AN UNUSUAL CASE OF HANGING WITH ELASTIC CREPE BANDAGE: A CASE REPORT

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ABSTRACT: Committing suicide by hanging is very common now-a-days because it is the cheapest method and it produces painless death. Any person irrespective of sex, age and socioeconomic status can commit suicide by hanging any time by using any material available at that time as a ligature material. Some of the commonly used ligature materials are rope, wire, electric cord, saree, veil, lungi, towel, bed sheets etc. Sometimes unusual ligature materials like hand kerchief, belt, shoe laces, hospital dressing bandages can also be used. Here in the present case a middle aged person committed suicide by hanging using elastic crepe bandage as a ligature material.

KEYWORDS: Suicide, hanging, ligature material, elastic crepe bandage.

INTRODUCTION: Hanging is that form of asphyxia which is caused by suspension of the body by a ligature which encircles the neck, the constricting force being the weight of the body.¹ On the basis of degree of suspension, when the feet do not touch the ground or any other material so that the body is completely suspended in the air is called complete hanging. Here the constricting force is the weight of the entire body. While in all other positions where feet touching the ground and only a part of the body weight acts as a constricting force is called incomplete or partial hanging. On the basis of position of knot, when point of suspension is placed over the occiput i.e. the knot is at the nape of the neck on the back, is called typical hanging. While in other conditions where the point of suspension i.e. knot is at any other position, is called atypical hanging.²

Various mechanism involved in death due to compression of neck in cases of hanging are asphyxia, venous congestion, combined asphyxia and venous congestion, cerebral anaemia, reflex vagal inhibition and fracture or dislocation of the cervical vertebra.¹ Blockage or compression of air passages is not necessary to cause death in hanging.³ In the absence of classical signs of asphyxia, even in hangings in which there is complete suspension, the inference must be that death has occurred more rapidly than it takes for such signs to appear, raising the possibility that carotid sinus pressure and neurogenic cardiac arrest has played an important role.⁴ The ligature mark around the victim's neck constitutes an extremely precious piece of evidence in order to arrive at a conclusion as regards the cause of death, whether Hanging or Strangulation, though on some rare occasions, the Forensic Pathologist finds it immensely problematic to opine confirmatively about the cause and manner of death, because of certain peculiarities embracing the "mark".⁵ Although most hangings are suicidal in manner, one should not expect to find suicide notes, because they are present in less than 50 percent of cases.⁶

CASE REPORT: A 48 year old male, coolie by occupation, found dead in hanging position at his owner's house. Body was suspended by an elastic crepe bandage. Owner of the house saw this and informed the police and police later shifted the body to Victoria hospital mortuary for post-mortem.

Clinical findings: No history of treatment.

POST-MORTEM FINDINGS:

General: Body length-167 cms. Moderately built and nourished. Rigor mortis present all over the body. Post mortem staining seen over the back of the body. Tongue partially protruded and bitten. Nail beds and lips bluish discolored. Left leg swollen and blackish discolored. Superficial veins of left leg appear dilated and tortuous. Infected wound present over lower aspect of left leg over an area of 16cm x 9cm. Maggots present in situ crawling over the wound. Ligature material present in situ around neck. It is a light brown coloured elastic crepe bandage.

- 1. **External:** Ligature mark: An oblique, incomplete ligature mark measuring 34cm x 2cm present over front and sides of neck, over and above the thyroid cartilage, running upwards and backwards, situated 3cm below right ear lobule, 6cm below chin and 7cm below left ear lobule. Another oblique, incomplete ligature mark measuring 11cm x 2cm present over right side of neck, situated 2cm below the above ligature mark, merging with the above ligature mark in front of the neck. The skin over the ligature mark is grooved, dark, hard and parchmentised. Patterns of texture of ligature material also observed over the skin of ligature mark.
- 2. **Internal:** Skull- Intact. Brain-Congested and cut section shows numerous petechiae in white matter. Pleura adherent to chest wall at places over right side. Lungs- Congested, Inter lobar fissures and surface shows petechiae. On cut section exudes dark fluid blood. Liver shows fatty changes. All other organs were found to be intact and congested. Neck-Tissues underneath the ligature mark were pale and glistening. Hyoid bone and thyroid cartilage were intact.

Ligature material: The light brown coloured elastic crepe bandage used as a ligature material has slip knot at one end and it corresponds to the ligature mark on twisting. It can withstand the weight of the body. The ligature material also has same patterns as found over the skin of ligature mark. Foul smelling dark coloured dried stains present at places.

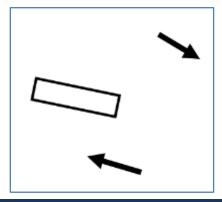


Fig. 1: Arrows showing protruded tongue and elastic crepe bandage around neck



Fig. 2: Arrow showing ligature material and ligature mark

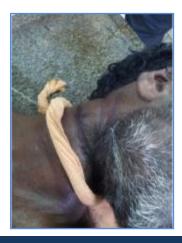


Fig. 3: Picture showing ligature material in situ around neck and two ligature marks



Fig. 4: Arrow showing swollen left leg with dilated and tortuous veins



Fig. 5: Picture showing slip knot over ligature material



Fig. 6: Arrow showing patterns of texture of ligature material over skin



Fig. 7: Closer view of patterns of texture of ligature material over skin of ligature mark



Fig. 8: Arrow showing grooving of ligature mark over front and left side of neck



Cause of death: Death due to asphyxia as a result of hanging was opined.

DISCUSSION: Hanging is highly lethal method of suicide. In most of the cases person dies in few minutes. In the present case the person was suffering from a very painful wound over the left leg due to vascular insufficiency leading to gangrene of his left leg. He was using elastic crepe bandage over his left leg to relieve his pain. But he could not bear that pain and opted for painless death by hanging himself using the same elastic crepe bandage, which was easily available at that particular time. Peculiarity of this case was slippage of ligature material was observed in this case as suggested by double ligature mark. One more peculiarity was patterns of texture of ligature material also observed over the skin of ligature mark. In 2010, in central jail of Goa, one prisoner, because of depression, committed suicide by hanging using crepe bandage as a ligature material⁷. This shows new trend that crepe bandage can also be used as a ligature material.

CONCLUSION: Hanging is preferred method of committing suicide. A person can hang himself/herself any time, at any place by using any material available at that time as a ligature material. So, treating doctors have to be very cautious while dealing with persons who are suffering from chronic diseases and mentally disturbed. Police also has to be cautious as any person can commit suicide by hanging in jail.

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