



AN UNUSUAL CASE OF SUICIDE BY INCISING POSTERIOR TIBIAL ARTERY

Forensic Medicine

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ABSTRACT

Self-harm (SH) is also called as self-injury. It is defined as the intentional, direct injuring of body tissues. The most common form of self-harm is using a sharp object to cut one's skin, but self-harm also covers a wide range of behaviors including burning, scratching, banging or hitting body parts. In present case we examined an unusual case of vascular injury by self-cutting over right ankle joint on medial surface, heel end (upper end) 1.5 cm below medial Malleolus, with cutting of underlying Vessels (Posterior tibial artery and veins) leads to sudden death of individual. The case was brought to forensic medicine department for medicolegal postmortem examination.

KEYWORDS

Self-harm, suicide, Posterior tibial artery, self-inflicted injury, incised wound

Introduction:

'Self-cutting' is a specific type of emergency presenting to accident and emergency departments. The self-cutting is most often seen in a young, unemployed person with emotional and psychological problems with monetary side or problems in love life. The majority of person cut their wrist, other site are abdomen, face and neck.¹ Vascular injuries are frequent among young population causing hypovolemia causing death.² Suicide by sharp weapon injuries accounted for 2.5% of all suicides.

Self-harm is when someone hurt or harms oneself purposefully. It is most common among young people; aged about 11-25 years.³ Addiction is the key factor that increase the risk of self-harm indicating the sign that something is wrong, however, it doesn't always mean the person has a mental health condition. The person may self-harm because, he find it difficult to cope with the moods or feeling. Everyone has their own reasons for self-harming attitude and those having this attitude are more at risk of suicide than someone who doesn't. Sharing the feelings with someone you trust can help you self-harm less and make you feel less alone. It can be hard to know how to support someone who self-harms. Being patient and learning about why they self-harm can help.

Self-harm is not a mental health problem in itself, but could be a part of a diagnosis of bipolar disorder, schizophrenia, eating disorders, obsessive compulsive disorder or post-traumatic stress disorder.⁴ Here we present an unusual site of unusual case of vascular injury by self-cutting over right ankle joint on medial surface, heel end (upper end) 1.5 cm below medial Malleolus, with cutting of underlying Vessels (Posterior tibial artery and veins) leads to sudden death of individual.

Case history:

Crime scene investigation:

A 28 year old man found unconscious on mat on floor besides the bed in a room. The room was about 15 feet x 13 feet x 12 feet, with one door and one ventilation window, with one bed inside the room Door of the room closed from inside. incised wound present over right lower limb ankle joint on medial surface, 1.5 cm below medial Malleolus, Blood pool of about 1.5 liters was present around the body, with a razor blade smeared with blood present 12 inches to right side of body. The body was supine with folded arms on chest and semiflexed legs with incised wound exposed. Patient was brought dead in tertiary care hospital. Declared brought dead on arrival in casualty and body was forwarded for autopsy in department on forensic medicine.



Figure 1. showing the scene of crime with pointer showing razor blade and pool of blood from incised wound.

Autopsy findings:

A deceased was moderately built, cloths were intact, the surroundings in room was intact. Rigor mortis well marked in the whole body. Faint postmortem lividity was present over back and buttock. Dried blood stains present over right palm, both leg and foot. Incised wound was present over right ankle joint on medial surface, 1.5cm below the medial malleolus, transversely oblique, 5cm x 0.5cm x muscle deep with evidence of underlying vessels (Posterior tibial artery and veins) cut with tailing at lower end (toe end). Five old healed deep hesitation cuts were present over left forearm flexor aspect. Other visceral organs were extremely pale. Stomach contains 100 ml of brownish fluid having alcoholic odour. Chemical analysis report shows presence of ethyl alcohol in routine viscera.



Figure 2 showing incised wound present over medial aspect of ankle below medial malleolus.



Discussion:

Self-inflicted intentional injuries are increasing at an alarming rate; many reports describe their relationship with alcohol consumption characterized by major depressive episodes and stressful life events, particularly interpersonal difficulties with poor social support and monetary problems.⁵ Such individuals consumes alcohol prior to the suicide attempt to strengthen the nerves before suicide attempt. Unemployment was identified as the strongest predictor. Odds of making attempt were found to be 15.81 times higher among the unemployed compared to the employed.⁶ The Suicides are committed at seclude place often room closed from inside.⁷ People who self-harm

are at more risk of suicide than people who have never self-harmed. It is 66 times more likely that someone will end their lives if they have recently had treatment for self-harm.⁸ Women who self-harm are at a greater risk of suicide than men.⁹

In the present case the person was consumed alcohol found grossly on postmortem examination and in chemical analysis reports, ethyl alcohol present in routine viscera. The person was poor socioeconomic status, monetary problems and unemployed. These are the condition contributed to suicidal ideation and attempt. Paleness of skin and visceral organs, mucous membranes and visceral organs especially renal cortex are pathological findings in death due to gross hemorrhage these are present in this case. On the basis of these findings the cause of death was framed as "Shock and hemorrhage due to incised Injury over right lower limb."

The closed room from inside, secluded place, no disturbance of circumstances, presence of weapon near body, hesitation cuts over body and unintentional cuts over fingers of right hand clearly indicate the suicidal manner of death.

In the present case fatal incised wound present over right ankle on medial aspect, though it is accessible but an unusual site, as per best of our knowledge, no literature was found regarding self-inflicted injury over posterior tibial vessels on ankle joints. This is the uniqueness of case. The possibility cannot be denied that the person gets knowledge of location of vital and major blood vessel at the site of incised wound from some media or internet.

Conclusion:

The closed room from inside, secluded place, no disturbance of circumstances, presence of weapon near body, hesitation cuts over body and unintentional cuts over fingers of right hand clearly indicate the suicidal manner of death.

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