Different homicidal mechanical asphyxial death and disposal of dead body to conceal crime: A case series



Vinod Kumar¹, Tarun Dagar², Jai Prakash Soni³, Chander Bhan⁴

¹Associate Professor, ⁴Resident, Department of Forensic Medicine, Pt. B. D. Sharma PGIMS, Rohtak, ²Assistant Professor, Department of Forensic Medicine, Kalpana Chawla Government Medical College, Karnal, Haryana, ³Assistant Professor, Department of Forensic Medicine, Gajra Raja Medical College, Gwalior, Madhya Pradesh, India

Submission: 28-03-2025 Revision: 28-04-2025 Publication: 01-06-2025

ABSTRACT

Homicide is the killing of a human being be another human being. Various methods are adopted by a person to kill other person (such as by various weapons and other mechanical methods etc.) such as using blunt and sharp weapons, mechanical methods, and firearm ammunition. Among the mechanical methods; strangulation by ligature, throttling, and smothering are used commonly however gagging, mugging, etc., are also used which are classified under mechanical asphyxial death. In many of the cases, more than one mechanical method is adopted by the assailant to kill the person such as throttling and smothering, strangulation by ligature and gagging. In many of the cases, the body of the deceased is disposed of by the accused by throwing it in an area away from original occurrence of place of crime or dumps it in any water body, etc., to conceal the crime.

Key words: Mechanical asphyxial death; Strangulation; Smothering; Gagging; Concealment of crime

Access this article online

Website:

https://ajmsjournal.info/index.php/AJMS/index

DOI: 10.71152/ajms.v16i6.4543

E-ISSN: 2091-0576 **P-ISSN**: 2467-9100

Copyright (c) 2025 Asian Journal of Medical Sciences



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License

INTRODUCTION

Mechanical asphyxia is a broad term in which enough external pressure is applied to the neck, chest, or other areas of the body, or the body is positioned in such a way that respiration is difficult or impossible.¹ Hanging, strangulation, throttling, smothering, gagging, etc., are various forms of mechanical asphyxial death. Strangulation is a form of mechanical asphyxial death by compression of neck from the exterior. If the compressive force is applied by the ligature it is known as strangulation by ligature and if by applied by the human hand it is called throttling or manual strangulation.² Strangulation is mostly homicidal in manner however cases of accidental strangulation like by entangled

cloths in wheel of two-wheeler in riders, by parna during work of thrashing in fields, etc., have also been reported occasionally. Suicide by ligature strangulation is uncommon. Smothering is a form of asphyxia caused by mechanical occlusion of external air passages, that is, the nose and mouth by hand, cloth, plastic bag, or other material.³ It is also usually homicidal however cases of accidental and suicidal smothering are also reported. Gagging is a violent form of asphyxia due to closure of mouth cavity by some foreign articles such as cloth and handkerchief. Such type of rolled cloth, handkerchief, or similar materials is known as gags.⁴ Often cases of death due to gagging occur when gags are used to suppress the voice of victim for help at the time of incidence not as a means of killing. In many of the cases, the

Address for Correspondence:

Dr. Vinod Kumar, Associate Professor, Department of Forensic Medicine, Pt. B. D. Sharma PGIMS, Rohtak, Haryana, India. **Mobile:** +91-9254444008. **E-mail:** vkmehra777@gmail.com

assailant tried to conceal the crime by various means. The common methods are disposal of the body in farflung areas, in the water bodies, by putting the body on fire, by burial, etc. However, the investigation agency by considering various facts and circumstances related to the case like place and circumstances of recovery of the body, crime scene report and photographs, history of persons related to the incidence, and any previous history which clarify the motive of crime, call records, location of mobile phone, etc., can establish and solve the crime. The forensic pathologist by conducting the autopsy meticulously and considering the police inquest report and various other related circumstances gives opinion related to the injury, time since death, manner of death, etc., and assists the investigating agency and Hon'ble courts to solve the crime. Here the authors are discussing three different cases, that is, strangulation by ligature coupled with gagging, throttling coupled with smothering, and strangulation by ligature, of mechanical asphyxial death where the assailant disposes of the body in bushes, in front of garden away from sight of peoples and in water body respectively to conceal the crime.

Case no. 1

A dead body of 50 years male individual was referred to our institute for postmortem examination from Civil Hospital of District of Haryana State. As per statement enclosed in police inquest report, the deceased was a tractor driver and his tractor was hired in the late evening by two persons for transportation for shifting of home. However, the deceased did not return back and his body was recovered in next evening in bushes near cremation ground. His tractor, mobile phone, and money were missing. The apparent cause of death by the police was mentioned as by pressure on the neck and putting cloth in the mouth by tying both hands and feet. Body was received for postmortem examination with both hands and feet tightly tied together by means of two pieces of cloths, that is, white parna which was present around the wrist joints, and another white and purple colored piece of cloth around the ankle joints. Both abovementioned clothes were tied together by means of a fixed knot in front of the pelvic region. The body was in state of putrefaction and not identifiable. A rolled up piece of cloth was found to be tightly thrust in the oral cavity occluding the cavity of mouth including the oropharynx and nasopharynx. It was lying outside of the mouth for 30 cm whereas the portion lying inside the oral cavity which was rolled up was 25 cm in length. The width of this piece of cloth was 40 cm. it was found to be stained with dark secretions of the oral cavity. The structures in the oral cavity including the oropharynx and nasopharynx and the posterior half of the tongue and the palate and inside of the cheeks were found to be contused which was evident in form of reddish ecchymoses of these structures. A ligating material found, in form of three loops of plastic rope, was found to be tied tightly around the neck by means of fixed knots over the left side. A completely encircled, transversely placed, grooved reddish ligature mark was present above the level of thyroid cartilage. On dissection, the underlying neck structures including subcutaneous tissues, laryngotracheal structures, cricothyroid cartilages, muscles, deep fascia, and neurovascular structures were found to be ecchymosed. The cause of death in this case was opined as strangulation by ligature coupled with gagging. The manner of injury/death was opined as homicidal.

Case no. 2

A dead body of 31 years male individual was referred to our institute for postmortem examination from General Hospital of District of Haryana State. As per the statement of family members enclosed in police inquest report, the deceased was away from the home since last evening and the body was recovered near a sewerage canal on next morning. The deceased was a factory worker and he left home on previous evening for factory work. Further, as per family member statement, his wife has illicit relations with a person and due to said reason the deceased was murdered. The apparent cause of death by the police was mentioned as murder. On postmortem examination, multiple reddish contusions of various sizes were present over the face over an area 12 × 8 cm involving tip of nose, both lips, right and left angle of mouth, and chin. Reddish contusion were also noted over the right side of neck, front of neck, left side of neck, around the left eye, and scalp over top of head and left parietal. The cause of death in this case was opined as throttling coupled with smothering. All the injuries were opined as antemortem in nature, recent in duration, homicidal in manner, and caused by blunt impact.

Case no. 3

A dead body of 40 40-year-old male individual brought in our department for postmortem examination. As per statement of family members enclosed in police inquest report, the deceased was a truck driver who was beaten by some persons at bus stand while returning home in the night after which they dumped the body in the river. The body was recovered from water source in the morning after 2 days of alleged incidence. The deceased was a resident of nearby district from where body was recovered. The apparent cause of death by the police was mentioned as Unknown. The body was in state of putrefaction and not identifiable. Feet of the body were tied together by a pant which passed around the both ankle joint, by fix tight

knot. Further, a full sleeved shirt, which was rolled up, was found tied around the neck with a fixed knot at the nape of neck. The sleeves of that shirt were passed downward over the back of thorax and passed through cubital fossa of both elbow joints thereby securing the both upper limbs on the sides of torso with the help of fixed tight knot by both sleeves behind the back. On further examination, a transversely placed ligature mark was found all around the neck. On dissection, underlying structure of ligature mark was found ecchymosed. The cause of death in this case was opined as strangulation by ligature. The manner of injury/death was homicidal.

DISCUSSION

Asphyxia is a condition caused by interference with respiration, or due to lack of oxygen in respired air, due to which the organs and tissues are deprived of oxygen (together with failure to eliminate CO₂), causing unconsciousness or death.¹ Strangulation by ligature, throttling, smothering, etc., are usually used singly by the assailant to kill a person as these are sufficient to cause death of an individual. However, in many of the causes as described more than one method is adopted by the assailant. Ordinarily, involvement of more than one assailant is expected to murder a healthy individual by these methods however in case of children, unconscious persons, aged persons, and individuals who unable to defend themselves due to any reasons, single assailant can murder a health individual.

These mechanical asphyxial methods of death are usually homicidal. Homicide by a combination of three different asphyxial methods, that is, manual strangulation, smothering, and traumatic asphyxia by thoracic compression was also reported by Das and Jena in the case of a 42-year-old male who was sleeping in the veranda of his house however found dead in the next morning.⁵ Martin et al., reported a case of homicidal smothering on toilet paper in a 91-year-old woman who was found dead in the bedroom of her nursing home by the night watchman. The body was covered by various papers. A roll of toilet paper was found near the body. Acute blunt head injuries however not fatal, bilateral periorbital hematoma, diffuse left-sided hematoma of the scalp, multiple bruises of the chin, the left mandible, the right cheekbone, and the right ear were observed. Small abrasions and bruises were noticed around the lips and left angle of the mouth, upper extremities, particularly on the hands and forearms. Residues of toilet papers were noticed around the lips.⁶ Death by homicidal smothering using hot steam towel was reported by Jang et al., in thin built male individual of age 21 years. Extensive scalding with drying of face along with severe thermal damage of buccal region was noted in the case during autopsy. Other injuries in the form of abrasion and contusions were present over the forehead, anterior neck, occipital region, thorax, abdomen, and both extremities. Sebastian et al., reported a case of suicidal smothering with gagging in an 18-year-old girl who was found dead at her residence. The body was found with a polythene bag covering her entire head and mouth of the bag was secured with a lace. Her oral cavity was stuffed with multiple pieces of tissue paper (soaked in saliva), followed by a crumbled handkerchief. In the present cases, meticulous examination of the body, police inquest report, and circumstance of the cases helps in deciding the cause and manner of death.

CONCLUSION

Final opinion regarding cause and manner of death in such types of cases should be framed after meticulous postmortem examination of the body, examination of complete police inquest papers, location of recovery of body, and after giving due credence to circumstantial circumstances surrounding death of the victim to helps investigating agency and Hon'ble Courts to arrive at justice to the case.

ACKNOWLEDGMENTS

Dr. Vijay Pal Khanagwal, Ex-Professor and Head, Department of Forensic Medicine, Kalpana Chawla Government Medical College, Karnal, Haryana, India for his guidance.

REFERENCES

- Reddy KS. The Essentials of Forensic Medicine and Toxicology. 35thed. New Delhi, India: Jaypee Brothers Medical Publishers; 2022.
- Vij K. Textbook of Forensic Medicine and Toxicology Principles and Practice. 6th ed. New Delhi, India: Reed Elsevier India; 2014.
- Biswas G. Review of Forensic Medicine and Toxicology Including Clinical and Pathological Aspects. 4th ed. New Delhi, India: Jaypee Brothers Medical Publishers; 2018.
- Karmakar RN. Forensic Medicine and Toxicology. 5th ed. Kolkata, India: Academic Publishers; 2015.
- Das S and Jena MK. Homicide by a combination of three different asphyxial methods. Egypt J Forensic Sci. 2016;6(3):298-302. https://doi.org/10.1016/j.ejfs.2015.04.001
- Martin PS, Lefrancq T and Sauvageau A. Homicidal smothering on toilet paper: A case report. J Forensic Leg Med. 2012;19(4):234-235.
 - https://doi.org/10.1016/j.jflm.2011.12.032
- Jang SJ, Park JH, Kim YJ, Ham SH, Jo NY and Ha H. Death by homicidal smothering using hot steam towel: A case report.

Korean J Leg Med. 2013;37(2):90-92. https://doi.org/10.7580/kjlm.2013.37.2.90

8. Sebastian D, Prem TN, Ajay B and Sasidharan A. Suicidal Smothering with Gagging: A case report. J Indian Acad Forensic Med. 2022;44(4):101-102.

https://doi.org/10.5958/0974-0848.2022.00119.1

Author's Contribution:

VK- Prepare the first draft of manuscript, literature survey, data collection, and analysis; TD- Assist during the data collection and analysis; JPS- Manuscript revision, literature survey, coordination, and data analysis; CB- Assist in literature survey and concept design.

Work attributed to:

Department of Forensic Medicine, Pt. B. D. Sharma PGIMS, Rohtak, Haryana, India.

Dr. Vinod Kumar - 10 https://orcid.org/0009-0007-4034-0025
Dr. Tarun Dagar - 10 https://orcid.org/0000-0001-5018-6665
Dr. Jai Prakash Soni - 10 https://orcid.org/0000-0002-9174-7622
Dr. Chander Bhan - 10 https://orcid.org/0009-0001-0984-0845

Source of Support: Nil, Conflicts of Interest: None declared.