

**CASE REPORT****PATHOLOGY AND BIOLOGY**

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## Multiple Self-Inflicted Stab Wounds to Neck, Chest and Abdomen as a Unique Manner of Suicide

**ABSTRACT:** This is a case report of a 30-year-old man found dead in his flat lying on the floor with multiple stab wounds over the body, surrounded by an extensive volume of blood. Examination of the scene of death showed a secure flat, locked from inside. A blood-stained knife was present close to the body and two unstained notes left on the sofa at the locus. A small plastic bag containing white powder (which following toxicological examinations appeared to be cocaine) and an almost full bottle of beer were present on a table. Autopsy revealed more than 40 stab wounds to neck, chest, and abdomen arranged in isolated groups within which the wounds showed similar directions and had a transverse orientation. Together with hesitation marks located on the neck and wrists these characteristics allowed to interpret this case as a suicide.

**KEYWORDS:** forensic science, suicide, multiple stab wounds, tentative injuries, cocaine

Self-inflicted stab wounds are uncommon and are described in only approximately 1% of all suicides. In the majority of these cases, a single wound is observed while numerous self-inflicted wounds are very uncommon and can be seen only occasionally (1–6). The presence of multiple wounds raises the question of whether the wounds were actually self-inflicted or caused by another person. Additional background information such as a history of depression and/or previous suicidal attempts, and from the scene such as a lack of evidence of signs of a fight could assist in determining the nature of the death (1,2,7). It is also assumed that in suicides, to make stabbing easier, the body surface is usually uncovered from clothes, which is rather not observed in homicides (2,7,8). The majority of suicides are characterized by tentative injuries/hesitation marks on the body, close to the penetrating fatal wound(s) and/or also common over the wrists (9,10); however, there are known cases when “tentative” marks had been caused by a perpetrator to disguise a suicide (11). Other autopsy findings supporting the assumption of suicide include the horizontal orientation of stab wounds and no injuries to the ribs (12,13). In some cases, a variety of suicide methods and injuries are noted, e.g., if a deceased tried to use another suicidal method but was unsuccessful (14). Of note is also a report by Konopka et al. (2) comparing the concentration of blood alcohol in victims of suicide and homicide by stabbing. In their study, insobriety was noted in only 3 of 17 suicides by self-stabbing (the concentration

of alcohol in blood exceeded 50 mg/dL) whereas in homicide insobriety was noted in 29 of 36 victims.

### Case Report

The deceased was a 30-year-old man with a history of depression and drinking in the past who was found dead in his flat with multiple stab wounds. At the time of death, however, he was described to have recovered from these conditions (he complained of low mood 1 year before his death). He had no other relevant medical history and was believed to be fit and healthy at the time of death. His last sign of life was a text message sent to his friend 3 days before discovering the body, informing that he would not attend soccer training because of feeling unwell. From that time on, nobody managed to contact him causing his family to attend at the flat and gain entry with help of a locksmith.

The body was discovered lying face down on the floor in the corridor leading from the living room to the kitchen, surrounded by an extensive amount of smeared dry blood on the floor and mostly at low level on the walls, commencing in the living room and extending to the corridor (Fig. 1). The flat was tidy and well kept. A bag of white powder and an open beer bottle were found on the table in the living room. Doors and windows were all locked from inside, and no blood was present on doors or windows and other premises of the flat. A blood-stained knife was also lying on the floor approximately 150 cm apart from the body (Fig. 2).

There were two handwritten notes and a pen on the sofa in the living room. One of these read “HELP ME,” the other said “B.F. DID THIS” (actually a full name of the deceased’s acquaintance was written). Both notes and the pen showed no blood staining,

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FIG. 1—Location of the body at the scene.



FIG. 3—Location and grouping of the wounds on the neck, chest, and abdomen.



FIG. 2—Blood-stained knife found at the scene close to the body.



FIG. 4—Tentative wounds on the left wrist exposing muscles tendons.

therefore the notes appeared to have been written prior to infliction of the wounds.

The body was fully dressed, and there were multiple stab wounds to the front of the neck, chest, and abdomen, penetrating the tee-shirt and resulting in a total of 26 defects consistent with stab wounds. There were incised wounds to both wrists consistent with hesitation marks. No defensive injuries and no wounds to the back of the body were identified.

Postmortem examination showed no natural disease. There were multiple stab wounds (over 40 in total) forming a total of six groups of injuries with similar direction and orientation. Each of the groups comprised several wounds (at least three in each group) located on the neck (one group), the chest (three groups), and the abdomen (two groups) (Fig. 3). Two further groups of incised wounds were found on the front of both wrists, more extensive on the left side and partially exposing the underlying tendons (Fig. 4). There were two additional superficial wounds: one on the right eyebrow and the other on the chin.

The wounds were predominantly superficial involving the skin, subcutaneous tissues, and superficial muscles. None of the ribs were injured. The two neck wounds resulted in cuts to the left jugular vein measuring 0.2 and 0.3 cm. Another one penetrated through the cricoid cartilage into the trachea (Fig. 5), but only traces of blood were present in the airways, with no pulmonary foci



FIG. 5—Wounds to the neck: (1) cutting the jugular vein and (2) penetrating through the cricoid cartilage to the trachea.

of blood inhalation. Three stab wounds to the abdomen measuring 2.5–4 cm in width penetrated the liver, two of which ran through and through the left lobe and the third resulted in a deep cut to the

right lobe. There was associated hemorrhage into the peritoneal cavity, where approximately 200 mL of clotted blood was present.

#### *Toxicological Analysis*

The substance found in the plastic bag at the scene was identified to be cocaine. Alcohol levels in the blood and urine were 31 and 62 mg/dL, respectively. Cocaine level in blood was 0.15 mg/L, and the concentration of benzoylecgonine was 0.49 mg/L. There was also indication of phenacetin and lignocaine in the blood, both of which are used as common cutting agents in samples of illicit cocaine.

Cocaine is converted within the body to benzoylecgonine as part of the process by which it is eliminated. The conversion occurs very rapidly when cocaine is taken. The concentration of cocaine and benzoylecgonine found in the blood of the deceased was lying within the wide range of values found following the illicit abuse of cocaine.

The blood was further examined for acidic drugs, other basic drugs, amphetamine and related compounds, benzodiazepines, cannabinoids, methylamphetamine and related compounds, methadone, morphine, and opiates with negative results.

#### **Discussion**

Cases as presented earlier are a challenge when it comes to differentiating between suicide and homicide. According to the literature, the findings in this case consistent with suicide comprise: lack of signs of a fight or struggle at the locus, presence of blood limited to the area around the body, no defense injuries, and presence of hesitation marks on both wrists.

The grouping of the wounds and their similar shape and orientation also indicate that the deceased was not moving during the stabbing (neither fighting nor trying to escape). A mostly horizontal orientation of the wounds is also described to be more common in suicides rather than in homicides. This depends on the manner of holding the knife. A person stabbing him or herself would therefore hold the knife more horizontally because of anatomical conditions (4,12,13).

The two notes found at the scene of death, however, indicating that somebody else "did this," appear to have been most likely written by the deceased before attempting suicide. They did not show any bloodstains and were positioned in the room in an area easy to spot. It is hard to imagine that a victim is able to write such notes before being attacked, predicting what is going to happen. It would be expected that if B.F. would have been the murderer he would obviously have removed the notes from the scene. In our opinion, the notes could have been prepared by the deceased to conceal a suicide and disguise a homicide.

In the great majority of suicide cases by stabbing, the stabbed areas are more commonly unclothed (2,4,8). In the earlier case, the tee-shirt was cut 26 times. However, although it is not typical for suicide, it doesn't exclude it, as according to literature such findings are not unique and can be found in up to 28% of suicides by self-stabbing (2,4,15). In our opinion, the thin tee-shirt was not considered by the deceased to be an obstacle in stabbing himself, and therefore he did not uncover the skin.

A similar situation can be noted when analyzing the number of wounds. Usually, a large number of wounds suggest involvement of a third party. In this case, the total number of wounds exceeded 40, but actually most of them were superficial and only three

penetrated deeply into the liver. It is recognized in forensic medicine that cases of suicide may involve multiple stab wounds (1,16–19). Karger and Vennemann (17) reported a case of suicide with 92 stab wounds on the body, and Lieske (18) reported even 120 self-inflicted wounds. Moreover, in the case that Lieske reported, the wounds were caused through clothing.

Another possible explanation for the number of wounds is the fact that the deceased was under the influence of cocaine at the time of stabbing himself. Therefore, his sensitivity to pain was much reduced (20). A drug-related state of mind could also give reasons for choosing such a manner of death.

Moreover, the presented case supports the results of the studies on suicide by self-stabbing performed by Konopka et al. (2): in their studies and in our case, the level of blood alcohol was very low.

#### **Conclusions**

This case shows that preliminary suspicion of a homicide can be modified after meticulous examination of the scene and the body. The emphasis has to be put on the detailed examination of the locus and the body, including the deceased's medical history, lifestyle, and analysis of all possibilities indicating either homicide or suicide. Certain "characteristic" features of homicide can also be identified in suicides. Despite of some issues reported as being uncommon for suicide, after complete examination of the scene, body, and literature records, this case was classified as suicide. In our opinion, the neck wounds could have, on their own, potentially led to death; however, the remaining wounds, mainly those injuring the liver, would have resulted in fatal blood loss.

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