Management of Agitated Patients

5th Annual Acute Care of the Complex Hospitalized Patient for NPs & PAs

2/8/2017

Gabrielle Melin, MD, MS, Assistant Professor
Medical Director, Emergency Psychiatry Services, Mayo Clinic
Rochester, MN
Disclosures

• I do not have any financial relationships to disclose
Objectives

• 1) Discuss how to safely assess patients in any setting
• 2) Describe how to complete a violence risk assessment
• 3) Describe how to prevent agitation/violence and what are the least restrictive options
• 4) Describe how to manage the agitated/violent patient, including medications to treat
Case

• A 25-year-old Caucasian married male is brought in by police for agitated behavior at a local shopping mall

• Patient’s vital signs are: 170/95, pulse 125, temp and respiratory rate 20, afebrile

• He is yelling and screaming. He exhibits psychomotor agitation. He references the Bible and that he is an angel of God

• People that are not angels of God, must be killed
Case continued

• You have no history on the patient other than what the police tell you happened today

• The patient’s story makes no sense. He remains preoccupied with religion and remains agitated, he will not cooperate with providing a urine sample or having blood drawn, he denies that he has any medical issues, he continues to yell and scream

• He then begins charging at staff as well as spitting and then start striking out
Case continued

• A spit hood is placed on his head.
• Security and nursing staff place him in a restraint chair
• He remains highly agitated and uncooperative
• On the differential includes psychosis secondary to substance use as well as schizophrenia or bipolar disorder or secondary to a general medical condition
• This is undifferentiated agitation
Case continued

- The safest option is to use benzodiazepines. Since he is in the Emergency Department and can be monitored closely, he was given 5 mg of midazolam IM after 10 minutes another 5 mg of midazolam IM is administered
- 10 minutes later he is still yelling and screaming and using profanities as well as focusing on using his Divine powers
- He is then given droperidol 5 mg IM
- In about 15 minutes he is sedated
Scope of the Problem

4.2% of 72,247 ED visits 2015; 3066; average 8.4 psych consults daily (adult and child)

22 patients in ED Spring 2016

• Commitments/testifying starting in ED; Jarvis

• Decreased reimbursement

• Bed shortages #49/50 (2016 Iowa is now #50); foster care, group homes, lack of Psychiatrists

• Patient at Regions in St. Paul Psych unit for 324 days November 2014-Sept 2015; Acute Inpatient Hospitals are like state facilities; Months stays on Medical Floors
5 Steps to assess risk for violence

• 1. Patient History
• 2. Context- immediate situation the patient is in at the time of the psychiatric evaluation
• 3. Identify arousal states fear, anger, confusion or humiliation
• 4. Structure the interview for safety
• 5. The clinical encounter
Step 1: The patient history

• Try to get as much information as you can PRIOR to interviewing the patient

• Talk with police officer, family, outpatient provider or others (friends, employer) that have pertinent contact with the patient; this can provide valuable information.

• Past Violence

• Psychotic States

• Demographic variables

• Psychiatric diagnoses
Risk Factors for Violence
Past violence, psychotic states, demographics and Psychiatric diagnoses

• Individual history of violence (but there’s always a first time)
• Substance intoxication, use or dependence (withdrawal too)
• Poor impulse control secondary to Neuropsychiatric impairment
• Hallucinations or Delusions (Psychosis, Schizophrenia and Mania)
• Character Pathology (Borderline, Narcissistic and Antisocial)
• History of abuse, family violence or “rootlessness”
• The chaotic environment of the ED (i.e. first visit, brought in by Law Enforcement)
Assessment of the Potential for Violence

- low education level
- Access to weapons
- Criminal Record
- Sex; Males 9: Females 1
- Age; Late teens is peak risk and decreases through 4th decade
- Ability to Deal with frustration in a non-violent manner (IQ, coping skills)
- Degree of social stability – supports, employment
- ** Demographic class most likely to assault a Clinician is an unemployed male (<40) with low Socioeconomic status.
Other

• Theories: younger and inexperienced with poor communication skills

• Violence more commonly experiences by RNs that smoke cigarettes, drink coffee at work, use alcohol after work to relax and are dissatisfied with work. (Swedish RNs-1996 article)

• Surveys determined that as many as ½ of Psychiatrists have been assaulted

• Assaults by patients and families are likely to be directed at young physicians who are early in their careers.
Step 2: CONTEXT

• The present situation that the patient is in at the time of the psychiatric evaluation

• environmental stressors can be acute and destabilizing or can be a chronic part of the patient’s life and can be stabilizing forces.

• Example, you are told the patient is divorced. Is this new, 20 years ago, due to an affair, etc.
Step 3: Identify Arousal States

• Fear
  • Unknown-explain your actions and behavior
  • Personal space with paranoid patients
  • Business-like manner with paranoid patients
    • warmth/friendly manner may not be interpreted as genuine

• Anger *remember your voice and body language!
  • Loud voice, staring, clenching fists, red face, standing up, pacing and verbal threats
  • Let the patient escape-never stand between the patient and the door
  • Told they could leave after assessment
Step 3: Identification of Arousal states

- Confusion
  - Can occur with dementia, delirium
  - Even routine procedures can provoke these patients
    - At nursing home, getting patient up for meals, medications, etc.
    - Don’t bend over with your hands at the side; use orienting techniques

- Humiliation
  - Loss of self-esteem, feeling powerless or out of control
  - taken away by Police in front of family, friends
Step 4: Structure the Interview for Safety

- Interview environment
  - Heavy furniture, no glass
  - Have door open and security at door if needed
  - cramped and overcrowded conditions increases risk
- Take control
  - Sit far enough away, sit at 90 degree angle to limit sustained eye contact (may be interpreted as confrontational)
  - Require the patient remain seated
- Trust your intuition
- Use restraints physical or medication to treat the condition when necessary
  - Wait until patient is responsive to talking before removal
Evaluation of the Patient
The Clinical Encounter

• “Risk factors make you worry more; nothing makes you worry less.”
• Keep on guard
• Do not be complacent
• Statistics should never override your clinical judgment
• Know your hospitals policies and procedures
Pharmacologic Options for Treating Agitation

• Typical Neuroleptics  D2 Receptor Blockade (75-90%)

• 1) *______ (haloperidol) High Potency=High EPS (little anticholinergic, less sedating than ______)

• 2-5 mg PO/IM q 10-15 minutes until calm (up to 200mg qd)

• 2-5 mg Haldol=100 mg Chlorpromazine (_______)

• IV not FDA approved-can cause Torsades de Pointes

• 2) Inapsine (droperidol) Mid Potency, IM and IV (more sedating than _____ and _____, onset faster than _____, but equivalent efficacy to _____ at 1 hour) 2.5-5mg q3-6 hours; BLACK BOX WARNING 12/2001: QT Prolongation

• Droperidol Pulled From Mayo Formulary January 2002; back on formulary around 2014, limited use areas, ED and ICU

• 3) __________ (chlorpromazine) Low Potency=Low EPS (have “built-in” anticholinergic activity); 100 mg (standard measure for all typicals)

• 3) Midazolam expected duration 90 minutes, so short acting compared to ______
Agitation due to intoxication

• **Intoxication** – Agitation can result from multiple different ingestions and drugs. Benzodiazepines are the safest option for treatment of acute agitation due to intoxication since antipsychotics can dangerously interact with some drugs. ______ has the best track record with minimal sedation.
Consultation Liaison Service
Hospital Setting; Oral Med Options

• Undifferentiated Agitation or Intoxication:
  • Lorazepam 1-2 mg multiple times daily, depending on tolerability and sedation. Lorazepam gives persistent action for several hours; elimination ½ life 12-14 hours (less in alcoholics)

Psychosis/ Behavioral Dyscontrol, Mania:
  • Haloperidol 2-5 mg PO up to 20 mg, high potency, +/- 25-50 mg diphenhydramine; up to 2 hours for effect
  • Thiothixene (_______) 2-5 mg PO up to 20 mg daily; medium potency more sedating than Haldol; use to help with sleep regulation
  • Quetiapine 6.25-50 mg PO BID to TID
  • Olanzapine 5-20 mg PO (Zydis is disintegrating tablet)
  • ** use half doses in elderly
IM options for Agitation

Haloperidol 2-5 mg IM q 15-20 minutes until calm +/- Lorazepam; Primary Psychosis: Haldol still standard (Note that oral Haloperidol can take up to 2 hours.)

- $$$ olanzapine 10 mg IM q2-4 hours hours (30 max)** Not in Pyxis
- $$$ zisprasadone 20 mg; IM Geodon start with 20 mg (not 10) – will make patient calm NOT sedated! Not in Pyxis

- ** Do not use Benzodiazepines (IM) within two hours of giving IM Olanzapine, risk for cardiorespiratory depression, severe hypotension; From package insert “Concomitant use: Concurrent use of parenteral benzodiazepine and IM olanzapine is not recommended; if considered, monitor for excessive sedation and cardiorespiratory depression [12].”

- IM lorazepam up to 30-60 mins (oral lorazepam 15-60 minutes😊)
# Medications for Agitation

Adult dosing only; use ½ in elderly

<table>
<thead>
<tr>
<th>Medication</th>
<th>IM/IV</th>
<th>Dose mg</th>
<th>Onset/peak conc.</th>
<th>½ life</th>
<th>PO</th>
<th>Onset/peak conc</th>
<th>½ life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lorazepam</td>
<td>IM</td>
<td>2 mg</td>
<td>IM 30-60 mins /1-2 hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td></td>
<td>IV 15-30/15-20 mins</td>
<td>12-14h</td>
<td>15-60 min</td>
<td>15-60 min /1-6hrs</td>
<td>12 hrs</td>
</tr>
<tr>
<td>haloperidol</td>
<td>IM</td>
<td>5 mg</td>
<td>/20-40 min</td>
<td>15-35</td>
<td>2-6 hrs</td>
<td>15-35</td>
<td></td>
</tr>
<tr>
<td>thiothixene</td>
<td>IM</td>
<td>2-5 mg</td>
<td>NA</td>
<td>1-2 hrs</td>
<td>34 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>quetiapine</td>
<td>IM</td>
<td>25-50</td>
<td>NA</td>
<td>/2hrs</td>
<td>6-7 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>olanzapine</td>
<td>IM</td>
<td>5-20</td>
<td>/15-45</td>
<td>20-54</td>
<td>/6hrs</td>
<td>20-54 hr</td>
<td></td>
</tr>
<tr>
<td>Midazolam</td>
<td>IM</td>
<td>5-10</td>
<td>2mins /30 mins</td>
<td>3 hrs IV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Droperidol</td>
<td>IM</td>
<td>5-10</td>
<td>IV 3-10 mins, IM15-20 mins /30-40 mins</td>
<td>2 hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM/IV preferred</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>parenteral only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Case #2

• A 75-year-old male with Alzheimer’s disease (with moderate cognitive impairment) is admitted to the hospital for pneumonia. He was calm in the emergency room but became agitated when he arrived on the floor.

• The family reports that he has been intermittently hallucinating for the last few days, including visual and auditory; he sleeps during the day and is awake at night.

• Prior to that he had not had any behavioral dyscontrol.
Case continued- Delirium

• The plan is for IV antibiotics and fluids
• The patient’s agitation is interfering with care
• He has never been on a psychotropic medication before
• An EKG was obtained in the ED and revealed a normal QTC
• Oral medication is refused
• _______ and _______ are readily available.
  Because of his age, start with H_______ 2 mg IM
Case continued

- It is possible for ______ cause a paradoxical reaction in the elderly or in those with a TBI.
- When the patient is not calm after 15 minutes another 2 mg IM of ______ is administered.
- The patient is still agitated yelling swearing and being uncooperative with cares.
- 1 milligram of ______ is administered IM.
- Would go ahead and schedule _____ 6.25-25 mg BID weighting HS dose.
Case Continued

• Alternatively can use thiothixene. 2 mg p.o. daily up to 20 mg. You can use it during the day as needed for agitation

• Thiothixene is about equal as far as potency but is more sedating than Haldol so can be helpful with trying to normalize sleep-wake cycle

• If using b.i.d. give lower dose in the morning and more at bedtime, say 2 mg AM and 4 mg HS
How to calm anyone anytime
Question #1

• Which of the following is the least restrictive action?
  • A. Restraints
  • B. Seclusion
  • C. Offering oral Medication
  • D. Security and Nursing holding patient down and administering an IM medication
Question #2

• Which of the following combination of medications is the shortest acting and is used in undifferentiated agitation in the ED setting?

a. Lorazepam and ______
b. Midazolam and Droperidol
c. ______ and IM ______
d. Propofol and Droperidol
Question #3

• Which of the following medications can cause sedation & therefore can be very helpful for agitation?
  • A. Lorazepam
  • B. Olanzapine PO
  • C. Thiothixene
  • D. Quetiapine PO
  • E. All of the Above
References

References

• The Psychopharmacology of Agitation: Consensus Statement of the American Association of Emergency Psychiatry Project BETA Psychopharmacology Workgroup

• February 2012, WJEM; Wilson, Michael P., MD, PhD, Pepper, David, MD, Currier, Glenn, MD, Holloman, Gerald H, MD, Feifel, David, MD, PhD
References

A Retrospective (Post-Marketing) Case Series of Patients Receiving Intramuscular (IM) Olanzapine Outside of Product Doses and Indications (Off-Label): Assessing Safety and Tolerability; Clinical Medicine Insights: Psychiatry 2011:31; Joel W. Lamoure and Abraham Rudnick; Departments of Psychiatry and Medicine, University of Western Ontario, London, Ontario, Canada. Departments of Psychiatry and Philosophy, University of Western Ontario, London, Ontario, Canada. Faculty of Pharmacy, University

- Package insert Micromedex for Olanzapine, 2016
- Access.medicine.mhmedical.com, haloperidol, droperidol and olanzapine info