https://www.reliasmedia.com/articles/140623-management-of-the-violent-patient-in-the-emergency-department

Management of the Violent Patient in the Emergency Department

May 1, 2017

AUTHORS

Creagh Boulger, MD, FACEP, Associate Professor, The Ohio State University, Department of Emergency Medicine, Columbus.

Howard Werman, MD, Professor of Clinical Emergency Medicine, The Ohio State University College of Medicine, Columbus.

April Jessica Pinto, Medical Student, The Ohio State University, Columbus.

PEER REVIEWER

Steven M. Winograd, MD, FACEP, St. Johns Riverside ED, Yonkers, NY; CityMD, Pelham, Bronx, NY; Assistant Clinical Professor Emergency Medicine, NYiTCOM.

Statement of Financial Disclosure

To reveal any potential bias in this publication, and in accordance with Accreditation Council for Continuing Medical Education guidelines, we disclose that Dr. Farel (CME question reviewer) owns stock in Johnson & Johnson. Brian Hocum, PharmD, (pharmacist reviewer) reports that he is an employee of United Therapeutics. Ms. Light (nurse planner) is a retained consultant for Bard Medical. Dr. Schneider (editor), Dr. Stapczynski (editor), , Dr. Boulger (author), Dr. Werman (author), Ms. Pinto (author), Dr. Winograd (peer reviewer), Ms. Mark (executive editor), Ms. Coplin (executive editor), and Ms. Hatcher (AHC Media Editorial Group Manager) report no financial relationships with companies related to the field of study covered by this CME activity.

EXECUTIVE SUMMARY

- Risk factors for violence in the ED include overcrowding, prolonged stays in the ED, increasing numbers of patients with mental health disorders (especially without proper facilities for them), understaffing, inadequate training, rising rates of substance abuse, absence of a pre-existing relationship between staff and patients, and the lack of privacy.
- Cues to escalating behavior include yelling or cursing and aggressive verbal and physical behavior. Pacing, avoiding eye contact, and being destructive to their space suggest escalating behavior.
- Sedation may be necessary. Commonly used drugs include benzodiazepines, haloperidol/droperidol, and ketamine.
- Sedated patients may require intubation. Clearly, all patients given sedation who do not respond easily may require monitoring.
- Chemical restraints are preferable to physical restraints.

Statistically, every emergency provider likely will experience some form of workplace violence. Most of us have become numb to insults and verbal abuse by patients and, at times, even our colleagues. In most other workplaces, this type of behavior would not be tolerated. But verbal abuse is so commonplace in the emergency department that most of us would not even consider it "violence." Actual physical abuse also is alarmingly common. Most of us recall at least one if not several episodes involving either ourselves or our coworkers. Luckily, most of these assaults do not result in severe injuries. However, serious injury and even death have occurred.

It is often difficult to predict which patients will become violent. The atmosphere in the emergency department is chaotic, and definitely not calming. Patients and families are under severe stress. Crowding and the boarding of inpatients, particularly those with mental health emergencies, aggravate the situation.

This article will help us to predict violence and provide some guidelines for the management. While it is clear that our purpose in the emergency department is to care for the patient, the health and welfare of our staff must be a priority as well. As I was taught in the first year of medical school, if the doctor/staff is hurt or incapacitated, the patient cannot get care.

— Sandra M. Schneider, MD, Editor

Introduction

Workplace violence is defined by the Occupational Safety and Health Administration (OSHA) as any act or threat that occurs in the work environment.[1] Workplace violence is an increasingly common issue in healthcare. It is estimated that healthcare providers have a four-fold rate of workplace violence compared to other industries.[1] This number likely underrepresents the actual problem, as many times these incidents go unreported out of both fear and learned apathy.[2] As healthcare providers, we are obligated to provide care to violent patients; however, we must do so while taking care to protect ourselves, the patient, and other staff. Violent patients in the emergency department present a complex problem for care providers. These patients present with more than a behavioral disturbance. Often these patients have mental health issues and underlying medical illnesses that contribute to their conduct.

Epidemiology

As noted above, workplace violence is a major issue in healthcare. The emergency department experiences workplace violence at significantly higher rates than other areas of healthcare, with some sources stating that up to 50% of all attacks on healthcare workers occur in the emergency department.[3,4]

A recent study reported that as many as one in 20 emergency department visits is the result of behavioral emergencies.[5] In a national survey by Behnam et al, nearly 80% of physicians reported exposure to at least one act of workplace violence in the preceding year, with 20% reporting multiple episodes.[6] Many authors have explored possible risk factors for violence in the emergency department setting. Identified risk factors include overcrowding, prolonged emergency department stays, a growing mental health population, poor staffing ratios, inadequately trained staff, rising rates of substance abuse among patients, the absence of a pre-existing relationship with the patient, and the lack of privacy.[7,8,9,10] Risk factors are summarized in Table 1.

Table 1. Risk Factors for Violence in the Emergency Department

Patient

- Young age
- Male
- Lower socioeconomic status
- History of violence
- History of abuse
- Substance use
- Comorbid mental health disorder

Environment

- Crowding
- Poor staff-to-patient ratios
- Prolonged emergency department stays
- Lack of privacy
- Poor communication among staff

Environmental Risk Factors

Emergency department overcrowding appears to be a root cause of violent episodes, as it leads to longer wait times and poor staffing ratios, as well as increased patient frustration and dissatisfaction. Overcrowding has been cited as a major contributor to violence in the emergency department.[11] An additional effect of boarding and overcrowding is prolonged emergency department stays.[12] This is especially true for psychiatric patients, for whom there are limited outpatient and inpatient resources available. Several studies document average emergency department lengths of stay exceeding 24 hours for mental health patients.[13-16] Studies have shown that prolonged time in the emergency department increases the risk for violence. The combined effect of prolonged length of stay in patients with existing mental health issues compounds the problem and significantly increases the risk of emergency department violence.

Other studies have investigated staffing ratios and staff training as a cause of violence in the emergency department. Several national and international nursing surveys report that there is a direct relationship between increasing nurse-to-patient ratios and the risk of violence.[7,10,17,18] This relationship is likely multifactorial. With an increased nurse-to-patient ratio, there are increasing wait times for patient concerns to be addressed, medications to be administered, and dispositions to be made. This inevitably leads to increasing patient frustration and escalating behavior. Additionally, inadequate staffing leads to a failure to identify early signs of escalating behavior, resulting in a missed opportunity for early intervention.

Finally, another common risk factor for escalating violence is a lack of background knowledge regarding potentially violent patients. Elbogen et al noted that without prior knowledge of the patients, their previous violent events, their physical and mental health history, and an established trusting relationship, there is an inherent risk among emergency department staff of exposing themselves to violence.[19]

Patient-specific Risk Factors

In addition to the environment, there are some patient-specific risk factors that predict violent behavior in the emergency department. Most commonly, the violent patient is a young male. A careful

history often will reveal a previous history of violence in at-risk patients. The risk of violent behavior also is increased when there are co-existing substance abuse and underlying mental health disorders.[20,21]

Cues

Certain behavioral cues have been identified as potential red flags for violent behavior. Patients who are yelling, cursing, or even merely talking in a loud tone should be monitored carefully for escalation. In addition, patients perseverating on minor details and irrelevant aspects of their healthcare should raise suspicion for potential violence. These patients may be demanding care that is not necessary or exhibiting paranoid delusions in staff interactions.

Physical cues also may help facilitate early recognition of the potentially violent patient. Patients who will not make eye contact, who are restless or pacing, who are destructive to their space, or who invade staff personal space have a high risk for aggressive outbursts. Finally, patients who cross behavioral boundaries set by staff should be monitored for escalation.

Evaluation and Diagnostic Studies

When approaching the violent patient in the emergency department, the provider needs to consider that the violence and agitation often are multifactorial. A broad workup often is necessary to rule out underlying organic causes of the patient's agitation. Obtaining these diagnostic studies can be a challenge, as the patient is often noncompliant with treatment and poses a threat to staff. The violent patient should have a head-to-toe assessment completed when safe and possible. The practitioner should assess for signs of trauma, substance use, and other organic causes, such as hypoglycemia. If the provider finds any signs of trauma, such as bruising; blood in the nares, oropharynx, or ear; deformity or tenderness over bony surfaces; or focal neurologic findings, the provider should consider a CT scan of the head to evaluate for any intracranial hemorrhage that could be contributing to the behavior. If signs of trauma are found, the provider also should consider restricted spinal immobilization and subsequent imaging. Sedation may be required either before or after imaging.

If no signs of trauma are identified, the provider should continue a broad medical workup to evaluate for other organic causes of the violent behavior. Some possible organic etiologies for agitation include hypoglycemia, hyperglycemia, hypovolemia/hemorrhage, hepatic failure, acute intoxication with sympathomimetic or other substances, medication reaction or side effects, hypoxemia, seizure, postictal state, hypothermia, and infections such as meningitis, encephalitis, and sepsis. This evaluation often is accomplished through appropriate laboratory and urine studies. The specific workup for each of these conditions is beyond the scope of this paper; however, a basic metabolic workup for the acutely agitated patient should include a full set of vital signs, including blood pressure, temperature, pulse oximetry, and heart rate. Hematologic and urine studies should include a complete blood count, complete metabolic panel, point-of-care glucose, liver function, urine drug screen, and alcohol level.

Table 2. Diagnostic Considerations in the Violent Emergency Department Patient

- CT scan of the head
- Complete blood count
- Toxicology screen
- Ethanol level
- Point-of-care glucose

- Chemistry panel
- Liver function panel
- Urinalysis
- CK
- Lumbar puncture*

* Based on historical and physical findings suggestive of meningitis, encephalitis, or hemorrhage

Management

Just as these patients are complex and often have multifactorial causes of their behavioral disturbance, the management of this population also is complex. Management of the agitated or violent patient requires an awareness of staff, self, and patient safety. With these considerations in mind, the practitioner should consider how best to de-escalate the patients for their safety and the safety of the team. This often can be accomplished with verbal de-escalation and removal of triggers, especially if the patient's behavior has not yet escalated to frank violence. Sometimes these simple environmental changes may not work, requiring chemical restraint. Chemical restraint is preferred over physical restraints, as physical restraints often only escalate the situation. Further injury can occur.

Chemical restraint can be accomplished with several classes of medication and delivered via various routes. If chemical restraint is unable to be obtained or is unsuccessful, consider a combination of physical and chemical restraint.

A unique study by Georgieva at al assessed patient preference for either seclusion or forced medication. In this study, when patients were asked retrospectively after an episode of violence, they indicated a preference for forced medication. However, when patients were offered input on the duration and conditions of seclusion, they stated that they would prefer seclusion for future encounters.[22]

De-escalation

De-escalation often is the first-line approach to managing the violent patient in the emergency department. De-escalation refers to non-coercive verbal intervention with the patient to modify their behavior. Very little literature exists on the best techniques to be used for de-escalation in this population. What literature does exist reinforces the importance of consistency among staff, empowering the patient to regain control of their behavior, and avoiding physical restriction, as this often reinforces violence as a solution.[23-25] A key component that Fauteux emphasizes is trying to understand the patient's feelings, identify where those feelings are coming from, and work with the patient to find a resolution.[25] Fauteux also notes it is important to remember that anger has many roots, and solutions depend on the source of the anger. An important component of de-escalation is acknowledging the patient's feelings. "I understand you are frustrated" is an excellent way to introduce the conversation. Validation of the patient's feelings and demonstrating empathy are the next steps: "I am sure that waiting 24 hours in a chair is frustrating. How can I help?" Rather than restraining the patient, it can be more effective to allow the person to verbalize and work through consequences, such as asking, "What do you think will happen if you hit someone or refuse to follow our instructions?"

It is important for the provider to consider the patient care environment for the safety of the patient, the staff, and himself/herself. Some obvious steps are to have security remove any potential weapons, have backup readily available, and keep yourself between the patient and the door. Do not wear anything around your neck. Respect the patient's personal space. It is also crucial to be cognizant of your own tone and body language to have the best chance of success with de-escalation. Arms should be kept in view at the sides, not crossed around

the chest or clasped behind the back. An “open” stance reflects the willingness to interact with the patient and looks less defensive.

One of the most important components of safe and effective de-escalation is proper training of the staff. When staff are not properly trained in de-escalation, they risk a paradoxical escalation in behavior that can endanger both the staff and the patient.[23]

Pharmacotherapy

Occasionally de-escalation fails or is not implemented early enough in the encounter with a violent patient. This may result in voluntary or involuntary administration of medication to the agitated patient. If the patient is compliant, oral (PO) or sublingual (SL) routes can be considered as a less invasive means of chemical restraint. If the patient is not cooperative, intramuscular (IM), intravenous (IV), or intranasal (IN) routes may be necessary. There are a few major classes of medications commonly used in the agitated or violent patient. These include benzodiazepines (lorazepam, midazolam, diazepam), antipsychotics (haloperidol, risperidone, droperidol, olanzapine), and ketamine. The next section will briefly discuss each class of medication, the risks and benefits associated with each, and special considerations in their administration. Chemical sedation recommendations are summarized in Table 3.

Table 3. Pharmacotherapy for the Violent Adult Emergency Department Patient

Medication	*Dose*	*Available Routes*	*Considerations*
Benzodiazepines			
Lorazepam	0.5 mg to 2 mg q 30 min	IM, IV	Best for agitation with drug intoxication or withdrawal Concerns for respiratory depression, propylene glycol toxicity, and concomitant use with drugs or conditions affecting respiratory function Use with caution in patients with CKD
Midazolam	IV: 2.5 to 5 mg q 3-5 min IM: 2.5 to 5 mg q 10 min	IM, IV	
Diazepam	IV: 2 to 10 mg q 1 hr PO: 2 to 10 mg	IV, PO	
Antipsychotics			
Haloperidol	2.5 to 10 mg q 15-20 min	IM, PO	Best for agitated patient with known psychiatric disorder Concerns for torsades de pointes Pre-treatment ECG preferred, no concomitant condition affecting QTc Dose should be decreased by half in the elderly Contraindicated in benzodiazepine or alcohol withdrawal
Droperidol	2.5 to 5 mg Max: 20 mg	IM, IV	Concerns for torsades de pointes

Medication	Dose	Available Routes	Considerations
			Pre-treatment ECG preferred, no concomitant condition affecting QTc Dose should be decreased by half in the elderly Contraindicated in benzodiazepine or alcohol withdrawal
Risperidone	1 to 2 mg	PO	Increased mortality in elderly patients with dementia-related psychosis Contraindicated with benzodiazepines and opioids
Olanzapine	10 mg	IM, PO	Best for agitation associated with bipolar mania and schizophrenia Concerns for cardiorespiratory depression when used in combination with benzodiazepines
Ketamine	IV: 1 to 2 mg/kg IM: 4 to 5 mg/kg	IM, IN, IV	Emergence reaction Side effect may include hypertension, tachycardia, laryngospasm, emesis Can exacerbate schizophrenia
Combination Therapy			
Midazolam + Droperidol	Midazolam (5 mg IV or IM q 3-5 min) Droperidol (5 mg IV or IM)	IM, IV	More rapid sedation than either drug used alone
Lorazepam + Haloperidol	Lorazepam (2 mg IV or IM q 10-20 min) Haloperidol (5 mg IV or IM)	IM, IV	More rapid sedation than either drug used alone

Benzodiazepines

Benzodiazepines (BZDs), particularly lorazepam and midazolam, are commonly used in sedating patients with agitation from an unknown cause, substance withdrawal, or intoxication.[26,27] BZDs are ideal for use in patients with liver disease, as they are not cleared by the liver.[28] This class of medication has the potential to cause respiratory depression and, therefore, should be used with caution in patients with comorbid conditions such as chronic obstructive pulmonary disease or in those taking concomitant medications that might impair respiratory function.[26,28,29] Lorazepam has a rapid action and is available via IM or IV routes. The recommended adult dose is 0.5 to 2 mg given every 30 minutes as needed. Midazolam has an even more rapid onset than lorazepam but remains effective for only one to two hours. The recommended adult dosing for midazolam is 2.5 to 5 mg IV or IM; doses may be given as frequently as every three to five minutes in severely agitated patients. Intranasal

dosing may require more frequent dosing at the higher end of the dosing range.[26,28] Elderly patients may need smaller doses of medication.

Antipsychotics

First-generation "typical" antipsychotics (haloperidol and droperidol) are highly effective in restraining an agitated patient, especially those with a known history of schizophrenia. This class of medication may prolong the QT interval (especially in high doses) and should be used with caution in patients who have a pre-existing QTc prolongation or are on other medications with the potential to cause a prolonged QT. Torsades de pointes is a cardiac arrhythmia that may be precipitated with the use of haloperidol and droperidol. In 2001 the FDA issued a black box warning for droperidrol secondary to the risk of prolonged QTc.[30] As a result of these concerns, it is beneficial to obtain a pre-treatment ECG whenever possible. Understandably, this often is not feasible in an acutely violent patient, so clinical judgment must prevail.[28] Haloperidol can be given IV, IM, or PO. The adult dose recommendation is 2.5 to 10 mg with an onset of action in 30-60 minutes. Re-administration is recommended at 30 minutes as needed. Haloperidol also may have the side effect of extrapyramidal syndrome that can manifest days after a single dose. This adverse reaction is managed with diphenhydramine (Benadryl) or benztropine (Cogentin). Droperidol has a shorter half-life and slightly faster onset of action (15-30 minutes) and also can be given IM or IV in doses of 2.5 to 5 mg for adults, but it currently is limited in its availability.[28]

Second-generation "atypical" antipsychotics (olanzapine and risperidone) have not been studied widely in the treatment of acute agitation in the emergency department population.[31-33] Preliminary studies suggest IM olanzapine (Zyprexa) may be a reasonable alternative when first-generation antipsychotics are contraindicated, but will require monitoring for respiratory depression. Olanzapine can be administered via IM or oral routes; a dose of 10 mg for adults should be used in IM formulations and can be repeated every two hours until a maximum dose of 30 mg per day is reached.[28,32,34] Zyprexa has been shown to have less extrapyramidal symptoms than other atypical antipsychotics. Like the other atypical antipsychotics, it also has been shown to prolong the QTc interval.[28,32,34] Risperidone (Risperdal) is available in oral and IM depot formulations.[28,32,34] In a patient with acute undifferentiated agitation, it would be advisable to use the oral dosing rather than IM depot, as the onset is not rapid.[28] For oral dosing with dissolving tablets, 1 to 2 mg is used and can provide rapid chemical control.[28,32,34] Another antipsychotic to consider in the acutely agitated adult patient is ziprasidone (Geodon). Ziprasidone can be dosed IM 10 to 20 mg or 10 mg PO, which is also available in oral disintegrating tablets.[28,32,34,35]

Ketamine

Ketamine is used most commonly for procedural sedation but also has been beneficial in providing chemical restraint to acutely agitated patients. It may be most effective as a back-up when BZDs or antipsychotics have failed, as there has not yet been substantial research on its use in acute agitation.[36-38] However, it is used as a primary agent in many institutions. An initial dose of 1 to 2 mg/kg IV or 4 to 5 mg/kg IM is suggested for treatment of agitation. The duration of action, however, is quite short, lasting only 10-20 minutes. Emergence reactions are possible, as are hypertension, tachycardia, and laryngospasm. Therefore, one must be prepared to assess and manage the patient's airway when using ketamine.[36-38] Some institutions mistakenly consider all doses of ketamine as general anesthesia. Ketamine is a dissociative agent, and has very little respiratory depression, especially in these dosage levels.

Restraints and Seclusion

On rare occasions, a patient is unable to be de-escalated or chemically restrained. In such cases, a violent patient may require physical restraint. Providers should use physical restraint only until adequate sedation is achieved

with the use of chemical agents. Restraints should be implemented as a last resort and should be considered a temporizing measure to be removed as quickly as possible.[28,39] When restraints are placed, an appropriately trained team must be present. Ideally there should be enough team members present to control each limb, with a nurse or pharmacist available to administer medication. Finally, someone always should be available to monitor and control the airway as well as direct the administration of sedative agents.

One patient population in whom restraints should be avoided is the patient with excited delirium. This is a special population that presents with hypertension, tachycardia, hyperthermia, and delirium. The details of this condition are beyond the scope of this paper; however, it is important to note that there have been reports of sudden death in this population when physically restrained without chemical restraint.[40-42] Patients should be monitored and aggressively treated to reduce stress and stabilize abnormal vital signs. Patients with excited delirium should be rapidly sedated.

In some cases, patients will present seriously out of control and pose an imminent danger to themselves and to the staff. In severe cases, patients may need to be deeply sedated. Intubation may be necessary, as it is not easy to slowly titrate sedations, as one would do for procedural sedation.

Conclusion

The acutely agitated emergency department patient presents a complex management dilemma for healthcare providers. Practitioners need to protect themselves, the patient, and other staff while initially attempting to de-escalate the patient. A cooperative patient is necessary to complete an appropriate diagnostic workup and provide care to the patient. Initial management of the violent patient should include non-coercive verbal de-escalation. If this modality fails, chemical sedation should be considered. Chemical sedation can be achieved with a variety of pharmacologic agents. Currently, benzodiazepines are the first-line agents recommended for undifferentiated agitation. Alternative agents include antipsychotic medications or ketamine. If chemical sedation is inadequate or the behavior is escalating, physical restraint and seclusion should be considered as a last resort. Before pursuing non-voluntary medication and restraint, it is crucial that staff understand their regional laws and national regulations in regard to involuntary commitment.

The key to safe and successful management of a violent emergency department patient is clear protocols and adequate staff training. Having a mechanism in place to screen for a potentially violent patient, minimizing exposure to environmental factors that may intensify violent behavior, and recognizing escalation early are crucial to successfully caring for this patient population.

REFERENCES

1. Occupational Safety and Health Administration. Workplace violence. Available at: https://www.osha.gov/SLTC/workplaceviolence/. Accessed April 16, 2017.
2. Nikathil S, Olaussen A, Gocentas RA, et al. Review article: Workplace violence in the emergency department: A systematic review and meta analysis. *Emerg Med Australas* 2017; Apr 12 [Epub ahead of print].
3. Hodge AN, Marshall AP. Violence and aggression in the emergency department: A critical care perspective. *Aust Crit Care* 2007;20:61-67.
4. Stowell KR, Hughes NP, Rozel JS. Violence in the emergency department. *Psychiatr Clin North Am* 2016;39:557-566.
5. Rossi J, Swan MC, Isaacs ED. The violent or agitated patient. *Emerg Med Clin North Am* 2010;28:235-256.
6. Behnam M, Tillotson RD, Davis SM, Hobbs GR. Violence in the emergency department: A national survey of emergency medicine residents and attending physicians. *J Emerg Med 2*011;40:565-579.

7. Angland S, Dowling M, Casey D. Nurses' perceptions of the factors which cause violence and aggression in the emergency department: A qualitative study. *Int Emerg Nurs* 2014;22:134-139.
8. Pich J, Hazelton M, Sundin D, Kable A. Patient-related violence at triage: A qualitative descriptive study. *Int Emerg Nurs* 2011;19:12-19.
9. Gilchrist H, Jones SC, Barrie L. Experiences of emergency department staff: Alcohol-related and other violence and aggression. *Australas Emerg Nurs J* 2011;14:9-16.
10. Hahn S, Müller M, Hantikainen V, et al. Risk factors associated with patient and visitor violence in general hospitals: Results of a multiple regression analysis. *Int J Nurs Stud* 2013;50:374-385.
11. Derlet RW, Richards JR. Overcrowding in the nation's emergency departments: Complex causes and disturbing effects. *Ann Emerg Med* 2000;35:63-68.
12. Krall SP, Guardiola J, Richman PB. Increased door to admission time is associated with prolonged throughput for ED patients discharged home. *Am J Emerg Med* 2016;34:1783-1787.
13. Pearlmutter MD, Dwyer KH, Burke LG, et al. Analysis of emergency department length of stay for mental health patients at ten Massachusetts emergency departments. *Ann Emerg Med* 2016. doi:10.1016/j.annemergmed.2016.10.005. [Epub ahead of print]
14. Zhu JM, Singhal A, Hsia RY. Emergency department length-of-stay for psychiatric visits was significantly longer than for nonpsychiatric visits, 2002-11. *Health Aff* (Millwood) 2016;35:1698-1706.
15. Stephens RJ, White SE, Cudnik M, Patterson ES. Factors associated with longer length of atay for mental health emergency department patients. *J Emerg Med* 2014;47:412-419.
16. O'Neil AM, Sadosty AT, Pasupathy KS, et al. Hours and miles: Patient and health system implications of transfer for psychiatric bed capacity. *West J Emerg Med* 2016;17:783-790.
17. Ferns T. Considering theories of aggression in an emergency department context. *Accid Emerg Nurs* 2007;15:193-200.
18. Tishler CL, Reiss NS, Dundas J. The assessment and management of the violent patient in critical hospital settings. *Gen Hosp Psychiatry* 2013;35:181-185.
19. Elbogen EB, Mercado CC, Tomkins AJ, et al. Clinical practice and violence risk assessment: Availability of MacArthur risk factors. In: Farrington D, Hollin C, McMurran M, ed. *Sex and Violence: The Psychology of Crimes and Risk Assessment*. New York: Routledge; 2001:38–55.
20. Newton VM, Elbogen EB, Brown CL, et al. Clinical decision-making about inpatient violence risk at admission to a public-sector acute psychiatric hospital. *J Am Acad Psychiatry Law* 2012;40;206-214. Available at: http://jaapl.org/content/40/2/206.long. Accessed April 16, 2017.
21. Scott CL, Resnick PJ. Violence risk assessment in persons with mental illness. *Aggression and Violent Behav* 2006;11:598-611.
22. Georgieva I, Mulder CL, Wierdsma A. Patients' preference and experiences of forced medication and seclusion. *Psychiatr Q* 2012;83:1-13.
23. Nordstrom K, Zun LS, Wilson MP, et al. Medical evaluation and triage of the agitated patient: Consensus statement of the American Association for Emergency Psychiatry Project BETA Medical Evaluation Workgroup. *West J Emerg Med* 2012;13:3-10.
24. Department of Health, Government of Western Australia. Guidelines: The management of disturbed/violent behaviour in inpatient psychiatric settings. 2006. Available at: http://bit.ly/2pvmHRA. Accessed April 18, 2017.
25. Fauteux K. De-escalating angry and violent clients. *Am J Psychother* 2010;64:194-213.
26. Battaglia J, Moss S, Rush J, et al. Haloperidol, lorazepam, or both for psychotic agitation? A multicenter, prospective, double-blind, emergency department study. *Am J Emerg Med* 1997;15:335-340.
27. Wilson MP, Pepper D, Currier GW, et al. The psychopharmacology of agitation: Consensus statement of the American Association for Emergency Psychiatry Project BETA Psychopharmacology Workgroup. *West J Emerg Med* 2012;13:26-34.
28. Coburn VA, Mycyk MB. Physical and chemical restraints. *Emerg Med Clin North Am* 2009;27:655-667.

29. Isbister GK, Calver LA, Page CB, et al. Randomized controlled trial of intramuscular droperidol versus midazolam for violence and acute behavioral disturbance: The DORM study. *Ann Emerg Med* 2010;56:392-401.e1.
30. Jackson CW, Sheehan AH, Reddan JG. Evidence-based review of the black-box warning for droperidol. *Am J Health Syst Pharm* 2007;64:1174-1186.
31. Villari V, Rocca P, Fonzo V, et al. Oral risperidone, olanzapine and quetiapine versus haloperidol in psychotic agitation. *Prog Neuropsychopharmacol Biol Psychiatry* 2008;32:405-413.
32. Zeller SL, Rhoades RW. Systematic reviews of assessment measures and pharmacologic treatments for agitation. *Clin Ther* 2010;32:403-425.
33. Citrome L, Volavka J. The psychopharmacology of violence: Making sensible decisions. *CNS Spectr* 2014;19:411-418.
34. Allen MH, Currier GW, Carpenter D, et al; Expert Consensus Panel for Behavioral Emergencies 2005. The expert consensus guideline series. Treatment of behavioral emergencies 2005. *J Psychiatr Pract* 2005;11 (Suppl 1):5-108.
35. Brook S, Lucey JV, Gunn KP. Intramuscular ziprasidone compared with intramuscular haloperidol in the treatment of acute psychosis. Ziprasidone I.M. Study Group. *J Clin Psychiatry* 2000;61:933-941.
36. Le Cong M, Gynther B, Hunter E, Schuller P. Ketamine sedation for patients with acute agitation and psychiatric illness requiring aeromedical retrieval. *Emerg Med J* 2012;29:335-337.
37. Green SM, Roback MG, Kennedy RM, Krauss B. Clinical practice guideline for emergency department ketamine dissociative sedation: 2011 update. *Ann Emerg Med.* 2011;57:449-461.
38. Cole JB, Moore JC, Nystrom PC, et al. A prospective study of ketamine versus haloperidol for severe prehospital agitation. *Clin Toxicol* (Phila) 2016;54:556-562.
39. Garriga M, Pacchiarotti I, Kasper S, et al. Assessment and management of agitation in psychiatry: Expert consensus. *World J Biol Psychiatry* 2016;17:86-128.
40. Pollanen MS, Chiasson DA, Cairns JT, Young JG. Unexpected death related to restraint for excited delirium: A retrospective study of deaths in police custody and in the community. *CMAJ* 1998;158:1603-1607.
41. Rajagopalan A, Pollanen MS. Sudden death during struggle in the setting of heterozygosity for a mutation in calsequesterin 2. *Forensic Sci Med Pathol* 2016;12:86-89.
42. Otahbachi M, Cevik C, Bagdure S, Nugent K. Excited delirium, restraints, and unexpected death: A review of pathogenesis. *Am J Forensic Med Pathol* 2010;31:107-112.