



**Code White! How to wind down the wound-up patient in the ED**  
25th Annual Update in Emergency Medicine  
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### Declaration of disclosure

- \* I have no actual or potential conflict of interest in relation to the program

### Objectives

- \* Identify important warning signs to be aware of when dealing with agitated patients, and how to de-escalate
- \* Understand the proper use of physical restraints and pitfalls to avoid
- \* Understand which chemical restraints work best in the acutely violent patient
- \* Special considerations in management eg. elderly

How many of you have been assaulted (physically or verbally) by a patient while at work?

### Did you know...

- \* Up to 50% of human service providers become victims of violence at some point in their career
- \* Among hospital workers, the majority of assaults occur in the ED, psychiatric wards, waiting rooms and geriatric units
- \* An average ED wait time of at least 2 hours is significantly associated with an increased incidence in violence

### ED Environment

- Potentially volatile
- 24-hour open door policy
- High stress, illness, prolonged wait times
- Frequent lack of communication

## ED Environment

Carriage of weapons in ED population estimated at 4-8%  
Accessibility to drugs...weapons....people

## Case 1

### Case 1

- \* An 22 year old male presents at triage complaining of shortness of breath and chest pain
- \* He is paranoid and is pacing
- \* The nurses are unable to get his vitals
- \* During the assessment he gets up and decides to leave

### What would you do next?

- \* Let him leave the ED - he looks fine
- \* Block the exit with your body
- \* Give him an injection of haldol IM
- \* Try to talk to him and convince him to stay and be assessed
- \* Get help

### Predicting violence is challenging in the ED

- \* Difficult to identify -assault may come from patient, visitors or family members eg. parents of ill children
- \* Prediction, prevention and control of violent outbursts is difficult in ED environment

### Risk Assessment

- \* Strongest positive predictors:
  - \* male gender
  - \* prior history of violence
  - \* drug or ethanol abuse
- \* Psychiatric illness esp. manic
- \* Altered mental status

**“While imperative to deal effectively with violence in the ED, it’s better to recognize signs of impending violence and to prevent violence **before** it happens”**

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## Risk Assessment

- \* Consider all angry patients potentially violent
- \* Increased motor activity is most consistent sign of impending attack eg. provocative behavior, angry demeanor, pacing, loud speech, tense posture, frequent changes in body position, pounding walls, throwing things
- \* Beware: patients with acute medical illness may erupt violently without warning

## Case 1

- \* You talk to the patient and convince him to come in for an assessment
- \* The patient is placed in monitored bed area in a private room, visible to the nursing station
- \* Security is called for a patient watch
- \* What steps should you take next?

## Case 1

- \* Anticipate potential for escalation / violence
- \* Be prepared for chemical / physical restraint of patient
- \* FORM 1 the patient?
- \* Examine the patient and investigate for possible organic causes for their presentation

## 4 screening criteria for organic illness

1. Disorientation
2. Abnormal vital signs - always document temperature in all patients undergoing medical clearance
3. Clouded consciousness
4. No previous psychiatric history

## Diagnoses associated with violence

- **“FIND ME”**
- \* Functional
- \* Infectious
- \* Neurologic
- \* Drug-related
- \* Metabolic
- \* Endocrine

## What is the single most important test in violent patients with no psychiatric history?

## De-escalation techniques

- \* Make patient as comfortable as possible
- \* Act as friendly host to establish trust ie offer chair, something to eat or drink (NO HOT LIQUIDS)
- \* Be an attentive listener
- \* Never, **ever** touch a violent patient

## De-escalation techniques

- \* "No surprises" - do not make any sudden movements or come up from behind
- \* Stand at least 1 arms length away
- \* Be aware of your own reaction to the patient - avoid showing anger towards patient (countertransference)
- \* Do not deny or minimize threatening behavior, as increases your risk of injury - you are not untouchable as an MD

## De-escalation techniques

- \* KEY MISTAKE TO AVOID: **Failing to address the violence directly.**
- \* eg. I can't help you when you threaten me or staff...Do you carry a weapon?...You look angry.

## Physical restraints

## Physical restraints

- \* If verbal techniques for de-escalation are not successful, you need to control the situation quickly
- \* Indication: prevention of imminent harm to patient, others and environment
- \* ED protocol should be in place
- \* Restraint team of 5+ people recommended

## Procedure

- \* Enter room in force displaying a professional attitude
- \* Explain procedure, instruct patient to cooperate
- \* Apply restraints
- \* Good documentation
- \* Medical evaluation

## Technique

- \* Use leather restraints if possible, as less constricting than softer restraints and stronger
- \* Tie restraint to solid frame of bed, not side rails
- \* Soft Philadelphia collar to neck minimizes head banging and biting
- \* Supine with head elevated is optimal, prevent aspiration

## Pitfalls to avoid

- \* Monitor frequently with standardized form for documentation
- \* Change positions to prevent neurovascular sequelae eg. circulatory obstruction, paresthesias, rhabdomyolysis
- \* Ensure adequate chest ventilations if using chest restraints
- \* Remove restraints as soon as patient is cooperative

## Chemical restraints

**True or false?**  
**An acutely psychotic patient has the right to refuse tranquilizing medication**

## Chemical restraints

- \* Rapid tranquilization (RT) allows for quick chemical control of agitated patient
- \* Calms patient for proper evaluation and treatment, prevent patient harm to self or others
- \* Prevents morbidity and mortality risks from continued struggling in restraints i.e. rhabdomyolysis
- \* Butyrophenones + benzodiazepines optimal for containing aggression

## Chemical restraints

- \* Acute sedation of violent patient
- \* **Haloperidol** (Haldol) 2-10 mg IV/IM q 20-30 min (max 6 doses in 24 hrs) OR **Droperidol** (Inapsine) 2-5 mg IV/IM q 20-30 min **AND/OR**
- \* **Lorazepam** 1-2 mg IV/IM q 30 min prn up to 120 mg/24 hr
- \* Combination superior to either drug alone - can be mixed in same syringe for one injection

## Butyrophenones: Contraindications & Complications

## Contraindications

- \* Avoid neuroleptics in:
  - \* pregnant and lactating females
  - \* PCP overdose
  - \* anticholinergic drug intoxication
- \* Butyrophenones controversial in sympathomimetic intoxication eg. cocaine, amphetamines

## Complications

- \* Most common adverse side effect : Extrapyramidal symptoms (EPS)
- \* EPS **NOT dose-related** ie can occur after 1 dose
- \* Dystonic reaction eg. torticollis, opisthotonus, oculogyric
- \* Akathesia - feeling of severe restlessness
- \* Incidence <1%

## Complications

- \* Neuroleptic malignant syndrome (NMS) - idiosyncratic reaction to neuroleptics
- \* S/S: altered mental status, hyperthermia, autonomic lability (BP), lead-pipe rigidity of muscles
- \* Incidence: 1%
- \* Rx: rapid cooling, muscle relaxants eg. benzo, dantrolene
- \* R

## Complications

- \* Conduction disturbances:
  - \* Prolonged QT interval & torsade de pointes
  - \* Usually in middle age to older patients with pre-existing heart disease
  - \* Also associated with high doses eg. 50 mg-2300 mg in 24 hrs

## Atypical antipsychotics

- Use for *known psychiatric illness*, *cooperative* patient
- eg. Olanzapine (Zyprexa), ziprasidone (Zeldox), quetiapine (Seroquel), risperidone
- Lower EPS rates
- Olanzapine has smallest effect on QTc at therapeutic dose
- Research studies have shown rapid decreases in acute agitation with olanzapine and ziprasidone IM (with less EPS) in schizophrenia vs haloperidol IM

## Benzodiazepines: Types and Complications

## Drug choices for RT

- **Lorazepam** (Ativan) best
- Rapid onset, effectiveness and short half-life
- No active metabolites
- Works rapidly IM compared to other benzos
- Midazolam (Versed) similar IM, but shorter half life
- Works well in agitation due to alcohol or drug intoxication

## Complications

- Sedation
- Confusion
- Ataxia
- Nausea
- Respiratory depression - esp if patient already has ingested respiratory depressant eg. alcohol

## Case 2

## Case 2

- 68 year old male with schizophrenia and previous history of alcoholism presents with increased agitation and confusion from the nursing home
- Vitals: BP 180/100 P 110 T 37.0
- He is known to get frequent UTIs, and was just started on an antibiotic 2 days prior
- He strikes out at you and the nurse several times as you go to examine him

## What would you most likely do?

- \* 4 point physically restrain him
- \* 2 point physically restrain him
- \* Use soft restraints instead of leather restraints
- \* Use only a chest restraint
- \* RT with Haldol and Ativan

## Important pitfalls to avoid

- \* Use only half the dose for RT in the elderly, as more risk of side effects
- \* Cardiac monitoring if history of heart disease
- \* Check bedside glucose and all vital signs ie PO2
- \* Higher risk of organic illness, so never assume is just psychiatric

## 4 screening criteria for organic illness

- \* disorientation
- \* abnormal vital signs - always document temperature in all patients undergoing medical clearance
- \* clouded consciousness
- \* no previous psychiatric history

## Beware

- \* 20% elderly patients with psychiatric presentation eg. agitation, paranoia may be suffering from a **drug reaction**
- \* Important to review patient's medication list and note any changes in medications either stopped or added recently

## Other considerations

## Policies & Procedures

- \* Hospital policy for security search of patient belongings in the ED
- \* Clear policy for when security can restrain patients ie Form 1 not necessary to complete by MD before restraining patient
- \* Protocol for management of violent patients with restraint record, specific documentation of why patient restrained
- \* Gunshot wound reporting - Ontario Bill 68

## Staff training important

- \* Nursing staff complete online learning module annually regarding restraint use
- \* Security staff train the nurses on use of restraints
- \* Accredited course on Non Violent Crisis intervention completed every 2 years by RNs
- \* Emergency physicians should be better trained in dealing with violent patients - poorly taught in medical school and residency

## Key points

- \* Be aware of the potential for violence in agitated patients early and de-escalate as soon as possible to prevent a "Code White" being called
- \* Screen for reversible organic disease even in your patients with known psychiatric disease - ensure vitals are done in all patients, esp temperature, bedside glucose
- \* The agitated elderly patient is at increased risk for an organic cause for their behavior change

## Key points

- \* Restrained patients may need chemical sedation to prevent rhabdomyolysis
- \* Haloperidol and lorazepam combined is better than either drug alone in calming patients with less side effects
- \* Communicate clearly to other healthcare workers if you assess a patient is agitated, so that they treat them quickly and are not unknowingly at risk of violence

## References

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