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## Case Report

# A Suicide Claimed As A Homicide - Role of Medical Evidence to Untie.

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Article Info	Abstract
Received on: 02.12.2021 Accepted on: 12.05.2022 Key words Railway Injuries, Hesitation Cuts, Second Autopsy, Honour Killing, Head Injuries.	<b>Introduction:</b> Majority of the fatal railway cases are accidental in nature though there are cases of suicide and homicide. Though decapitation or transection of the body at thoraco-abdominal region is common in suicidal cases there can be cases with different patterns of injuries depending on peculiar body posture adopted at that time. <b>Discussion:</b> When unusual pattern of injuries are present it becomes very difficult to give opinion about the manner of death. In sensitive cases and when proper history is not available it becomes very tough for the autopsy doctor to give his opinion. There is always a chance error leading to further chaos and miscarriage of justice. In the present case report we discussed about such an unusual death on a rail track. <b>Conclusion:</b> Timely intervention by law and medical expert opinion based on scientific findings can prevent heinous social crime.
1. Introduction	

Railway related deaths are often reported in India and the incidence is increasing day by day as this constitutes a common mode of public transport system. This increase in incidence is also contributed by factors like rapid urbanization and industrialization. More alarmingly, there has been a spate of Railway Accidents in India, leading to loss of a significant number of human lives.<sup>1</sup> The Railway accidents present with a vast variety of injuries which are often very difficult to assess as to their patterns at the postmortem examination.<sup>2</sup> Though fatal railway deaths are mostly accidental in manner sometimes it could be a case of suicide or homicide also. As bodies are generally grossly mutilated it may pose a great challenge to

determine manner of death in such fatal cases. Moreover, in the absence of proper case history or eye witness, it is difficult to distinguish between, accident, suicide or homicide.<sup>3, 4</sup> In the present case report we discussed about such a case of suicide on a rail track.

### 2. CASE HISTORY:

About 1.7m away from a rail track a dead body of a male about 20 years old was spotted by passerby public. Local police referred the dead body to a nearby government medical college for post mortem examination. The body was of average built of height 173 cm. On external examination rigor mortis was present in lower limb and passed off upper limb.

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Post-mortem lividity was present on the back side of body except on pressure points and it was fix. The mouth was partially open. There was no evidence of bleeding or discharge. The left eye showed subconjunctival haemorrhage in the outer canthus. There were no visible signs of putrefaction. There were grease mark on the front of chest, inner and front aspect of left hand and on the left middle finger on the outer aspect.

#### External body injuries were as follows:-

Irregular reddish abrasions of about 0.5 to 8.5cm size seen on right shoulder, right arm, left forearm, left fingers and right foot. About 15 x 8 cm x cavity deep laceration present on left nasal, forehead, frontal and parietal region exposing fractured pieces of skull vault, irregularly lacerated duramater and part of cerebellum (Fig No.1). Another about 7 x 2cm x bone deep size laceration seen on the back of elbow with surrounding irregular black grease mark (Fig No.2). The wound exposes fractured ends of upper part of ulna bone.

Fig No.1: Head Injury Showing Multiple Skull Bone Fragments



Fig No.2: Old Linear Multiple Superficial Scar Marks on Left Hand



Internal body injuries were as follows:-

- Swelling and deformity of left forearm, on dissection there was fracture of radius at its mid-3<sup>rd</sup> with surrounding reddish contusion.
- Available scalp tissue showed presence of about 6 X 1.5cm size reddish contusion on right parietal region.
- Skull Vault showed presence of 22 X 15cm size comminuted fracture involving the right frontoparieto-occipital region. There was a fissured fracture about 9cm long in the left parietooccipital region. Another 7cm long fissured fracture was seen in the left posterior cranial fossa which was in continuous with the vault fracture.
- Duramater was torn irregularly over the right and left fronto-parieto-temporal region. Both the cerebral hemispheres were oozed out from the cranial cavity. Cerebellum and part of brain stem were intact. Cut sections of the available brain matter were pale.

Other than these there was no external or internal injury in the body. The same day the remaining missing brain mater was also collected from the crime scene area and it was examined by the same autopsy doctor.

The cause of death was given as the head injury and the time since death approximately 12 to 24 hours prior to autopsy. However, viscera were preserved for chemical analysis. This was not the end of the case as there was a hue and cry from the relatives as they suspect homicide as this man eloped and tied a nuptial knot with a girl from a higher community. The situation went from bad to worse as communal riot broke out.

#### 3. Court intervention

The matter was filed in the court of law. On the direction of the Madras High Court the dead body was examined independently by two senior Forensic Medicine Professors one of which was one of the authors of this article. There was discordance in opinion and the following points were put forward by the other senior professor:-

- Usually in railway accidents extensive injuries like multiple lacerations, contusions, abrasions, etc. are seen all over the body.
- 2. In suicidal deaths complete severing of head from the body or severance of limbs are common.
- 3. Except the injury over the head and left forearm, no other injuries were seen in other areas of the

body. In head injuries due to speeding train, associated spinal injuries are seen. In this case we have taken X-rays to look for spinal or mandible fractures, we dissected the neck area to check for any bruising, to our surprise there were no sign of injury in the neck

- 4. If the deceased person was hit by the train by the sides, along with the head injury he would have sustained severe injuries over his shoulder, rib fractures, chest injuries and other injuries on the side of impact will be seen. In this case no such injuries were seen. Since the shoulders are the most protruding part of the body it will definitely show severe injuries. In this case forearm injuries are seen, no shoulder injuries are present.
- 5. Extensive laceration with fracture of skull were seen but bruising of the scalp was minimal, which was not consistent with the extent of injury.
- 6. Thus the possibility of accidental or suicidal death theory was challenged by the other senior Forensic Professor.

So, the necessity of a second post mortem examination was felt and the court ordered to conduct a second post mortem examination by a Medical Board of forensic experts.

#### 4. Second autopsy findings:

An autopsy team of Medical Board comprising three experts came from one of the premier institutes located in New Delhi and the second autopsy was conducted on the 8<sup>th</sup> day after the first autopsy. The Medical Board unanimously concluded that:-

- 1. The cause of death in this case is the extensive cranio-cerebral damage caused by impact of a heavy blunt object. The head injury as well as other injuries are ante mortem in nature and it will result to instantaneous death. The injuries mentioned could be caused by the impact of a running train.
- 2. The deceased was having multiple linear scars on inner aspect of left forearm which are hesitation cut marks suggestive of previous suicide attempts/tendencies (Fig No.2). Suicidal tendency is the propensity of a person to have suicidal ideation or to make suicidal attempt.

The Medical Board also further observed that – "It is most likely that since the deceased was under the influence of alcohol at the time of incidence and the ideation of committing suicide, sustaining injuries resulting into death could be possible due to accidental hitting by a moving train."

#### 5. Discussion

In accidents cases head injuries are more common though they are associated with other bodily injuries on different body parts such as lower extremities, abdomen, thorax, upper extremities, neck, etc.<sup>5,6</sup> In suicide cases decapitation and hemi section of body trunks are quite common.<sup>7</sup> So, the present case, by prima facie, must go in favour of an accidental death. But there was no enough other bodily injuries to call it as accidental one.

In his forensic medicine textbooks published throughout the 1920s and 1930s Prof. Milovanovic' noted: "suicidal or accidental railway collisions with a person in an upright position are quite similar. However, injuries in individuals lying across the rails are overly characteristic: they are found at the neck, head, legs, and the pelvis; the wounds are parallel, with the scissors-effect of the train wheels and the rails on the body lying across the track. Bound legs, covered eyes, and hands covering the ears all indicate suicide. Covering the ears with the hands results in arm injuries that are contiguous with neck injuries, which may also be typical for suicides".<sup>7,8</sup>

Individuals who lie across railroad tracks in order to commit suicide hold the palms of their hands against their ears in an effort to avoid the noise produced by the oncoming train. In such cases the arms and shoulders are abducted with the elbows flexed, resulting in contiguous injuries of the neck and arms. However, in the present case the position of the deceased at the time of impact could be partially bending forward so that only the frontal part of the head was smashed forcefully by the prominent portion of the train resulting into the oblique laceration of the scalp along with shattering of the underlying vault and base of the skull, complete severance of the body may not be necessary.

Multiple abrasions, contusions, fractures and lacerations seen on the deceased (though they are not scattered in the whole body) are also possible in a case of railway accident. Laceration & fracture of left arm bones could be due to secondary impact injury. Because of the extensive head injury, death could have occurred instantaneously so scalp contusion was not extensive.

Another angle of possibility of torture and killing by other means and placing the dead by deliberately onto the railway track was also excluded

as there was no evidence of such physical torture. Regarding the question about the absence of neck and spinal cord injury, it is not necessary that there will be always such damages as the head was not stationary. This opinion was consistent with the opinion given by the Medical Board experts. This whole theory was consistent with findings of the crime scene investigation. So, ultimately the possibility of homicide was excluded.

#### 6. Conclusion:

The ugly face of communal hatred and riots due to inter-caste marriage rises up now and then in our society. Sometimes, it may lead to honour killing of their daughter or suicide of the parents. Those who dared for the inter-caste marriage by violating the social norm had to face the consequence in terms of violence, social boycott, family boycott and even death. Timely intervention by law and medical expert opinion based on scientific findings can prevent such heinous social crime.

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#### **References:**

- Ghosh S, Banerjee A, Sharma N, Agarwal S, Ganguly N, Bhattacharya S et al. Statistical analysis of the Indian railway network: a complex network approach. Acta Physica Polonica B Proceedings Supplement. 2011; 4(2):123-38.
- Malick DS, Goswami A. Pattern of fatal railway injuries in Sealdah (South) section, Kolkata-An autopsy based study. IOSR J Dent Med Sci (IOSR-JDMS). 2017; 16(10):17-21.
- 3. Byard RW, Gilbert JD. Characteristic features of deaths due to decapitation. Am J Forensic Med Pathol. 2004; 25:129–30.
- Lerer LB, Matzopoulos RG. Fatal railway injuries in Cape Town, South Africa. Am J Forensic Med Pathol. 1997; 18(2):144-7.
- 5. Tsokos M, Tu"rk EE, Uchigasaki S, Pu"schel K. Pathologic features of suicidal complete decapitations. Forensic Sci Int. 2004; 139:95–102.
- 6. Mohanty MK, Panigrahi MK, Mohanty S, Patnaik KK. Death due to traumatic railway injury. Med Sci Law. 2007; 47(2):156-60.
- 7. Puttaswamy. A Five Year Review of Railway Related Deaths in Mandya Town of Karnataka: A Retrospective Study. J Evid Based Med Healthc.2015, 2, (37): 5871-5.
- 8. Nikolić S, Živković V. A train-related fatality—old dilemmas: accident, suicide, or homicide? Premortem

or postmortem decapitation? Forensic Sci Med Pathol. 2014; 10:278-83.