Control of the Agitated Adult Emergency Department Patient

**Initial Measures**
- Assess for staff safety and call security if needed
- Attempt to calm patient with de-escalation techniques
- Routine medical/psychiatric care
- Assess for reversible causes of agitation

**Physical Restraint Necessary?**
- Yes
  - Ensure adequate resources and staff safety
  - Follow MMC Restraint Orders/Monitoring Guidelines

**Pharmacologic Intervention Necessary?**
- No
  - Ensure adequate resources and staff safety
  - Follow MMC Restraint Orders/Monitoring Guidelines

Select Appropriate Drug Therapy

**Rapid Intervention**
1. Haloperidol 5 mg IM/IV PLUS Lorazepam 2 mg IV/IM OR Midazolam 5 mg IV/IM
   OR
2. Ketamine 4-5 mg/kg IM (2 mg/kg IV) PLUS Lorazepam 2 mg IV/IM OR Midazolam 5 mg IV/IM

**Non-Violent Psychosis/Dementia**
1. Olanzapine 10 mg IM/PO
   OR
2. Risperidone 2 mg po ODT

**Elderly**
1. Haloperidol 2.5 mg IM/IV PLUS Lorazepam 1 mg IV/IM OR Midazolam 2.5 mg IV/IM
   OR
2. Olanzapine 2.5 mg IM/PO

**Reversible causes of agitation**
- Hypoglycemia
- Hypoxia
- Intoxication
- Withdrawal
- Infection
- Intracranial hemorrhage

Notes
1. Consider ketamine for the acutely violent patient. Ketamine has an expected duration of 30-60 minutes. Data on re-dosing is limited, but may be considered.
2. There is a concern of risk of worsening of underlying psychiatric symptoms with sub-dissociative dose ketamine. This has not been reported with dissociative (agitation) doses.
3. Patients may require multiple doses of antipsychotics/benzodiazepines for both initial stabilization and on-going sedation.
4. Benzodiazepines may be given after administration of ketamine (within 10-15 minutes) to decrease risk of emergence phenomena.
5. Data is insufficient to recommend use of ketamine in elderly patients

This guideline was ratified by the emergency department faculty at Maine Medical Center in May 2017. It reflects our expert opinion and is not necessarily applicable to all institutions. It is intended to be a reference for clinicians caring for patients and is not intended to replace providers’ clinical judgment.

Created by Sheldon H. Stevenson, DO and Tammi Schaeffer, DO April 19, 2017
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## Evidentiary Table

<table>
<thead>
<tr>
<th>Recommendation:</th>
<th>Source:</th>
<th>Classification:</th>
<th>Level of Evidence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ketamine IV/IM (2 and 4mg/kg, respectively) for acute agitation</td>
<td>1. Riddell J, et al. Ketamine as a first-line treatment for severely agitated emergency department patients. American Journal of Emergency Medicine. 2017; Article in Press</td>
<td>Single-center, prospective, observational study</td>
<td>IIa</td>
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<tr>
<td>Add midazolam or</td>
<td>1. Senner, et al. Ketamine with and</td>
<td>RCT</td>
<td>Ib</td>
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<td>Practice Guideline</td>
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