Ronald L. O'Halloran, M.D. and Park Elliott Dietz, M.D., M.P.H., Ph.D.

Autoerotic Fatalities with Power Hydraulics

REFERENCE: O'Halloran, R. L. and Dietz, P. E., "Autoerotic Fatalities with Power Hydraulics," Journal of Forensic Sciences, JFSCA, Vol. 38, No. 2, March 1993, pp. 359-364.

ABSTRACT: We report two cases in which men used the hydraulic shovels on tractors to suspend themselves for masochistic sexual stimulation. One man developed a romantic attachment to a tractor, even giving it a name and writing poetry in its honor. He died accidentally while intentionally asphyxiating himself through suspension by the neck, leaving clues that he enjoyed perceptual distortions during asphyxiation. The other man engaged in sexual bondage and transvestic fetishism, but did not purposely asphyxiate himself. He died when accidentally pinned to the ground under a shovel after intentionally suspending himself by the ankles. We compare these cases with other autoerotic fatalities involving perceptual distortion, cross-dressing, machinery, and postural asphyxiation by chest compression.

KEYWORDS: pathology and biology, asphyxiation, accidental death, autoerotic fatalities, sexual asphyxiation, sexual masochism, paraphilias, farm machinery

When accidental death results from dangerous techniques of sexual self-stimulation, family members are always puzzled and often find the victim's behavior incomprehensible. When the dangerous technique involves bondage, suspension, complex apparatus, or machinery, even seasoned death investigators may be perplexed. We report two cases of asphyxiation during autoerotic activity employing hydraulic shovels on tractors.³ The first involves a backhoe, the second a farm tractor with a frontend loader shovel.

Case 1

A 42-year-old Asian man was found hanging by the neck, suspended by a rope attached to the raised shovel of a John Deere model J D 410, diesel powered, backhoe tractor. He was last seen alive by his parents the prior evening at 10:30 when he walked out of their shared rural home. Shortly thereafter they heard the tractor engine start, as they had on prior occasions, but they investigated no further. The following morning the father noticed that his son's bed had not been slept in, and he heard the tractor engine idling. When he went out to the yard, he found his son dead, stiff, and cold.

The decedent was suspended in a semi-sitting position by a cloth safety harness strap wrapped around his neck and clipped to a rope that was hooked on the raised shovel of

Received for publication 1 July 1992; accepted for publication 16 July 1992.

¹Ventura County Medical Examiner Office, Ventura, CA.

²Clinical Professor, Psychiatry and Biobehavioral Sciences, School of Medicine, University of California, Los Angeles, CA; Forensic Psychiatry Consultant, FBI National Center for the Analysis of Violent Crime, Quantico, VA; consulting forensic psychiatrist, Newport Beach, CA.

³To protect the identities of the parties, certain facts have been changed in a manner that does not alter the meaning or educational value of these case reports.

the backhoe tractor (Fig. 1). A towel was between the loose fitting strap and the victim's neck. A long piece of plastic pipe was connected on one end by conduit tape to the hydraulic control lever of the shovel in the operator's compartment of the tractor. A broom stick was taped to the other end of the pipe and was partially under the decedent's buttocks. The hydraulic shovel could be easily raised or lowered by slight pressure applied to the broom stick. The decedent was fully clothed and his genitals were not exposed. No pornographic materials, women's clothing items, or mirrors were at the scene.

The decedent was a self-employed engineer who was unmarried and had always lived with his parents. He owned his own successful company and was actively involved in several hobbies, including two high-risk sports. He regularly contributed volunteer work to a charitable organization. His medical history was remarkable only for Reiter's syndrome with ankylosing spondylitis and clinical urethritis. He had no known psychiatric illness.

Two years before his death he had bought the backhoe tractor as a Christmas gift to himself and named it "Stone." He used the backhoe on occasional ditch-digging jobs. He wrote about it in a Christmas newsletter to friends, in which he enclosed Stone's picture. He also wrote about his tractor in a long poem, which alluded to flying high in the sky with his friend, Stone.

The autopsy showed only a fresh, partial ligature furrow and minor abrasion about the neck. Skeletal changes were consistent with ankylosing spondylitis. The decedent was 67" tall and slender, but well-developed and well-nourished. A postmortem toxicology screen was negative for alcohol and common drugs of abuse. The carbon monoxide level was 37% saturation and was thought to be due to prolonged exposure to the tractor's exhaust fumes.

The victim had used the ligature attached to the hydraulic shovel to achieve partial autoerotic asphyxiation, and it was hypothesized that he lost consciousness and acciden-



FIG. 1-The decedent in Case 1.

tally hanged. The death was certified as due to accidental autoerotic asphyxiation with carbon monoxide intoxication as a contributory cause.

Case 2

A 62-year-old white man was found dead in his barn, pinned under the hydraulic front scoop of a John Deere 1520 Model 145 tractor. He was last seen alive by his wife in the early afternoon when he went to the barn. When he had not returned by late afternoon, she called a neighbor to check on him. The neighbor found him lying prone on the ground with the scoop of the tractor resting on his back. The tractor engine had died, but the ignition was still in the on position. Restarting the engine and lifting the hydraulic scoop caused the victim's feet and legs to rise. The neighbor detached the victim from the tractor and called for emergency aid. Paramedics and the coroner found that the decedent had been dead for several hours.

The victim was nude except for a pair of red women's style shoes with 8" heels, knee-high nylon stockings, and duct tape wrapped around the ankles (Fig. 2). His ankles were tied to a 4' long segment of pipe such that his legs were spread. A yoke was attached to the center of the pipe, which was attached above the front loader bucket by a chain. His body lay on a piece of plastic. Two ropes led from the victim to the control lever on the tractor for raising and tilting the bucket. Fully raising the hydraulic bucket would have caused complete suspension of his inverted body by the ankles.

Next to the body was a broken, 5' long piece of $2'' \times 4''$ lumber. Examination of the body at the scene showed nasal and oral froth, several rib fractures, and a large pressure abrasion on the back that matched the tractor bucket. The scene gave evidence of the victim having clawed at the dirt floor after being pinned. Seminal fluid was found under

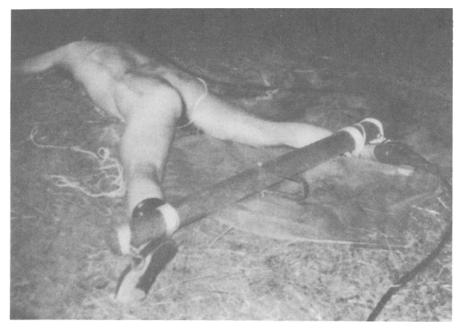


FIG. 2-The decedent in Case 2.

the uncircumcised foreskin. No autopsy or toxicology was done because of the limited autopsy budget in this rural coroner jurisdiction. No medical conditions were known.

His clothing was neatly folded nearby, and a fishing tackle box was found with women's jewelry and two empty pantyhose packages inside. The victim's son admitted that his father had been found at home on two prior occasions dressed in women's clothing. No pornographic materials or mirrors were at the scene.

This victim's technique of sexual self-stimulation was to manipulate the tractor hydraulics to suspend himself by the ankles while cross-dressed. The 5' board was placed under the tractor scoop as a safety measure to prevent it from drifting down. It is not known whether the engine stalled, whether the board snapped when the victim allowed it to support the weight of the scoop, or whether the victim became careless, or lost consciousness, but it is clear that the board snapped and the scoop dropped, coming to rest on his back and pinning him to the ground. He died of positional asphyxiation by chest compression.

Discussion

Accidental deaths during dangerous autoerotic activities have been reported in the medical literature throughout this century, though many of the early cases were misinterpreted as suicides or otherwise misunderstood [I]. Strictly speaking, the victims are not always masturbating, because not all use their hands to stimulate the genitals, hence these deaths are referred to as autoerotic fatalities rather than masturbation deaths. The autoerotic or sexually self-stimulating activities associated with accidental death are chiefly those in which the victim has purposely caused himself pain or endangered his life because he finds the pain or danger sexually arousing. When this is done repeatedly, evidencing a longstanding pattern of sexual arousal in response to pain or danger, a diagnosis of sexual masochism is implied.

Sexual masochism is one of the paraphilias (sexual deviations) detailed in the DSM-III-R [2], which is the standard psychiatric diagnostic system in the United States. Under the heading of sexual masochism, DSM-III-R contains a definition and description of hypoxyphilia, a term introduced in 1983 to refer to an enduring pattern of sexual arousal in response to oxygen deprivation [3]. Among those who intentionally induce hypoxia, methods of so doing have included hanging, strangulation, suffocation (usually by plastic bags), airway obstruction, anesthetic agents, chest compression, and submersion [4,5]. Other masochistic practices that sometimes result in accidental death involve self-endangerment with electrical stimulation, nonasphyxial sexual bondage, and poisons. The resulting deaths by electrocution, exposure, asphyxiation, poisoning, or other causes have been classified as atypical autoerotic fatalities [6]. The terms "autoerotic fatality" [7] and "autoerotic death" [8] have been used to describe the broader grouping of cases that encompassing both asphyxial and other dangerous autoerotic practices and both asphyxial and nonasphyxial causes of death.

The victim in Case 1 evidenced hypoxyphilia through his apparently repetitive use of self-hanging. The name he gave his tractor suggests that the altered mental state engendered by hypoxia was one of the effects he sought from self hanging. Several other hypoxyphiles have described perceptual and sensory changes that they found pleasurable. Stekel quoted a patient who described "a voluptuous sense of giddiness, like the feeling that overcomes one on a height" and another who said that pressure on her throat produced "such pleasant sensation [arising] from her stomach upward that she almost lost her senses" [9]. An hypoxyphile examinated by one of us suggested that he enjoyed sensations of numbness, watching his body go limp, and possibly tingling. Another who had died as a result of his hypoxyphilia left cryptic notes suggesting that he saw gold,

yellow, and green colors while asphyxiating himself [4]. The fact that this man gave his tractor a nickname, sent photographs of it with his Christmas letter, and even honored it with a poem suggests a greater degree of affection for his apparatus than is commonly observed.

While the man in Case 1 purposely asphyxiated himself and died as a result of asphyxiation, the man in Case 2 did not purposely use asphyxiation, though asphyxiation through chest compression caused his death. Thus, Case 2 is an example of an atypical autoerotic fatality. Positional asphyxiation by chest compression has been the cause of death in several other reported autoerotic fatalities [4,10].

In Case 2, the victim's binding of his ankles with duct tape, tying of his ankles to the pipe, and inverted suspension are evidence of masochistic sexual bondage. The nylons and high heels he wore, the pantyhose and women's jewelry in his tackle box, and the prior occasions when he had been caught cross-dressing indicate transvestic fetishism, a paraphilia in which a heterosexual male has persistent urges to cross-dress and sexually arousing fantasies of cross-dressing [2]. Cross-dressing has been associated with autoerotic deaths since long before the sexual purpose and accidental manner of the deaths were recognized [11-13]. In the largest published series of cases to date [3], 26 (20.5%) of 127 males dying of autoerotic asphyxiation were cross-dressed at the time of death, of whom five had been observed by others to have repeatedly cross-dressed in the past and another five had sizable or diverse collections of women's clothing or makeup, allowing the inference of transvestic fetishism. Evidence of paraphilias in addition to sexual masochism is commonly found among autoerotic fatality victims [3,14].

Cases 1 and 2 each evidenced escape mechanisms and a lack of suicidal ideation, both of which are essential features of accidental autoerotic fatalities. Each also showed two of the hallmarks of repetition: attempts to protect the skin underlying ligatures from visible injury and a complex design. The towel wrapped around the neck of the decedent in Case 1 was intended to prevent ligature marks on his neck, which, along with bondage, was one of the purposes of the duct tape wrapped around the ankles of the decedent in Case 2. Some such protective padding is often observed among those who on prior occasions learned that ligature marks are unsightly and may be difficult to cover or explain. In each of these cases, the victim had developed a complex means of indulging himself, and such complexity of the injurious agent has been suggested as an indication of repetition, with elaboration of the complexity over time [15].

Autoerotic deaths involving the use of machinery have been reported previously, most of which involved household or homemade electrical devices causing electrocution [6]. Rupp reported an autoerotic asphyxial death involving bondage to an automobile [10]. Coe reported the autoerotic asphyxial death of a hospital orderly who looped a padded rope around his neck and hooked it to a motorized lift in such a way that he could control its up-and-down movement [16]. To the authors' knowledge, no prior cases of autoerotic death involving the hydraulics of heavy machinery have been reported.

The individual who survives repeated brushes with death probably believes that he has ultimate control over the outcome of his dangerous autoerotic sessions, and it is unusual for those who do this to seek treatment or to reveal these habits to therapists they may be seeing for other problems. Where the behavior is identified to a knowledgable therapist, however, it may be possible to save or prolong the patient's life with antiandrogenic medication, which reduces the intensity of his sexual drive. Thus, it is important for physicians to be aware of this dangerous practice and might be desirable for patients and their families to be aware that treatment is available for persons known to cross-dress, bind themselves, or asphyxiate themselves. Counterbalancing the possibility of bringing the occasional patient to effective treatment is the risk that dissemination of information on autoerotic asphyxiation will provoke the sexually immature, confirmed sexual masochists, or even suicidal persons to experiment with asphyxiation [17].

Acknowledgments

The authors thank Robert Boyd and Terry Wilson, who aided in the scene investigations of these deaths.

References

- Dietz, P. E., "Recurrent Discovery of Autoerotic Asphyxia," Autoerotic Fatalities, R. R. Hazelwood, P. E. Dietz, and A. W. Burgess, Lexington Books, Lexington, MA, 1983, pp. 13-44.
- [2] American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 3rd Ed. Revised, American Psychiatric Association, Washington, DC, 1987.
- [3] Dietz, P. E., Burgess, A. W., and Hazelwood, R. R., "Autoerotic Asphyxia, the Paraphilias, and Mental Disorder," In Autoerotic Fatalities, R. R. Hazelwood, P. E. Dietz, and A. W. Burgess, Lexington Books, Lexington, MA, 1983, pp. 77-100.
 [4] Hazelwood, R. R., Dietz, P. E., and Burgess, A. W., "Asphyxial Autoerotic Fatalities," in
- [4] Hazelwood, R. R., Dietz, P. E., and Burgess, A. W., "Asphyxial Autoerotic Fatalities," in Autoerotic Fatalities, R. R. Hazelwood, P. E. Dietz, and A. W. Burgess, Lexington Books, Lexington, MA, 1983, 1983, pp. 55-76.
- [5] Garza-Leal, J. A. and Landrom, F. J., "Autoerotic Asphyxial Death Initially Misinterpreted as Suicide and a Review of the Literature," *Journal of Forensic Sciences*, Vol. 36, No. 6, 1991, pp. 1753-1759.
- [6] Dietz, P. E. and Hazelwood, R. R., "Atypical Autoerotic Fatalities," Medicine and Law, Vol. 1, 1982, pp. 307-319.
- [7] Hazelwood, R. R., Dietz, P. E., Burgess, A. W., and Lanning, K. V., "Autoeroticism and the Public Visibility of Autoerotic Asphyxia," *Autoerotic Fatalities* by R. R. Hazelwood, P. E. Dietz, and A. W. Burgess, Lexington Books, Lexington, MA, 1983, pp. 1-12.
- [8] Byard, R. W. and Bramwell, N. H., "Autoerotic Death, A Definition," American Journal of Forensic Medicine and Pathology, Vol. 12, No. 1, March 1991, pp. 74-76.
- [9] Stekel, W. (Brink, L., trans.), Sadism and Masochism: The Psychology of Hatred and Cruelty, Liveright, New York, 1929.
- [10] Rupp, J. C., "The Love Bug," Journal of Forensic Sciences, Vol. 18, No. 3, July 1973, pp. 259-262.
- [11] Auden, G. A., "An Unusual Form of Suicide," Journal of Mental Science, Vol. 73, 1927, pp. 428-430.
- [12] Stearns, A. W., "Cases of Probable Suicide in Young Persons Without Obvious Motivation," Journal of the Maine Medical Association, Vol. 44, 1953, pp. 16-23.
- [13] Gutheil, É. A., "The Psychologic Background of Transsexualism and Transvestism," American Journal of Psychotherapy, Vol. 8, 1954, pp. 231–239.
- [14] Boglioli, L. R., Taff, M. L., Stephens, P. J., and Money, J., "A Case of Autoerotic Asphyxia Associated with Multiplex Paraphilia," American Journal of Forensic Medicine and Pathology, Vol. 12, No. 2, March 1991, pp. 64-73.
- [15] Hazelwood, R. R., Dietz, P. E., and Burgess, A. W., "The Investigation of Autoerotic Fatalities," Journal of Police Science and Administration, Vol. 9, 1981, pp. 404-411.
- [16] Coe, J. I., "Sexual Asphyxias," Suicide and Life-Threatening Behavior, Vol. 4, 1974, pp. 171–174.
- [17] Dietz, P. E., "Television-Inspired Autoerotic Asphyxiation," Journal of Forensic Sciences, Vol. 34, 1989, pp. 528-529.

Address requests for reprints or additional information to Ronald L. O'Halloran, M.D. Ventura County Medical Examiner Office 3291 Loma Vista Road Ventura, CA 93003