## CASE REPORT

José Alberto Garza-Leal, M.D. and Francisco J. Landrón, M.D.

# Autoerotic Asphyxial Death Initially Misinterpreted as Suicide and a Review of the Literature

REFERENCE: Garza-Leal, J. A. and Landrón, F. J., "Autoerotic Asphyxial Death Initially Misinterpreted as Suicide and a Review of the Literature," Journal of Forensic Sciences, JFSCA, Vol. 36, No. 6, Nov. 1991, pp. 1753-1759.

ABSTRACT: Death during autoerotic activities is of special concern to law enforcement officials, medical examiners, the family of the decedent, and society in general. As in the probing of any violent demise, accurate identification, management, and preservation of all physical evidence; complete photographic documentation of the scene and the body; reconstruction of the scene; and interviews with the family and acquaintances (psychological autopsy) are mandatory for proper study, evaluation, and interpretation of the case. Because of a lack of knowledge on the part of many people, including professionals, about these activities and the fact that many autoerotic fatalities share common characteristics with suicide and homicide, these cases are often misinterpreted. The authors present a case of autoerotic accidental asphyxial death which was initially misinterpreted as suicide.

**KEYWORDS:** pathology and biology, autoeroticism, asphyxia, sexual asphyxia, hypoxyphilic behavior, accidental deaths, suicide, homicide, sexual behavior, forensic pathology

One of the most fascinating and least understood types of cases that the forensic pathologist encounters in the medicolegal investigation of death is autoerotic asphyxiation [I]. It is also known as sexual asphyxia, autoerotic asphyxia, and hypoxyphilic behavior [2]. It is defined as a sexual practice in which the subject seeks to induce cerebral hypoxia, to produce a profound sexual euphoria, using an injurious agent [I,3]. The circumstances and characteristics of such deaths are not commonly known, and as a result, they are frequently misinterpreted [4] even by professionals, if they are unaware of the existence and circumstances of this sexual practice [3].

Inducing cerebral hypoxia for sexual gratification has been described by anthropologists for centuries [1,5]. This practice was introduced into Europe and Africa by legionnaires of the French Foreign Legion who had been based in French Indochina before that country's independence. Breitenecker established that pressure on the neck during sexual activity is a common practice of Eskimos and Southeast Asians [1,5-7]. This kind of sexual activity is more common than is realized; conservative estimates now suggest that

Received for publication 5 Feb. 1991; accepted for publication 7 May 1991.

<sup>1</sup>Forensic pathologist and professor of legal medicine, School of Medicine, Universidad Autónoma de Nuevo León, Monterrey, N.L., Mexico.

<sup>2</sup>Forensic pathologist, Institute of Forensic Sciences, San Juan, Puerto Rico.

between 500 and 1000 deaths occur annually as a result of this practice [3]. Unfortunately, this kind of sexual behavior is almost always discovered when death results from the act itself because these individuals rarely seek professional advice [1,8].

Accidental fatalities during autoerotic sexual activities usually result from failure of the escape mechanism. Death is usually caused by asphyxia. The complete reconstruction of the scene of the fatal incident, along with the findings of the autopsy and the psychological autopsy, is essential for correct establishment of the cause and manner of death [1,9,10].

#### Material and Methods

In April 1988, the police department was called to investigate the death of a person in San Juan, Puerto Rico. The scene investigating team arrived at the scene and found the body of a man on the floor of his room, gagged, partially nude, with a noose around the neck and left wrist, and the legs crossed and tied with a bandage with a velcro clasp. The room was orderly and showed no signs of a struggle. Rigor mortis was generalized and livor mortis was well developed on the legs. No drugs of any sort were found. No suicidal note was found.

This case was considered a suicide and the body was sent to the Institute of Forensic Sciences, in San Juan, Puerto Rico.

Complete photographic documentation of the scene and of the body, a reconstruction of the scene, a psychological autopsy, and postmortem and toxicological examination were performed for correct evaluation and interpretation of the case.

#### Scene Investigation

A 25-year-old white male, a seminarian, who had shared breakfast with his family, later retired to his room, from which he never left. His family called him several times but he did not answer. During the afternoon, he was called again by his family, without response. His father decided to force the door, which was locked from the inside, and found him partially suspended by a loop bound to the neck and left wrist. The father cut the loop and put the body on the floor and tried to assist his son, with no success.

After complete documentation, the scene investigators considered it a classic case of suicide and sent the body to the Institute of Forensic Sciences of San Juan, Puerto Rico.

#### **Postmortem Examination**

The physical examination revealed a marked congestion of the face and pinpoint hemorrhagic infiltrates in the conjuctivae and sclerae. The body was wearing a gag, which consisted of a white sock affixed with masking tape (Fig. 1). Around the neck was a very elaborate noose with a protective padding, which consisted of an unknotted white tee shirt, a blue bandage with a velcro clasp outside that, and a white noose with a slipknot (Fig. 2) outside all the other materials. The noose was cut.

On the left wrist was a restraint with a partially fixed knot (Fig. 1). The noose around the neck and left wrist showed the same characteristics in color, shape, and appearance, and, after both distal ends had been joined, it was clear that they were previously joined and thus that they belonged to the same loop.

When noose and protective padding were removed, the neck showed an ascending oblique abraded groove. The left wrist also showed an abraded furrow in the skin (Fig. 1).

The victim was clothed in a short-sleeved beige zippered shirt, which was partially closed, with a white tee shirt under it; both were elevated to the level of the thoracic



FIG. 1—View of the gagged body and the protective padding, showing a knot and an abraded furrow at the left wrist and also the partial nudity and exposed external genitalia.

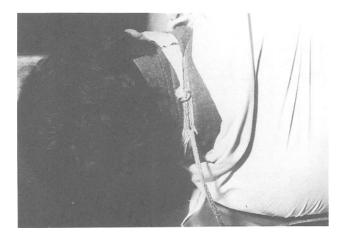


FIG. 2—Posterior view of the neck, showing the protective padding and the slipknot of the noose.

region. White underwear was found at the level of the middle third of both thighs, and the external genitalia were exposed (Fig. 1). He also had on beige shorts, which were unfixed and located at the middle third of both legs, which were crossed and bound with a blue elastic bandage with a velcro clasp at the level of the distal third of the thighs (Fig. 3).

The internal examination showed hemorrhagic infiltrates in the soft tissue of the neck. The hyoid bone, laryngeal cartilages, and cervical vertebrae showed no evidence of trauma. The blood presented a dark red and completely fluid appearance. The thoracic and abdominal organs and the brain showed no evidence of trauma or microscopic anomalies. The toxicologic examination of the blood and vitreous humor were negative for alcohol and drugs.

With all the aforementioned findings, we concluded that the cause of death was asphyxia by hanging; however, the case did not fulfill the requirements for establishment of suicide as the manner of death, as initially had been determined. This discrepancy made a scene reconstruction and interviews with the family and acquaintances of the victim (psychological autopsy) necessary.



FIG. 3—View showing the legs crossed and tied, with the shorts lowered to the middle third of the legs.

#### Scene Reconstruction

The reconstruction of the scene and the reenactment of the incident using a doll (Fig. 4) was based on information given by the victim's father and helped solve the enigma. The father established that the body had been partially suspended by a noose around the neck, which had passed over the horizontal rod of the closet, and that the other end of the noose was tied to the left wrist. The horizontal rod showed multiple previous abrasions. The father had cut the noose off and tried to assist his son. He also stated



FIG. 4—Reconstruction of the final position, showing the partial suspension.

that the body had been gagged and partially nude, with the legs crossed and tied by a blue bandage with a velcro clasp.

The father admitted to having previously removed some pornographic pictures that were on the floor in front of the body, but he did not find female garments in the room or over the body. The psychological investigation of the victim was based on direct interviews with the family and acquaintances. They established that he was a very mature, positive, and happy person and that he was well oriented and had shown no behavioral changes before his death. He had no history of depression, and a suicide note was not found

#### Discussion

This case satisfies the criteria for the establishment of autoerotic asphyxial death [5,9]. The body was found in a secluded area, the room locked from the inside, demonstrating the desire for secrecy and privacy. Also, the characteristics of the physical ligature of the neck and left wrist suggest that the victim had bound himself with the intention of voluntarily inducing and controlling cerebral hypoxia to obtain sexual gratification [3,11,12]. By far the most characteristic feature was the presence of protective padding between the skin of the neck and the ligature. This indicates that the victim did not want an abrasion or mark to be produced on the neck, which he would later have to explain. The intention was not to die, but to produce sexual gratification [1,4,5,13].

The meticulously elaborate ligature on the neck and left wrist, the gag, the partial nudity, the tying of the legs, and the pornographic pictures played an important role in the victim's sexual fantasies. Also, there were old abrasions on the horizontal rod of the closet that held the noose, which probably indicates that this activity had been performed more than once. Usually, but not always, intimate feminine garments are used during the performance of these autoerotic activities, and when present, they reflect an obvious symbolic significance in the erotic fantasies of the practitioner [9]. In this case, female intimate garments were not found, but the investigating team in such cases should be alert to the possibility that female clothing or other types of physical evidence on the scene or over the body may have been previously altered or completely removed by family members or acquaintances before the arrival of the scene investigating team. These facts add difficulties to the establishment of the manner of death [4]. Also, the presence of semen has been described as evidence of masturbatory activity. This is not conclusive [4,12,13], however, because seminal discharge can occur in any type of death (suicide, homicide, accident, or natural); it is due to rigor mortis changes in muscles of the seminal vesicles [12]. However, previous autoerotic activity may be suggested when the victim is partially or completely nude, when a hand is found near or over the external genitalia, when vibrators or other phallic objects are found, or when pornography is present [3,4,12,13].

This type of sexual behavior is usually seen in heterosexuals who lead normal lives and for whom its only purpose is to obtain erotic pleasure; thus, it has an exclusively physiological purpose. However, this type of behavior also involves homosexuals and bisexuals, who practice these activities for two main purposes, a psychic stimulus and a physiologic stimulus [14]. Because of the psychic stimulus, many autoerotic deaths show combined aspects of masochism, fetishism, transvestism, and homeovestism [9,11,13-16] that disclose different degrees of sexual identification, which are fundamental in reaching orgasm [17].

The vast majority of autoerotic fatalities are accidental; however, characteristics such as finding the victim alone, in a room with the door locked from inside, and hanging by the neck, sometimes lead to an erroneous classification as suicide [4,11], despite the fact that there is only one case of suicide posed as an autoerotic asphyxial death in the literature [17]. Other findings, such as obstruction of the breathing passages with gags, blindfolding,

and physical restraint, may sometimes lead to an equivocal interpretation of homicide [4]. In the vast majority of cases the victims are young white males, between the second and fourth decades of life; however, this kind of sexual activity may also occur in women [4,11,18].

Transient cerebral hypoxia during autoerotic manipulation, combined with physical helplessness and self-endangerment to the degree that life is threatened, enhances sexual gratification [5,9,17] but also weakens the victim's self-control and judgment, occasionally resulting in accidental death from the failure of or inability to operate previously arranged self-rescue mechanisms.

The ability of the practitioner to escape injury or death is seriously impaired by his already altered euphoric and hypoxic state of mind [9].

The different types of failure of escape mechanisms that result in death depend on the way the practitioner operates and controls the pressure exerted on his neck. This can be performed by progressively relaxing the body, by manipulating the ligature on the neck by means of a physical restraint tied to the legs or upper extremities or by increasing weight on the noose [5].

The alterations in the state of mind and consciousness secondary to cerebral hypoxia can result in a loss of the control position, loss of balance, and, finally, partial or complete suspension. There is another immediate consequence of the constriction of the neck: a sudden exaggerated bilateral pressure on the carotid sinuses results in an immediate loss of consciousness, with relaxation of the body and the resultant suspension, asphyxia, and death [5,7].

In this case, the differentiation between accident and suicide could be made by the scene reconstruction, the autopsy findings, and the psychological autopsy of the victim. We demonstrated that the act was repetitive; there was no evidence of failure in the escape mechanism; and, thus, death was probably due to a carotid sinus reflex with vagal inhibition or to a few seconds of miscalculation, resulting in loss of consciousness, which ended in the victim hanging himself.

The psychological study of the victim and the aforementioned findings show that this case should be classified as accidental death and not as suicide [19].

The cause of death in such cases is almost always asphyxia, and the injurious agent most commonly used is a noose around the neck [3,4,13,20]. However, the mode of producing asphyxia is variable, and there are many methods that alter the state of consciousness, such as a ligature around the thorax [9,12], a ligature around the abdomen [10], plastic bags [4,21,22], the passage of electrical current throughout the body [20], inhalation of toxic gases or chemicals in spray cans or masks [4,23], partial or total submersion [24], and other strange and complicated methods [6,7,25] which obviously indicate how little we know about human behavior.

In these cases, the forensic pathologist has a role, not only in establishing the cause and manner of death but also in advising clinicians on how to identify persons involved in this peculiar type of behavior.

### Acknowledgments

The authors acknowledge the assistance of Miguel Hinojosa-Lezama, M.D., and Daniel González-Spencer, M.D., in the preparation of this manuscript.

#### References

[1] Walsh, F. M., Stahl, C. J., Unger, H. T., Lilienstern, O. C., and Stephens, R. G., "Autoerotic Asphyxial Deaths: A Medico-legal Analysis of Forty-Three Cases," *Legal Medicine Annual*, 1977, pp. 155-182.

- [2] Miller, E. C. and Milbrath, S. D., "Medical-Legal Ramifications of an Autoerotic Asphyxial Death," Bulletin of the American Academy of Psychiatry and Law, Vol. 11, 1983, pp. 57-68.
- [3] Burgess, A. W. and Hazelwood, R. R., "Autoerotic Asphyxial Deaths and Social Network Response," American Journal of Orthopsychiatry, Vol. 53, 1983, pp. 166-170.
- [4] Hazelwood, R. R., Dietz, P. E., and Burgess, A. W., "The Investigation of Autoerotic Fa-
- talities," Journal of Police Science Administration, Vol. 9, 1981, pp. 404-411.
  [5] Resink, H. L. P., "Erotized Repetitive Hangings: A Form of Self-Destructive Behavior," American Journal of Psychotherapy, Vol. 26, 1972, pp. 4-21.
- [6] Minyard, F., "Wrapped to Death: An Unusual Autoerotic Death," American Journal of Forensic Medicine and Pathology, Vol. 6, 1985, pp. 151-152.
- [7] Emson, H. E., "Accidental Hanging in Autoeroticism: An Unusual Case Occurring Outdoors," American Journal of Forensic Medicine and Pathology, Vol. 4, 1983, pp. 337-340.
- [8] Hayden-Smith, P., Marks, I., Buchaya, H., and Repper, D., "Behavioural Treatment of Life-Threatening Masochistic Asphyxiation: A Case Study," British Journal of Psychiatry, Vol. 150, 1987, pp. 518-519.
- [9] Hiss, J., Rosenberg, S. B., and Adelson, L., "Swinging in the Park: An Investigation of an Autoerotic Death," American Journal of Forensic Medicine and Pathology, Vol. 6, 1985, pp.
- [10] Thibault, R., Spencer, J. D., Bishon, J. W., and Hibler, N. S., "An Unusual Autoerotic Death: Asphyxia with an Abdominal Ligature," Journal of Forensic Sciences, Vol. 29, No. 2, April 1984, pp. 679-684.
- [11] Sass, F. A., "Sexual Asphyxia in the Female," Journal of Forensic Sciences, Vol. 20, No. 1, Jan. 1975, pp. 181–185.
- [12] Spitz, W. U., "Sex associated asphyxias," Medicolegal Investigation of Death, 2nd ed., W. U. Spitz and R. F. Fisher, Eds., Charles C Thomas, Springfield, IL, 1980, pp. 345-349.
- [13] Hucker, S. J., "Self-Harmful Sexual Behavior," Psychiatric Clinics of North America, Vol. 8, 1985, pp. 323-337.
- [14] Ford, R., "Death by Hanging of Adolescent and Young Adult Males," Journal of Forensic
- Sciences, Vol. 2, 1957, pp. 171-176.
  [15] Zavitzianos, G., "Homeovestism: Perverse Form of Behaviour Involving Wearing Clothes of the Same Sex," *International Journal of Psychoanalysis*, Vol. 53, 1972, pp. 471-477. [16] Zavitzianos, G., "The Object in Fetishism, Homeovestism and Transvestism," *International*
- Journal of Psychoanalysis, Vol. 58, 1977, pp. 487-495.
- [17] Litman, R. E. and Swearingen, C., "Bondage and Suicide," Archives of General Psychiatry, Vol. 27, 1972, pp. 80–85.
- [18] Henry, R. C., "Sex' Handing in the Female," Medico-Legal Bulletin of the Commonwealth of Virginia, Vol. 214, 1971, pp. 1-4.
- [19] Hazelwood, R. R., Dietz, P. E., and Burgess, A. W., "Sexual Fatalities: Behavioral Reconstruction in Equivocal Cases," Journal of Forensic Sciences, Vol. 27, No. 4, Oct. 1982, pp. 763-773.
- [20] Sivaloganathan, S., "Curiosum Eroticum: A Case of Fatal Electrocution During Auto-erotic Practice," Medicine, Science and the Law, Vol. 21, 1981, pp. 47-50.
- [21] Ikeda, N., Harada, A., Umetsu, K., and Susuky, T., "A Case of Fatal Suffocation During an
- Unusual Auto-erotic Practice," *Medicine, Science and the Law*, Vol. 28, 1988, pp. 131-134. [22] Johnson, J. M., Hunt, A. C., and Ward, E. M., "Plastic-Bag Asphyxia in Adults," *British* Medical Journal, Vol. 2, 1960, pp. 1714–1715.
  [23] Cordner, S. M., "An Unusual Case of Sudden Death Associated with Masturbation," Medicine,
- Science and the Law, Vol. 23, 1983, pp. 54-56.
- [24] Sivaloganathan, S., "Aqua-Eroticum: A Case of Auto-erotic Drowning," Medicine, Science and the Law, Vol. 24, 1984, pp. 300-302.
- [25] Rupp, J. C., "The Love Bug," Journal of Forensic Sciences, Vol. 18, No. 3, July 1973, pp. 259 - 262.

Address requests for reprints or additional information to José Alberto Garza-Leal, M.D. Cholula No. 108 Mitras Centro Monterrey, N.L. Mexico C.P. 64460