

CASE REPORT**PATHOLOGY/BIOLOGY**

Petr Hejna,¹ M.D., Ph.D.; Miroslav Šafr,¹ M.D.; and Lenka Zátoková,¹ M.D.

Suicidal Decapitation by Guillotine: Case Report and Review of the Literature

ABSTRACT: Suicidal decapitation is seldom encountered in forensic medicine practice. This study reports the analysis of a suicide committed by a 31-year-old man with a self-fabricated guillotine. The construction of the guillotine was very interesting and sophisticated. The guillotine-like blade with additional weight was placed in a large metal frame. The movement of the blade was controlled by the frame rails. The steel blade was triggered by a tensioned rubber band after releasing the safety catch. The cause of death was immediate exsanguination after complete severance of the neck. The suicide motive was most likely emotional distress after the death of his father. In medico-legal literature, there has been only one similar case of suicidal complete decapitation by a guillotine described.

KEYWORDS: forensic science, decapitation, guillotine, suicide, cutting instrument, autopsy

Decapitation of bodies is a very rare event in forensic medicine practice, accounting for about 0.1% of forensic autopsies (1). Suicidal beheading is an extraordinary method of self-destruction, accounting for <1% of the total number of suicides (1). In the suicidal context, decapitation as a result of violent methods always has a potential for confusion with homicide (execution) as well as with postmortem body dismemberment or mutilation (2,3). Most cases of suicidal decapitation result from an injury on the railway—the neck is crossed over by a train (1,3–5), vehicle assisted ligature strangling (3,6–10), and suicidal hanging (3,11–28). One case of a suicidal decapitation using a tractor loader (29) and two cases of suicidal explosion-induced decapitation (30,31) as a curiosity have been reported in the literature.

This study reports the analysis of a suicide committed by a 31-year-old man with a self-fabricated cutting tool strongly resembling the original guillotine. In medico-legal literature, there have been only three similar cases of suicide by a guillotine described (one case of complete decapitation, two cases of incomplete decapitation; [32–34]).

Case Report

Nature of the Crime Scene

A decapitated corpse of a 31-year-old man was discovered in an attic of a family residence (Fig. 1). The headless body was situated in the kneeling position on a wooden floor (Fig. 1). The separated head was fixed in a metal clamp holder in front of the metal frame of the guillotine and the torso (Fig. 2). A medical examiner at the place of death determined external blood loss as the primary cause of the victim's death. According to the anamnesis, the victim had

been suffering from feelings of danger and paranoia for several months.

The guillotine was placed on a wooden beam. Dimensions of the guillotine frame were 250 × 50 cm. The construction of the guillotine was very interesting and sophisticated. The guillotine-like heavy blade with additional metal weight (20 kg) was placed into large, upright metal guides. The blade was a sheet of steel plate that was sharpened on one edge. The movement of the blade was controlled by the frame rails (internal guides; Fig. 2). The movement of the blade was possible only because of its own gravity. The cutting steel blade was triggered by a tensioned rubber band after releasing the safety catch.

Autopsy Findings

The autopsy revealed the body of a Caucasian man of normal build, 178 cm tall (including the head). The separated head weighed 5 kg and the torso 59 kg. The man was dressed only in pants tracksuits, socks, and brown leather walking shoes. The fabric of track pants was soaked with blood mainly at the back and left leg. On the wamps of both shoes were multiple blood stains. Post-mortem hypostasis was only slightly present at the frontal part of the torso, and rigor mortis was fully developed.

The head was completely severed from the trunk (Fig. 3). The skin on the face was completely pale and showed no signs of cyanotic congestion or injury. The severance line was horizontal and passed through the midpart of the neck. Its edge was sharply delineated (Fig. 4). The severance plane passed through the body of the thyroid cartilage at the level of the fifth cervical vertebra. All deep cervical structures, including cervical vertebral column, had been sharply transected without tearing of the tissues (Fig. 4).

Blood aspiration was evident from blood covering the entire trachea and extending into the subsegmental bronchi. The internal organs were pale. No other external marks of violence were identified. No pathomorphological changes related to natural diseases were detected. The victim's blood alcohol level was determined as

¹Institute of Legal Medicine, Medical Faculty of Charles University and University Hospital Hradec Králové, Šimkova 870, 500 38 Hradec Králové, Czech Republic.

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FIG. 1—Scene of death with the guillotine and the headless body of the victim.



FIG. 2—The position of the victim, showing the guillotine blade in position after its descent.

5.21 g/kg while the urine alcohol level was 2.25 g/kg. Other toxicological investigations were negative. Cause of death was decapitation, and the manner of death was determined to be suicide. The victim repeatedly reported his suicidal intentions to his relatives. An extensive investigation could not support any third-party participation.

Discussion

Suicide by cutting instrument (machete, meat cleaver, sword, spade, hatchet, axe, etc.) is a rare phenomenon. Suicidal cutting wounds are usually inflicted in areas easily accessible to the victim's hands, most often in the head region—forehead, anterior part of parietal region, and temporal region. Wounds are usually multiple, parallel, and most of them are entirely superficial (35). Some



FIG. 3—Autopsy findings. The separated head and the torso of the victim.



FIG. 4—Inferior view of the superior part of the severance plane.

affect only the soft pericranial tissue; others may penetrate the cranial cavity. Suicidal cutting wounds are usually not immediately lethal, but their secondary complications may pose a danger (e.g., meningitis). In general terms, suicides with a cutting weapon are very rare and are predominantly employed by mentally ill people.

In the analyzed case, the wounding cutting weapon—a guillotine blade, struck the neck with very great force and intensity resulting in a complete interruption of the neck tissues and organs, including the cervical spine and spinal cord. In the medico-legal literature, only three similar cases of suicide by a functional self-constructed

guillotine have been described at present (32–34). In two cases, the suicidal instrument was a functional model of a self-constructed guillotine (32,33). The latter was a case of a portable cutting device that served as a small “portable” guillotine (34).

The first case was described in the literature by Nowak and Seidl (32). A 21-year-old man attempted to execute himself by a self-constructed guillotine. Despite a very serious neck injury, the man managed to release himself from the guillotine. He died because of a severe hemorrhage from the right carotid artery damaged by the cut. The second case, of a complete decapitation, was described by Shorrock (33). A newly widowed man constructed a guillotine at a pub entrance having previously announced his intention. Prior to the suicide act, the man tested the functionality of the guillotine with pieces of wood. He worked as a technical engineer. The third case of decapitation by guillotine was described in 2009 by Šídlo et al. (34) who analyzed a case of an almost complete decapitation of a 56-year-old man who had constructed a small portable guillotine in his house. The suicide motive in this case was financial problems. The man worked as a locksmith.

In the case reported here, the suicide victim tested the functionality of the guillotine on animal bones. The sophisticated design of the suicidal instrument points to the fact that this case could be classified as occupation-related suicide—the man worked as an agricultural machinery technician.

An external examination in all published cases (32–34) confirmed exsanguination of the body with pale appearance and only lightly expressed postmortem hypostasis. Corresponding blood evidence at the place of death has been observed in all cases published to date (32–34). As blood aspiration was detected in all published cases, it can be considered as a helpful vital sign in similar cases.

There has been only one case published in medico-legal literature of complete suicidal decapitation by a homemade guillotine (33). The described case is unique because of a sophisticated design and a self-assembly of the guillotine, and to the fact that the use of the guillotine led to a complete decapitation.

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Additional information and reprint requests:

Hejna Petr, M.D., Ph.D.
 Institute of Legal Medicine
 Charles University and University Hospital
 Šímkova 870
 500 38 Hradec Králové
 Czech Republic
 E-mail: hejnap@lfhk.cuni.cz