล บาดแผลมีลักษณะเกิดจากความลั้งเลใจหลายบาดแผล การตรวจภายในพบกระดูกอ่อน บริเวณคอถูกตัดขาดทะลุถึงหลอดลมคอ และปอดกลีบล่างข้างซ้ายทะลุร่วมกับมีเลือดออกในช่องเยื่อหุ้มปอด 500 มิลลิลิตร การค้นพบตามข้างต้น ช่วยชี้แนะว่าเป็นการฆ่าตัวตายโดยการใส่ของมีคมทำร้ายตนเองหลายตำแหน่ง
