

Case Report

A Case Report of Partial Hanging

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ABSTRACT

Hanging is the form of asphyxia due to constriction of neck when the force of constriction is on the body weight. Hanging is commonly suicidal in nature. While, partial hanging is usually taken to be diagnostic of being suicidal in nature. The authors describe here a typical case of partial suicidal hanging.

Key words: Hanging, Partial hanging, Ligature mark, Saliva stain.

INTRODUCTION

Hanging is the lethal suspension of a person by a ligature. The *Oxford English Dictionary* states that hanging in this sense is “specifically to put to death by suspension by the neck”, although it formerly also referred to crucifixion and death by impalement in which the body would remain “hanging”.

Hanging oneself is also used to describe a method of suicide in which a person applies a ligature to the neck and brings about unconsciousness and then death, by means of partial suspension or partial weight-bearing on the ligature. This method has been most often used in prisons or other institutions, where full suspension support is difficult to devise. The earliest known use of the word in this sense was in 1300 A.D.¹

As per number of authors of Medical Jurisprudence, hanging is best defined as the constriction of neck by a ligature tightened by the weight of the body². When the point of suspension is over the center of occiput, there is a maximum possibility of occlusion of the arteries and this is known as typical hanging, while all other points of suspension are called atypical hanging³.

In hanging from a high point of suspension, the victim is either fully suspended, with his feet clean off the ground or he is suspended with his knees slightly flexed.

In hanging from a low point of suspension (partial hanging), a comparatively little force, about 4.5 kg is enough to occlude blood vessels of the neck. The term partial hanging is used for such cases in which the bodies are partially suspended, or for those in which bodies are in a sitting, kneeling, reclining, prone or any other posture⁴.

Hanging is a common method of committing suicide in India⁵. While, partial hanging is usually taken to be diagnostic of being suicidal in nature. In most cases of suicidal hanging there should be a motive such as failure in love or examination, familial quarrel, poverty, unhappy conjugal life, battered wife, mismatched socioeconomic status of husband and wife etc. Accidental hanging can also take place at times. However, the most common accidental hanging occurs in the sexual asphyxia. Homicidal hanging is extremely rare. In case of hanging different types of ligature material are used, such as rope, electric wire, lungi, saree, dhoti, shoe laces etc. which are available during emotion. The post-mortem findings depend on type and site of hanging, nature of the material used, and time of suspension. Site of hanging may be anywhere like from branches of tree, light post, bathroom, in the ceiling hook etc. Cause of death due to hanging are asphyxia, apoplexy, cerebral anemia, reflex vagal inhibition and fracture and dislocation of cervical

vertebrae⁶. The commonest cause of death due to hanging are combined asphyxia and apoplexy.

CASE REPORT

We report a case of 35 years old male who committed suicide by hanging from a branch of tree with a muffler (cloth used as ligature material also called as angaucha in common language) around his neck. Victim was married and a labourer by occupation. He had borrowed a lot of money from his masters under whom he was employed. As he was poor so he was not able to return the money. Repeated teasing by the masters, mental pressure of debt over him made him more emotionally stressed and he was not able to balance himself and committed suicide. His body was found hanging by a tree with a muffler around his neck. His legs were touching the ground and partially bent at knee.

On external examination as per the postmortem report the person was found to be of average body built. His eyes were found closed, mouth partially open, tongue protruded out in between upper and lower jaw. Rigor mortis passed from upper limb and present in lower limb. Ligature mark of 28cmx3cm obliquely placed, non continuous high up inverted V-shape placed above thyroid cartilage around the neck with a gap of 6cm. Ligature mark was situated 3cm below from left ear, 4cm below from right ear and 4cm below from chin. On dissection margins were whitish leathery and parchment like.



Picture1: Scene of crime showing body of victim



Picture 2: Showing type and position of knot

On internal examination scalp was healthy. Brain and meninges were congested. The skull was found in an intact condition. There was no intracranial haemorrhage. No fracture of ribs and sternum was found. Lungs were found congested and oedematous. Heart was found empty. Stomach was filled with 250ml of digested food. Small and large intestine was filled with gases and faecal matter respectively. Spleen and both the kidneys were found congested. Urinary bladder was half filled.

Clothes were made available to us for inspection in our department of Forensic Medicine, MLN Medical College, in Allahabad by the police of Fatehpur district. They consist of muffler (ligature material), sweater, shirt, inner, pant, belt, lower, brief and sleepers. On examination of muffler no tears or any stain mark was found on them. It was 150cm long. On examination of sweater white colour stain mark was found on right side over chest area.

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Picture 3: Showing Clothes of victim with white colour stain

No other stain marks or tears or any other significant finding was found on any other cloth. White colour stain present on sweater was scrapped out and stored in normal saline for further examination.

Examination and medicolegal importance of saliva stain:- saliva moistens the mouth. It is secreted from 3 sets of glands on each side of the mouth (a) sublingual (b) submandibular (c) parotid. The saliva from parotid contains amylase which helps the digestion of carbohydrates. Saliva can be an evidence of sexual offence, hanging and strangulation. Suspected stain due to saliva can be confirmed by (a) presence of buccal squamous cells. (microscopic) (b) detection of the presence of amylase:- To test for the presence of amylase the stain extract is treated with starch solution

and incubated at 37 degree for 12hrs. Then a drop of Grams iodine is added. If the stain was due to saliva, then there will not be any bluish discoloration, because amylase digest the starch partly to dextrin and then to maltose. If the stain is not due to saliva then there will be bluish discoloration on addition of Grams iodine after incubation of extract with starch⁷.

As clothes were made available to us after two month interval and validity of amylase test is for 48hrs so no specific finding was found except some fungus on microscopic examination.

OPINION:- As per the postmortem examination death was due to asphyxia as a result of hanging which was ante mortem and suicidal in nature.

DISCUSSION

After complete examination of all important papers such as FIR, PM report, Photographs, Police inquest papers were made available to us by the investigators. After a thorough examination of the scene of crime, clothes and photograph of victim we conclude the cause of death by our major findings:

1. Firstly, as the principal finding for diagnosis of hanging is ligature mark. In this case the characteristic of ligature mark was consistent with the imprint. It was obliquely placed non continuous, inverted V shaped placed above the thyroid cartilage with a gap on the back side of the neck. Skin underneath was leathery, whitish and parchment like. All these factors indicate that death was due to hanging.
2. Secondly, the feet of victim was touching the ground with legs bent at knees indicating that it is a case of partial hanging.
3. Thirdly, as the victim was of average built and it is very difficult to hang a well built individual unless overpowered by assailant by some means. Also, neither there was any sign of deliberate trauma and struggle nor there were any positive toxicological findings. So, we can say it is a case of ante-mortem hanging.

Hence, it was concluded that it is a case of death due to asphyxia as a result of partial hanging which was antemortem in nature.

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