

Chapter 5

Agitation



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Introduction

Patients with agitation are frequently encountered in an emergency department (ED) or psychiatric emergency service (PES). Agitation is not a disease state but actually a cluster of symptoms. Core symptoms and signs of agitation generally include irritability, excessive or semi-purposeful motor activity (also known as “psychomotor agitation”), heightened responsiveness to internal and external stimuli, and an unstable course. Agitation can be associated with both psychiatric and non-psychiatric conditions. Until agitation is appropriately treated, evaluation and treatment of the underlying issue may be delayed.

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Symptoms

- Internal restlessness
- Feeling out of control
- Feeling irritable/argumentative
- Heightened responsiveness to stimuli (internal and external)

Signs

- Increased and excessive semi-purposeful motor activity (pacing, etc.)
- Irritability
- Verbal outbursts
- Physical aggression

Life-Threatening Symptoms/Signs Related to Medical Causes

Symptoms

- Loss of memory, disorientation
- Severe headache
- Extreme muscle stiffness or weakness
- Heat intolerance
- Unintentional weight loss
- Psychosis (new onset)
- Difficulty breathing

Signs

- Abnormal vital signs: pulse, blood pressure, or temperature
- Overt trauma
- Anisocoria (unequal pupil size)
- Slurred speech
- Incoordination

Seizures
Hemiparesis

Differential: When a patient first arrives to the ED or PES and demonstrates agitation, it is helpful to think of agitation as falling into one of four main groups to guide immediate treatment. These include agitation associated with delirium; agitation due to intoxication; agitation associated with psychosis; and undifferentiated agitation (see “Tool” at end of chapter). After immediate treatment, further workup can be performed to determine the underlying cause of agitation. An extensive (though not exhaustive) differential of causes of agitation include the following:

- Acute pain
- Head trauma
- Infection
- Encephalitis
- Encephalopathy
- Toxins
- Metabolic issue
- Hypoxia
- Hyperthyroidism
- Neurologic disease
- Supratherapeutic dosing of medications
- Recreational drug intoxication
- Recreational drug withdrawal
- Exacerbation of primary psychiatric disorder

Treatment

Acute:

- In all cases, verbal de-escalation techniques should be tried.
- In order to determine best pharmacological treatment.
 - If the agitation is associated with delirium and alcohol or benzodiazepine withdrawal is not suspected, consider

medical causes first in the ED setting. Common causes include hypoglycemia, hypoxia, head injury, or thyroid disease. Treat the underlying cause first before giving medications (best evidence is for oral risperidone and oral olanzapine).

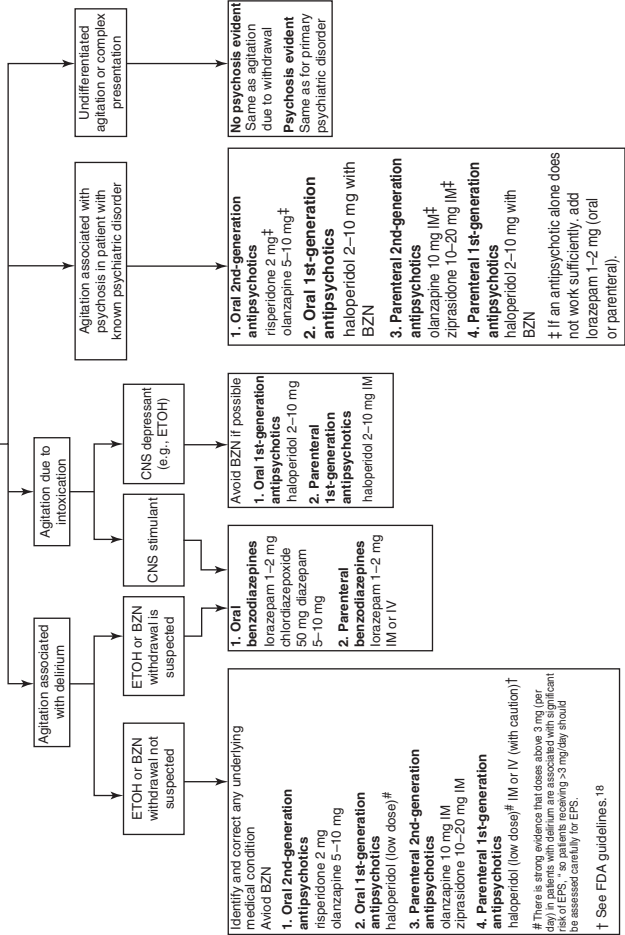
- If the agitation is associated with delirium and this is likely due to alcohol or benzodiazepine withdrawal, benzodiazepines are the first line treatment.
- If the agitation is associated with stimulant intoxication, benzodiazepines are also first line.
- If the agitation is because of a CNS depressant (like alcohol), protect the airway first. Non-pharmacologic interventions such as simply turning down the lights are first line. If medications are needed, first-generation antipsychotics like haloperidol are likely safer than benzodiazepines.
- If the agitation is associated with psychosis in a patient with a known psychiatric disorder, second-generation antipsychotics are preferred (best evidence for risperidone or olanzapine). If the home medication (anti-psychotic) is known, consider dosing with this medication.
- If the cause of the agitation is unknown and there is no psychosis, treat like alcohol or benzodiazepine withdrawal.
- If the cause of the agitation is unknown and there is psychosis, treat as if the patient had a known psychiatric disorder.
- Restraints are occasionally needed if the agitation is severe and the patient is actively trying to hurt self or others. Restraints should be used as a last resort only and avoided if at all possible. If used, frequent reassessment and patient debriefing is necessary.

Long-term treatment: The long-term treatment is really one of prevention. Agitation is an acute condition but the disease state that produces agitation may be chronic. If the agitation is related to a chronic illness, the treatment for the primary illness may need to be modified to help prevent breakthrough symptoms.

Tool

Protocol for Treatment of Agitation

Based on response to interventions, medication is now required



No psychosis evident
Same as agitation due to withdrawal
Psychosis evident
Same as for primary psychiatric disorder

1. Oral 2nd-generation antipsychotics
risperidone 2 mg †
olanzapine 5-10 mg †
2. Oral 1st-generation antipsychotics
haloperidol 2-10 mg with BZN
3. Parenteral 2nd-generation antipsychotics
olanzapine 10 mg IM †
ziprasidone 10-20 mg IM †
4. Parenteral 1st-generation antipsychotics
haloperidol 2-10 mg with BZN
† If an antipsychotic alone does not work sufficiently, add lorazepam 1-2 mg (oral or parenteral).

Avoid BZN if possible
1. Oral 1st-generation antipsychotics
haloperidol 2-10 mg
2. Parenteral 1st-generation antipsychotics
haloperidol 2-10 mg IM

1. Oral benzodiazepines
lorazepam 1-2 mg
clonazepam 50 mg
diazepam 5-10 mg
2. Parenteral benzodiazepines
lorazepam 1-2 mg IM or IV

Identify and correct any underlying medical condition
Avoid BZN
1. Oral 2nd-generation antipsychotics
risperidone 2 mg
olanzapine 5-10 mg
2. Oral 1st-generation antipsychotics
haloperidol (low dose) #
3. Parenteral 2nd-generation antipsychotics
olanzapine 10 mg IM
ziprasidone 10-20 mg IM
4. Parenteral 1st-generation antipsychotics
haloperidol (low dose) #, IM or IV (with caution) †
There is strong evidence that doses above 3 mg (per day) in patients with delirium are associated with significant risk of EPS. * so patients receiving >3 mg/day should be assessed carefully for EPS.
† See FDA guidelines. 18

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