Case Report

A Suicidal Hanging with Unusual Findings at Crime Scene

*C Behera, **Ankita Dey, ***Anju Rani, **Kulbhushan, ****P.C Dikshit

Abstract

A 42 year old male, was found hanging by a plastic rope in his unbolted bed room. The rope was found attached to two suspension points (one end attached to the window panel and the other side to the ceiling knob) and the middle part of it used for the binding of neck. There was no knot present in the ligature as the right hand was found holding the ligature loop for the purpose of constriction of neck. A towel was found covering the head and underneath the ligature material on the neck used for padding. Blood stain was present on the floor below the suspended body which oozed out from the haemorrhoids. He was holding the cloth, wore in lower half of the body up to the mid thigh label, which appreciated by the authors as cadaveric spasm that developed in his flexor muscles of left hand. Detailed autopsy, crime scene examination and police investigation supported the manner of death as suicidal.

Key Words: Cadaveric spasm; Ligature; Suicide

Introduction:

A method of suicidal hanging usually carried out by attaching one end of a ligature material to a higher point such as ceiling beams, staircase etc. and the other end by forming into either a fixed loop or a slip knot which is placed around the neck. The person stands on a chair or other support and jumps off or kicking away the support. An absence of knot in ligature on neck, or complex tying of ligature material in hanging is very rarely found. The co-occurrence of padding underneath the ligature in neck and unusual body position due to cadaveric spasm, can lead to suspicion of homicide or accidental autoerotic deaths. The Forensic Pathologist must be aware of the unusual presentation of suicidal hanging which may suggest foul play.

Case report:

A 42 years male, labourer, was found hanging in the bed room of his house by a plastic rope at 11.30 P.M. The door was not locked. The one end of the ligature was bound to the window. The other side of the ligature was fixed to the ceiling fan knob and the end part was just found hanging down. He was last seen alive at 6 P.M on the same day by the neighbours. A cotton towel was found covering the head and the neck below the ligature. Blood stain was found on his under garment, the dhoti and the floor below the completely suspended body (Fig. 3). He was separated from his wife about 10-15 years back and had been staying with his nephew. He was a known alcoholic and had been depressed due marital dispute. Suicide note or sexual aids such as pornographic material and bondage was not found at the crime scene.

Autopsy Findings:

Autopsy was conducted on the next day about 12 hours after death. The body was of middle aged male, moderately built and nourished, length was 162cm and weight 65kg. The right eye was closed and the left partially opened. The pupil were dilated and cornea hazy. The ligature material was found in situ neck. The right forearm was in flexed and adducted position with the ligature found entangled in the hand (Fig.4). Rigor mortis was present all over the body. No signs of decomposition were found over the body.

Ligature material was just wrapped around the neck without any knot. The loop of the ligature at neck was made by holding the ligature in middle in between the two suspension points (Fig.1). The left hand was found holding the dhoti (lower part cloth) firmly; he was wearing, up to the thigh region (Fig. 2). Blood stain was found on his under garment, the dhoti and the floor below the completely suspended body (Fig. 3). He was separated from his wife about 10-15 years back and had been staying with his nephew. He was a known alcoholic and had been depressed due marital dispute. Suicide note or sexual aids such as pornographic material and bondage was not found at the crime scene.

Corresponding Author:

*Assistant Professor
Department of Forensic Medicine and Toxicology,
MAMC, New Delhi, India
E-mail: drchitta75@yahoo.co.in
** Senior Resident, ***Junior Resident
**** Director Professor and Head

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The ligature mark (Fig.5) of width ranging from 0.6cm to 1.4cm, brownish black in colour, obliquely present over upper 1/3rd of neck, 6cm below the mentum, 10cm above the suprasternal notch at anterior midline, 3.5 cm below the right angle of mandible and over the right mastoid process at the right side of neck,
4.5 cm below the left mastoid process at left side of neck and at the back of neck merged with the posterior hairline. No ligature mark was present at left anterior part of neck. There was no knot mark present. Layer dissection of neck revealed, no bruising of neck muscles and fracture of hyoid thyroid complex. All organs were congested and fluidity of blood was observed. No other external injury was present over the body. Anal examination revealed multiple haemorrhoids at 7’o clock and 11’o clock positions. Toxicological blood studies, found no evidence of drugs or alcohol. Cause of death was asphyxia due to hanging by a ligature. The investigation of the scene, victim and witnesses revealed findings that supported the manner of death as suicide.

Discussion:

In our case the person tied the ligature material to the two high suspension points and used the middle part as loop the constriction of neck was quite unusual. The literature regarding use of ligature material in this manner is not available. The towel was tucked between the neck and the ligature, which act as a pad. The victim might think that it will lessen the feeling of pain due to the ligature constriction. The placing of soft material below the ligature at neck found occasionally. Serafettin Demirci et al. [1] reported soft materials such as a scarf, hood, the collar of a coat or shirt had been used as padding against the ligature loop in 11 cases of suicidal hanging. F.A. Benomran et al. [2] also reported a case where a vest was tucked between the neck and the ligature. The noose was partly cushioned with a bike tube with the obvious aim of reducing the pain was reported by Krill A. et al. [3]

The right hand was found holding the ligature loop at the left side of neck instead of a knot in the ligature, for the purpose of constriction of neck. Hanging without knot has been rarely reported. Kumar V.[4] reported a case of suicidal hanging where there was no knot present in the noose. Hanging cases reported by Pollak S et al.[5] where the fingers were interposed between loop of the ligature and neck because of staggering fell into the noose when still engaged in preparing the suspension.

Immediately after the death, at the crime scene, the deceased’s left hand was found holding the dhoti firmly. This spasm in his flexor muscles of left hand appreciated by authors as cadaveric spasm, which may be developed because of the intense and/or emotional activity during the process of hanging. Cadaveric spasm often indicates the last activity one did prior to death and is therefore significant in forensic investigations. While stepping down from the sofa, he was holding the dhoti up to the thigh level in his left hand. It is a usual practice holding the dhoti in hand above the knee level as it may sometimes obstruct the movement of the body, especially when a person rose to or step off from a higher point. There is rarity literature regarding this condition in suicidal hanging. Cadaveric spasm is a rare condition but usually associated with violent deaths like firearm wound of head, drowning and strychnine etc. It also occurs in circumstances of intense emotion like fear, severe pain, exhaustion, excitement.

The blood on the floor and clothes was due to post-mortem blood oozing out from the haemorrhoids. Similar types of cases were reported by Kanchan T. et al[6] and Bharadwaj D. N. et al[7] This blood stain may wrongly interpreted by the investigating police as that due to self-inflicted injury or possibly case of homicide followed by post-mortem suspension of the body. The findings aroused the suspicion of homicide or autoerotic deaths but the examination of scene of crime and other circumstantial evidences ruled out these manners.

References:

5. Pollak S, Stelligcarion C. Deviations in findings in hanging by interposition of fingers between noose and neck. Arch. Kriminol1986; 177(3-4); 76-84.

Fig. 4: Ligature material grasped in hand
Fig. 1: Ligature material tied to the two suspension point and loop was grasped in right hand

Fig. 2: Towel used for padding and cadaveric spasm of left hand

Fig. 3: Blood stain on the floor

Fig. 5: Ligature mark on neck