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CASE REPORT

An atypical case of suicidal cut throat injury

Sachin Sudarshan Patil *, **Ravindra Baliram Deokar, Sunil Gorakh Vidhate, Shashank Tyagi**

Dept. of Forensic Medicine, Seth GSMC and KEM Hospital, Mumbai, State – Maharashtra 400 012, India

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KEYWORDS

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Cut throat injury;
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Abstract The most commonly used methods for committing suicide in India are hanging, poisoning, burns, jumping from height, drowning, firearm injuries, stab injuries etc. Cut throat injuries using a sharp weapon is the least frequent suicidal method. Tentative cut marks are common in suicidal deaths. Committing suicide by cutting their throat without hesitation marks is a very rare occurrence. We present a case of 32 year old male, suffering from psychiatric illness brought dead to tertiary care hospital with suicidal cut throat injury and not associated with tentative cuts and tailing of wound.

1. Introduction

Suicide is one of the three leading causes of death among the persons of age between 15 and 34 years throughout the world.[1] According to the WHO, almost one million people commit suicide and 20 times more people attempt suicide every year. A global mortality rate is 16 per 100, 000.[2]

An Indian study showed that the highest suicide rate was in the 15–29 years age group (38 per 100,000 population) followed by the 30–44 years group (34 per 100,000 population). In those persons aged 45–59 years, the rates of suicide was 18 per 100,000 and 7 per 100,000 in those aged >60 years.[3]

The incidence and pattern of suicide differs from one geographic region to another because of the important role played by religious, cultural, and social values in its occurrence.[4] The most commonly used methods for committing suicide in India are hanging, poisoning, burns, jumping from height, drowning, firearm injuries, stab injuries etc.[5] Cut throat injuries using a sharp weapon is the least frequent suicidal method.[6,7] Tentative cut marks are common in suicidal deaths.[8,9] Committing suicide by cutting their throat without hesitation marks is a very rare occurrence.[10–16] From this case, we highlight that the possibility of self inflicted cut throat injury should be ruled out in initially suspected homicidal cut throat injury cases without relying totally on the characteristic autopsy features for correctly establishing the manner of death.

2. Case report

2.1. History

A 32 year old male arrived at a coconut shop in a public place in the afternoon. Coconut vendor being busy with other customers, taking advantage of the situation the deceased grasped the knife, routinely used for cutting coconuts and cut his

* Corresponding author at: Dept. of Forensic Medicine, 2nd floor, Library Building, Seth GSMC and KEM Hospital, Mumbai, State – Maharashtra 400 012, India. Tel.: +91 9757179483, +91 8108609282.
E-mail addresses: drsach_patil7@redifmail.com (S.S. Patil), ravideo80@gmail.com (R.B. Deokar).

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throat with that knife in the presence of many people at the venue. He immediately fainted down in the pool of blood and was brought to King Edward Memorial hospital, Mumbai in an injured condition where he was declared as brought dead. The body of the deceased was sent to mortuary for post-mortem examination at our post-mortem centre.

The identity of the deceased was revealed on the same day. On detailed investigations by police and information from relatives, it was revealed that the deceased was right handed and was suffering from depression since 01 year. He was taking antidepressant medications for the same in the outpatient department. Also there was history of previous suicidal attempts in the form of multiple incisions over front of left forearm few months back. He was a trained worker in a slaughter house, where he used to regularly cut throats of many animals as a part of his job.

2.2. Autopsy findings

2.2.1. External examination

Body of the deceased was averagely built and averagely nourished. Rigor mortis was well marked all over the body. Post mortem lividity was ill-appreciated and present over back of trunk except over pressure areas and was fixed. Multiple old healed linear scars were present over anterior aspect, middle 1/3rd of left forearm, horizontally placed and of length varying from 6 cm to 3 cm (Fig. 1).

2.2.2. Local examination

Cut throat injury was present over anterior aspect of neck, slightly obliquely placed at the level of laryngeal prominence in midline, 7 cm below the chin and 7 cm above the suprasternal notch. It was situated 05 cm below the tip of the right mastoid and 4.5 cm below the tip of the left mastoid measuring 20 cm × 06 cm × bone deep. Margins were clean cut showing irregular skin tags in between at places. Both angles of injury were cleanly cut and acute. Underlying thyroid cartilage, supraglottic part of larynx, laryngo-pharynx, soft tissue, blood vessels and musculature were cleanly cut corresponding to surface injury along with cut fracture of body of fifth cervical vertebra measuring 04 cm in length and maximum depth of 3 mm (Fig. 2a and b). Internal jugular vein and external carotid artery on the left side were incised at the level 1 cm above the origin of external carotid artery (Fig. 3a). The right sided carotid artery and its main branches were spared. No tentative incisions and tailing of wound were present over the neck (Fig. 3b).

Figure 1 Multiple old healed linear scar marks over anterior aspect of left forearm; it indicates tendency of self-mutilation.

2.2.3. Internal examination

Brain was pale and oedematous. Heart shows no morphological abnormality or injury and was pale. Rest of all the organs were pale.

2.2.4. Viscera preservation

Routine viscera and blood preserved, packed, labelled and sealed during autopsy. It was further sent for chemical analysis with maintenance of proper chain of custody.

2.3. Toxicological analysis reports from chemical analysers

Toxicological analysis did not reveal the presence of any poison or alcohol.

2.4. Final cause of death

Opinion as to the cause of death was haemorrhagic shock due to cut throat injury caused by sharp edged weapon.

3. Discussion

In homicidal attacks, cut-throat injuries and stab wounds to the neck induced by sharp weapons are often life endangering.[17–19] The proper evaluation of neck injuries case by case will help in differentiation between homicidal, suicidal and accidental injuries by the Forensic experts.[20,21]

A typical suicidal cut throat incision is oblique, starting on the upper part of the left side of neck, below the angle of jaw and terminating on the right side in the right handed person. Depth of the incision is more at the commencement while it becomes shallower as it crosses the throat, giving an indication regarding the direction of the slit and the handedness of the victim.[10] Agnihotri[22] stated that usually suicidal wounds are incised while homicidal wounds are usually chopped and stab wounds. Cut throat extending up to the vertebrae is suggestive of homicidal injury while its absence is indicative of suicidal injury.[9,12]

Suicidal incised neck wounds are classically numerous, being characterised by a number of cuts at the superior end of the wound known as tentative cuts/hesitation marks. Their presence suggests self-infliction, indicating repeated attempted cuts being stopped because of pain or hesitancy before finally cutting through the skin.[11,23–25] In these victims, hesitant superficial and parallel marks are commonly present on other accessible parts of the body – sometimes it is possible to observe scarring of the wrists from previous suicide attempts. An additional aspect of self-inflicted injury is that cut or stab wounds are usually found on sites that are easily reachable,