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Violence: Recognition, Management, and Prevention

WALKING AND TALKING VICTIMS OF STRANGULATION. IS THERE A NEW EPIDEMIC? A COMMENTARY

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INTRODUCTION

This issue of JEM presents five articles addressing the issue of manual strangulation in surviving victims of intimate partner violence (IPV). These landmark articles reveal to the medical community what the social services and advocate community has known for a long time: strangulation, or throttling, is a common means of domestic violence inflicted upon victims by their perpetrators. © 2001 Elsevier Science Inc.

OVERVIEW

"Manual strangulation is a form of blunt neck trauma," and is also referred to as throttling in the medical literature (1). Until the 1980s there was a distinct dearth of medical literature addressing manual strangulation, and its sequelae in surviving victims. In 1983, Stanley and Hanson published an article, "Manual strangulation injuries of the larynx," in the Archives of Otolaryngology (2). The following year, Iserson published a review article, "Strangulation: a review of ligature, manual, and postural neck compression injuries," in the *Annals of Emergency Medicine* (3).

The first hint that manual strangulation injuries might be far more common than reported in the literature appeared in 1985 when Line et al. published, "Strangulation: a full spectrum of blunt neck trauma" (4). These authors noted that although strangulation represents an important form of blunt neck trauma, "discussion of strangulation injuries has been infrequent." They reviewed the records of 112 non-survivors and 59 survivors. The records of the 59 survivors represented patients who had been admitted to Los Angeles County—University of Southern California Medical Center over an 11-year study period. These authors pointed out that their study population was not a true indication of the incidence of strangulation. They noted that a large number of patients had been seen in the minor trauma area of the main Emergency Department (ED) complaining of being strangled. However, these patients were judged to be asymptomatic and had not been referred to the otolaryngology service.

In 1989, Kuriloff and Pincus again commented on the paucity of literature addressing strangulation. They wrote, "Few reports describing manual strangulation injury to the neck are found in the otolaryngologic literature. Because most victims sustain immediate fatal asphyxiation, brain anoxia, or cardiac arrest, they are usually examined by a forensic pathologist" (1). They went on to note that manual strangulation injury "is more often a postmortem curiosity for the forensic pathologist,

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since the majority of victims sustain asphyxiation, cardiac arrest, or fatal brain anoxia" (1).

It is only in the last decade that physicians and colleagues working in the area of intimate partner violence (IPV) prevention have begun to realize that surviving manual strangulation victims are much more common that previously realized. This awareness was brought about by the groundbreaking work of San Diego district attorney Gael Strack, JD and Emergency Physician George McClane, MD. Beginning in the early to mid-1990s, they focused on strangulation as a form of IPV battering. Subsequently, working with Dean Hawley MD, a forensic pathologist and tenured professor of pathology in the Department of Pathology and Laboratory Medicine at the Indiana University School of Medicine, the group initiated a program to teach recognition, assessment and documentation of strangulation injuries in surviving patients. Their work has been presented throughout the country to law enforcement and IPV advocates. In February 1999, they presented their review of 100 cases of strangulation injuries to physicians attending the annual meeting of Physicians for a Violence-free Society. The records in the San Diego District Attorney's office provided the essential source documents and their review was subsequently expanded to cover 300 cases. The first report in the medical literature of the results of their study is in this issue of JEM.

As a result of Strack and McClane's San Diego presentation, the staff of the Violence Intervention Prevention (VIP) Center of Parkland Health & Hospital System began to focus on the issue of strangulation in surviving patients. Their first study, reported by Wilbur et al. in this issue of JEM, compiled the results of the self-reported experiences of 62 women who had been strangled while in an abusive relationship.

A NEW "HIDDEN" EPIDEMIC?

In October of 2000, Strack, McClane, and Wilber presented their research findings as part of a panel presentation at the first National Conference on Healthcare and Domestic Violence. Their presentation was made to a mixed national audience of healthcare providers, law enforcement officials and advocates. The information presented provoked much interest as well as a "Duh?" response. From the advocates was the general response of "Duh? You had to do research to find out that strangulation is common among battered women?" However, from the healthcare professionals, came the response "THAT many women who have been in abusive relations have been strangled? I didn't know that."

New Questions Before Us

The truth is that much research needs to be done in this area. Some critical questions are suggested by the articles presented in this issue of JEM. Just how common is strangulation as a form of assault in the men and women of this nation? Is it more common among victims of IPV? What is the best way to evaluate a "walking and talking" strangled patient presenting to the ED? In this issue of JEM, McClane et al. and Hawley et al. provide us with information that suggests a reasonable approach to these patients. In the near future, more research is needed to suggest whether or not clinicians should be more, or less, aggressive in their approach. For instance, should all the patients who have been strangled be admitted to the hospital? Currently this recommendation is in the literature. Kuriloff et al. write, "All patients with a history of strangulation, without dyspnea on presentation, should be monitored in an intensive care setting for at least 24 h. Periodic flexible fiberoptic laryngoscopy should be performed routinely for continued airway monitoring" (1).

The work of Smith et al. in this issue of JEM raises the question of strangulation sequelae being "dose related." Their findings of correlation between the number of symptoms and the number of strangulation attacks suggest that there is a dose-related impact of strangulation. Prospective studies of objective findings are needed to address this issue.

What Long-Term Outcomes May Be Occurring in Victims of Strangulation?

This critical question is just now being posed in the medical literature. Owens and Ghadiali in 1991 reported the case of a "patient with signs of anoxic brain damage, with psychometric investigation showing memory disturbance consistent with a left temporal lobe lesion." They note that this patient had been frequently strangled in his career as a judo player and suggest that such frequent strangulation was the cause of the damage (5). In 1999, Malek et al. suggested that "Manual strangulation should be included in the differential diagnosis of stroke in a young woman without evidence of fibromuscular dysplasia or other trauma" (6).

A Call for More Research

In addition to the questions raised above, there are many serious questions regarding strangulation or throttling as a means of IPV. For instance, a Web-based search revealed a military training course teaching strangulation

techniques (7). Does this mean that our military is unknowingly teaching throttling techniques to IPV perpetrators? Is throttling more common IPV perpetrator behavior among military personnel? Is strangulation an intermediate step before using a weapon? Are the hands to be considered a deadly weapon? If so, should all strangulation assault be criminally charged as a felony assault as opposed to misdemeanor? If children witness their parents using strangulation as a form of assault, will they "learn" this behavior and become strangling perpetrators themselves when grown? Are miscarriages more common among IPV victims who have been strangled during the course of their pregnancy? And if so, are miscarriages more likely to increase in some trimesters? Could previously unrecognized episodes of IPV strangulation attacks account for an increase of stroke and transient ischemic attacks in women aged 50 years and younger?

Ethical concerns also emerge. What to do with the patient who refuses admission? Should she be admitted against her will? Advocates for victims of IPV uphold the victim's right to make the decision. To do otherwise would infringe on the patient's autonomy. But is this wise? What if allowing the patient to leave carries with it a high probability of lethality within the foreseeable future? Research aimed at resolving this dilemma is in order.

CONCLUSION

Victims of domestic violence suffer many acts of physical abuse, including manual strangulation. Findings from the articles on strangulation presented in this issue of JEM suggest that this form of physical abuse is far more common than previously thought. It appears that many "walking and talking" strangled victims are underreported in the legal and medical literature and their history of strangulation, when it is reported, is often discounted and ignored. From a medical standpoint, the pathophysiology of strangulation injuries in the "walking and talking" survivor is controversial. More research and "living forensic" investigations are needed to provide guidance to clinicians for the earliest recognition, assessment, treatment, and documentation of manual strangulation or throttling injuries.

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