Emergency Department Guideline
Management of the Agitated Pediatric Patient

Inclusion criteria
- Presenting with acute agitation
- Developing agitation during ED care
- Definition: Agitation is “a state of behavioral dyscontrol that will likely result in harm to the patient or healthcare workers without intervention.”
  - Agitation can progress in stages:
    - Verbal stage- the child will use general threats and/or abusive language.
    - Motor stage- the child will remain in near constant motion, such as pacing.
    - Property damage stage- the child will become destructive, attempting to break nearby objects.
    - Attack stage- the child may attempt to harm themselves or others.

Triage considerations:
- ESI level 1 if property damage or attack stage, level 2 if verbal or motor stage
- Place in “safe room” (ED room 3) if available
- Call security if concern for evolving danger to self or others
- Code 21 if active violence
- Standard VS with weight if possible

Laboratory studies:
- Not routinely indicated
- If suspected or reported overdose consider:
  - Serum acetaminophen level
  - Serum acetylsalicylic acid (ASA, aspirin) level
  - Urine drug screen (UDS)
  - Urine β-hCG (pregnancy test)
  - Electrolytes
  - COHbG level
  - Serum creatine kinase
  - Urine myoglobin
  - ABG
  - ECG
- Consider POC Urine β-hCG (pregnancy test) in adolescent girls
Imaging:
- Rarely indicated
  - Consider head CT if history of trauma or focal neurologic findings

Medications/Interventions:
- Progress from the least restrictive (environmental alterations) to most restrictive (medications or physical restraints), unless safety is immediately at risk.
- De-escalation should be attempted prior to the use of medications.
- Optimize the environment:
  - Quiet space, dim lighting
  - Remove objects that distract, agitate, or create risk
  - Remove family members or guests that heighten agitation
  - Use universal precautions
- Optimize staff interactions:
  - Calm, soft voice; slow pace
  - Clearly identify yourself
  - Explain time course and procedures
  - Reassure patient that goal is to keep them safe
  - Understand and clarify the patients concerns and goals
  - Do not take behavior personally
  - Offer warm blanket, food, or drink (if possible)
  - Offer discrete choices—lights on or off, parents in or out, what to drink
  - Offer distraction items
  - Engage consultants as needed: social work, psychiatry, child life
  - Notify security to ensure safety
- Medications if de-escalation unsuccessful:
  - If patient is on antipsychotic or benzodiazepine for anxiety, consider giving \( \frac{1}{4}-\frac{1}{2} \) of baseline daily dose as prn
  - If can be done safely, attempt to persuade patient to take PO medication before progressing to IM or IV

<table>
<thead>
<tr>
<th>Situation</th>
<th>Medication</th>
<th>Dose</th>
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<tbody>
<tr>
<td>Suspected ingestion or intoxication as cause of agitation</td>
<td>Lorazepam (Ativan)</td>
<td>PO/IM/IV 0.05 mg/kg, max 2 mg</td>
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<tr>
<td>Agitation with low suspicion of ingestion (Avoid in liver disease, h/o neuroleptic malignant syndrome, seizure disorder)</td>
<td>Olanzapine (Zyprexa)</td>
<td>ODT/IM 2.5 mg (6-10 years), 5 mg (10+ years), 10 mg (consider if adult size)</td>
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<tr>
<td>Extra-pyramidal symptoms after olanzapine (dystonia, other abnormal movements)</td>
<td>Diphenhydramine (Benadryl)</td>
<td>1.25 mg/kg PO/IM/IV, max 50 mg</td>
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- Physical Restraints if de-escalation unsuccessful and unable to maintain safety with medications in a timely fashion
  - Team approach; one person per limb, one for head and airway
Use only approved restraints, least restrictive type possible
- Supine, arms at sides
- Secure to bed frame, not side rails
- Monitoring by trained staff and CR monitor per hospital policy
- Monitor for respiratory impairment, skin breakdown, neurovascular damage, rhabdomyolysis
- Frequent reassessment with earliest possible removal
- Release once no longer danger to self or others

**Consultations**
- Hospital Security
- Poison Control
- Child Life Therapy
- Social Services
- Safe and Healthy Children (CPS)
- Psychiatry
- Neurology
- Police

**Reassessments**
- Constant monitoring and frequent reassessment of the patient treated with medications or physically restrained patient, to optimize patient safety and to determine the earliest possible time for discontinuation or removal of these non-risk-free interventions.
- VS q15 minutes

**Discharge or admission criteria**
- Admit to PICU:
  - Ongoing, uncontrolled or poorly controlled agitation
  - Respiratory depression after medical therapy for agitation
  - History or laboratory evidence of life-threatening ingestion (in consultation with poison control)
- Admit to inpatient medical floor:
  - Evidence of etiology of agitation or co-morbid condition requiring medical management
  - Medication side-effects requiring acute monitoring and/or treatment in an inpatient setting
  - Agitation caused by an unknown or unconfirmed etiology
  - Social situation preventing a safe return to home
- Admit to psychiatric service (arranged via BEC at UMN Children’s Hospital)
  - Suicidal or homicidal ideation
  - Drug overdose, intentional or accidental
  - Behavior concerns rendering outpatient management unsafe or impractical

**Quality measures**
- Time in restraints
- Use of olanzapine as first line therapy
Management of an Agitated Patient

This UMMC Guideline addresses only key points of care for the specific population; it is not intended to be a comprehensive practice guideline. These recommendations result from review of literature and practices current at the time of their formulation. This Guideline does not preclude using care modalities proven efficacious in studies published subsequent to the current revision of this document. This document is not intended to impose standards of care preventing selective variances from the recommendations to meet the specific and unique requirements of individual patients. Adherence to this statement is voluntary. The clinician in light of the individual circumstances presented by the patient must make the ultimate judgment regarding the priority of any specific procedure or course of action.

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