

CASE REPORT

B. Karger · B. Vennemann

Suicide by more than 90 stab wounds including perforation of the skull

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Abstract A man committed suicide in his bathroom using a small pocket knife. At the autopsy a total of 92 stab wounds on the forehead, in both temples, the anterior aspect of the neck, the back of the neck, the chest and the sides of the trunk were found. In addition, repeated stabbing had caused a large soft tissue defect on the forehead. The frontal bone showed 3 perforations but no brain injury was present and two ribs were severed in the bony part, one of which carried a star-like pattern from repeated stabbing. No major vessels were injured and the cause of death was exsanguination after a considerable survival time. The large number of stab wounds, the perforation of bone and some injury sites, especially the head and back of the neck, are extraordinary findings in suicides which were probably favoured by insufficient anatomical knowledge and the use of a short-bladed knife. A psychiatric history could not be verified.

Keywords Sharp force · Suicide · Autopsy · Stab · Forehead · Back of the neck

Introduction

In modern times, sharp force is a rare method of suicide constituting only 2–3% of all suicides in various countries (Watanabe et al. 1973; Karlsson et al. 1988; Reuhl and Lutz 1992; Start et al. 1992; LaHarpe and Dozio 1998). The sometimes spectacular phenomenology of this “hard” method of suicide can result from the use of unusual implements such as power saws (Härtel et al. 1989; Campman et al. 2000) or a weighted dagger falling down (Ueno et al. 1999), or it can result from the type of injuries caused. Atypical injuries can require a careful forensic in-

vestigation because differentiation from homicide can be difficult. A case of suicide is reported where the injuries were extraordinary in more than one aspect.

Case report

A 42-year-old man was found dead in a prone position in his bathroom wearing only underpants. Most of the body including both soles of the feet showed thick blood deposits and the tiled floor was completely covered with blood. A pile of blood-soaked toilet paper was present on the floor and large smear stains indicated that the man had attempted to wipe up the blood. In the bloodstained shower, a pocket knife with a single-edged blade only 6 cm in length and a maximum width of 1.6 cm was found.

At autopsy, a total of 92 stab wounds were found (Fig. 1) localised as follows:

- Forehead: 15 stab wounds including one clean perforation of the frontal bone (Fig. 2), an irregular tissue defect 2 cm wide from repeated stabbing and 2 irregular perforations in the posterior wall of the frontal sinus (Fig. 2); small defects in the dura mater, no brain injury.
- Temples: three stab wounds in the right and four in the left temple including a notch in the bone.
- Anterior neck: 19 stab injuries (Fig. 3) wounding both lobes of the thyroid gland but no major blood vessels.

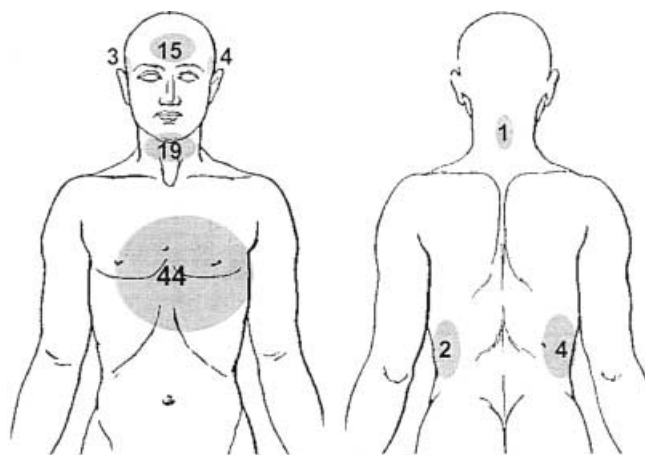


Fig. 1 Sketch depicting the number and sites of the stab injuries



Fig. 2 The anterior base of the skull and the inner surface of the frontal bone. The posterior wall of the frontal sinus shows two irregular perforations (*arrows*) from repeated stabbing and there is another perforating stab to the left which reflects the size of the blade (*arrow*)



Fig. 3 The chest and the anterior aspect of the neck together comprising more than 60 stab wounds

- Back of the neck: a single stab wound restricted to the muscles.
- Chest: 44 stab wounds (Fig. 3), superficial injuries to both lungs, moderate bilateral haemopneumothorax; clean perpendicular transection of the 5th bony rib, star-like perforation pattern from 3 separate stabs in the 7th rib, marginal defects in additional ribs.
- Sides of the trunk: two stabs in the left and four stabs in the right side.

The skin wounds ranged from a few millimetres to 2 cm in length and the wound margins were clean. The wound morphology was consistent with injuries caused by the small knife. Histology showed a beginning infiltration by granulocytes in some skin wounds. No additional injuries, signs of severe anaemia, exsanguination. The blood alcohol concentration was 0.0 g/l and toxicology screening was negative. There was no psychiatric history and a suicide note was found later.

Discussion

The scene circumstances and the suicide note underline that this was a clear case of suicide. In addition, two-thirds of the stabbing injuries were localised in body regions typical for suicide, i.e. the chest and neck (Karlsson et al. 1988; Start et al. 1992; Karlsson 1998a; Karger et al. 2000) and defence injuries were absent. The physical activity is not affected for a considerable time if the brain, heart and major vessels are not injured (Karger et al. 1999) so that the man was able to wipe the blood and walk around as demonstrated by his blood on the soles of his feet.

However, this suicide combined several very atypical aspects:

- The high number of stabbing injuries – a total of 92 distinguishable stab wounds were present but the total number was more than 100 considering the repeated stabbing to the forehead. In 3 large series of sharp force suicides together comprising 182 cases (Karlsson et al. 1988; Start et al. 1992; Karger et al. 2000), the maximum number of injuries did not approach 100 but cases of 120 (Lieske et al. 1987) and 187 injuries (Marx 1923) have been reported.
- The site of some injuries – stabs to the back of the neck, the upper face, the temples and the sides of the torso were also not encountered in a combined series of 182 cases (Karlsson et al. 1988; Start et al. 1992; Karger et al. 2000) but suicidal stabs to the head (Rouse 1994), the face (Sperhake and Schulz 1998) or the back of the neck (Klose and Pribilla 1989) have been published.
- The perforation of the skull – intracranial stabbing injuries have rarely been published in suicides (Levin 1928; Althoff 1975; Dempsey et al. 1977; Fekete and Fox 1980).
- The perforation of ribs – suicides commonly try to avoid striking the ribs (Karlsson 1998b; Karger et al. 2000).

It appears that the man has struck his forehead, neck and chest in a state of frenzy. In addition to mental illness, which was not verified, the bizarre features in many sharp force suicides can also result from insufficient anatomical knowledge and the use of an inadequate implement. These factors make it difficult to affect damage on essential body structures, something this case obviously demonstrates.

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