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## Case Report

# Some forensic aspects of hanging cases in the crime scene investigation

Vinod Dhingra<sup>1</sup>, Ritika Gupta<sup>2,\*</sup>

<sup>1</sup>PTS Tighra, Gwalior, Madhya Pradesh, India

<sup>2</sup>Dept. of Biology, Forensic Science Laboratory, Delhi, India



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### ABSTRACT

The hanging is commonly observed in most of the crime scene in northern Indian region. Hanging is mostly suicidal in nature and the second most common way, out of various means adopted by suicide victims. An investigating officer must adopt a scientific method to evaluate the incidence by logical and proper investigations and reconstruction of the case. The present study highlights some important and meaningful points in hanging cases.

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## 1. Introduction

Hanging is generally defined as form of death in which body suspended by ligature round the neck by accidentally, intentionally and under the pressure of emotions, which generates asphyxial death. The pressure on the soft tissues of the neck results from the body weight exercising a pulling force at the hanging noose. Hanging is major mode of suicidal death, it is also safest methods for criminals to camouflage their crime by disposing off the body by simulating hanging although, homicidal and accidental hanging is rare but has been recorded. In suspicious deaths crime scene examination may reveal about suicidal, homicidal or accidental hanging. Some time crime scene examination becomes challenging task for experts because family members disturb the crime scene for sake of life saving activity. In such cases reconstruction plays an important role. At crime scene, expert deals with questions like-what occurred, is it a criminal act, is hanging suicidal, homicidal or accidental, is it a true hanging spot or body hung after death.<sup>1-7</sup>

### 1.1. Some important scene of crime observations

Generally dead body found at scene of crime. The forensic expert must examine body as well as scene of crime on the basis of that concrete opinion may be generated.

### 1.2. Spot inspection

1. For crime scene investigation following point must be taken into consideration i.e. location of scene of crime, approach to the anchor, deceased male or female, body status, mental condition of the deceased, last seen of the deceased, availability of the ligature material, crime scene is indoor or outdoor (Figure 1), strength of the anchor, some external evidences attached to body, ligature mark, strength of the ligature material, type of ligature material, height of chair or stool.
2. The measurements should be noted down to justify the approach and space sufficient for hanging. (a) total height from ground level to the point of anchor. (b) height of the person, however approachable height of the person is always found more than real height, as the person can be on toe and he/she can extend his approach by keeping hands above to head. (c) between

\* Corresponding author.

E-mail address: [vdhingraso@hotmail.com](mailto:vdhingraso@hotmail.com) (R. Gupta).

anchor point and the knot on the neck. (d) height of the chair, table or stool etc. (e) between heel and floor.

3. Pocket of the clothes should be searched for suicidal note, letter or other documents, which may be important for the investigation apart from this external examination of clothes may be useful in any wear tear or mark of scuffle, sticking of foreign body like vegetative material, soil etc.
4. Some time dust or any types of stains are also important on the palm of the deceased which may occur from point of anchor.
5. Extent of rigor mortis developed.



**Fig. 1:** Outdoor hanging point of anchor tree



**Fig. 2:** Dribbling of saliva



**Fig. 3:** Ligature mark



**Fig. 4:** Tongue between teeth, eyes semi open

### 1.3. Dead body examination

Some time the dead body may be put down or brought to hospital. The expert must consider following observations

(a) In most of the hanging case, the body is found touching the ground. In such condition police and public normally consider it as homicidal but generally found that overall length between toe and anchor increases due to tightening of knot, ligature stretch, feet relaxation (Figures 1 and 3).

(b) Due to gravity postmortem staining i.e. blood contusion towards ground. Some time contusion of blood is misunderstood by the public even by investigating officer.

(c) In hanging, head is always found tilted against the knot; details about the knot should be noted with any peculiar feature which may give some indications about incidence (Figure 1).

(d) Fist generally found in clinched position with thumb drawn inside the fist.

(e) In suicidal hanging there may be possibility to identify the fibers of the ligature material on the hands and other part of the body like tissue, hairs or any biological material of the deceased.

(f) Dribbling of saliva from mouth is a vital indication of suicidal hanging it is always found downwards on the side of tilt and opposite to the knot (Figure 2). If knot is on backside of neck then it will be found on the middle of the lips and present over the front of chest.

(g) Flow of urine, nasal secretions and blood, their direction may play an important role in deciding suicidal or homicidal hanging.

(h) Eyes remain partially open with Tardieu's spots (Figure 4).

(i) Tongue is generally found protruding out with bluish at the tip, sometime bitten between teeth (Figure 4).

#### 1.4. Some physical evidences at scene of crime

Ligature material and their pieces, foot print on the chair etc., finger prints on the anchor point, suicidal note, any foreign material adhered to the body, cloths, paint marks on foot and palm, blood sample and tool marks etc.



**Fig. 5:** Slipper pair at scene of crime near the deceased

## 2. Conclusion

Due to increasing stress in life style men and women under different socio-economic groups undergo variety of situation therefore, they end their life prematurely. Forensic experts participation in the case of hanging crime scene investigation is often essential. Sometimes autopsy findings may be misinterpreted in absence of visit of crime scene. Law seeks the help of forensic experts in evaluating suspicious death due to hanging regarding their nature, cause of death, period of death, sign of struggle and reconstruction of the incident. Scene of crime provide important information that may indicate cause and mode of death.

Death scene should always be treated as homicide scenes and dealt with as such until the contrary is proved. This can only be achieved through detailed and thorough examination.

## 3. Source of Funding

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## 4. Conflict of Interest

None.

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## Author biography

**Vinod Dhingra**, Senior Scientific Officer

**Ritika Gupta**, Senior Scientific Assistant

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