American Academy of Physician Associates

Agitation in the ED and Urgent Care Setting

Overview

Urgent care and emergency department (ED) settings are particularly stressful "deleriogenic" environments to everyone, but even more so for patients with Alzheimer's disease (AD). Urgent care settings may not have the same capabilities to deal with agitation as EDs. Unfortunately, ED staff admit feeling underprepared when it comes to managing agitated older patients with dementia in this setting.[1]

Agitated patients are brought to the ED when they manifest with a risk of harm to themselves or to others with escalating agitation.

- About 50% of patients with AD will exhibit aggressive behaviors, often in later disease stages.[2]
- Agitation may be the patient's means for expressing pain, hunger, fatigue, fear, boredom, or overstimulation, or other unmet needs.[2]

What does agitation/aggression in the patient with often moderate-to-severe AD look like in the ED?[2-4]

- Shouting, name-calling, cursing, making lewd comments
- Hitting, pushing, biting, pinching, scratching, grabbing
- Aberrant motor activity (fidgeting, pacing)
- Demonstrating disinhibited sexual behavior
- Physical destructiveness

Key barriers to optimal care include:

- Clinicians' lack of immediate awareness of the patient's AD diagnosis
- The overstimulating environment of the ED setting, which can increase agitation
- Paucity of safe pharmacologic options for treating acute agitation
- Patients' lack of cognitive ability to understand what is happening

Clinicians can use the **Riker Sedation Agitation Scale (SAS)** to determine the patient's severity of agitation.[5]

- 7) Dangerous Agitation: Pulling at ET tube, trying to remove catheters, climbing over bedrail, striking at staff, thrashing side-to-side
- 6) Very Agitated: Requiring restraints and frequent verbal reminding of limits, biting ETT
- 5) Agitated: Anxious or physically agitated, calms to verbal instructions
- 4) Calm and Cooperative: Calm, easily arousable, follows commands
- 3) Sedated: Difficult to arouse, awakens to verbal stimuli, follows simple commands
- 2) Very Sedated: Arouse to physical stimuli but does not communicate spontaneously
- 1) Unarousable: Minimal or no response to noxious stimuli

There may be many potential underlying causes of the patient's agitation, some of which are easily treatable and would quickly ameliorate the agitation. To aid in this evaluation, the American College of Emergency Physicians (ACEP) developed the **ADEPT** tool to help ED clinicians manage confusion and agitation in the older ED patient.[6,7] Note that there are often multiple factors at play, so continue to perform comprehensive evaluations.

- ASSESS
    - Evaluate for life-threatening/immediately treatable conditions
        - Hypoxia, hypoglycemia, acute MI, cerebral ischemia, hypotension, sepsis
    - Evaluate for pain
    - Recognize the most common causes of acute alterations in mental status:
        - Infection, neurologic disorders, metabolic/electrolyte disorder
        - Medication effects (up to 39% of cases)
        - Deteriorating underlying medical conditions
        - Establish baseline mental status (helpful if care partner*/family member there)
            - This can be a major roadblock in determining urgency of an issue, or in determining if this portends a long-term change potentially requiring reconsideration of the patient's living situation.
    - Physical exam for potential nonaccidental trauma, neglect; frailty
- DIAGNOSE
    - Hyperactive delirium least common (10%) – agitation, increased psychomotor activity and heightened level arousal.
    - Determine if prior/current diagnosis of AD/Dementia:
        - From family/care partners, if present .
        - If not – use Delirium Triage Screen; if positive, use Confusion Assessment Method or Brief Confusion Assessment Method.
        - Rule out depression (PHQ2, Mini-Cog, brief Alzheimer's Screen, ED Depression Screening Instrument, as needed).
- EVALUATE (for underlying causes)
    - Comprehensive history and physical exam
        - Infection, acute neurologic disorders, medication adverse effects
        - Dehydration, pain, new meds or change in environment

        - Labs, urinalysis, imaging as needed
- PREVENT (progression to delirium and aggression)
    - Take measures in hectic environment of ED to reduce and prevent progression.
    - Treat underlying condition, manage pain (see below), treat other bothersome symptoms (e.g., nausea, diarrhea, constipation).
    - Avoid using medications that can cause delirium.
    - Provide hydration, food (if appropriate), access/assistance for toileting, mobility assistance/aids, hearing assistive devices.
    - Limit unnecessary disruptions.
    - Minimize tethers (IVs, Foley catheters, pulse oximetry, blood pressure cuffs, etc., as they can be frustrating).
    - When available and appropriate, use trained volunteers to sit with and monitor the patient, explain what is going on, and distract and defuse situations as needed.
- TREAT
    - NONPHARMACOLOGIC INTERVENTIONS (Not appropriate if agitation from medications)
        - Find out what has been effective in calming patient in the past (best if care partner is present): music, TV, silence, quiet touch?
        - Clinicians: calm demeanor, compassion, empathy, smile, reassurance, engage and support patient and care partner(s); do not respond to verbal agitation or argue with the patient.
        - Do not touch patient without permission.
        - Avoid startling or rushing the patient.
        - Utilize verbal de-escalation, distraction, reassurance.
        - Staff should stand on the patient's least dominant side of the bed and constantly monitor for signs of escalating agitation.
        - Avoid restraints.
        - Meet patient's healthcare needs: toileting, hydration, nutrition, pain/nausea management, ambulation; frequent reorientation as needed.
        - Ensure patient has no hearing impairments or visual impairments.
        - Limit exposure to excessive stimuli:
            - Close door to patient's room.
            - Reduce alarms and glare. Even the TV can increase agitation.
            - Be aware of how lighting can cause shadows that can increase agitation.
            - Minimize the number of people present in the room during procedures.
            - Be organized, calm, and efficient.
            - Speak softly in simple language.
            - Reduce exit-seeking or resistance-to-care behaviors.
        - "Calming" modifications: involve family members and volunteers/sitters to keep patient calm; move patient to a position of best observation and to

prevent falls/injury. If possible, use background music to decrease agitation.

- PHARMACOLOGIC TREATMENTS
  - Overview
    - **All** antipsychotic and benzodiazepine agents are contraindicated in older patients with dementia, and many have warnings about increased risk/prolongation of sedation or paradoxical agitation (benzodiazepines).
    - The goal of treating AD agitation in ED is generally for safe symptomatic management, **not** for sedation – in fact, sedation could lead to a prolonged hospital visit or even hospital admission.
    - Use oral medications when possible (onset within 30-60 min, fewer adverse drug reactions [ADRs]); start-low go-slow titration strategy.
    - Carefully consider IM/IV agents owing to elevated risk of serious side effects:
      - Increased confusion
      - Sedation
      - Falls
      - Mortality
    - Older patients are more vulnerable to ADRs from medications.
      - Older patients typically already on polypharmacy; need to determine what other medications currently taking if possible.
    - Consider any/all comorbid conditions when selecting appropriate treatment.
    - Treatment selection: consider speed of onset and duration.[8]
  - Specific Recommendations (Note: recommendations and guidelines precede 2024 FDA approval of brexpiprazole for agitation in AD)
    - Use lower doses to minimize ADRs when starting a new medication and titrate to effect.
    - Best consensus (prior to brexpiprazole): low-dose olanzapine, risperidone, quetiapine
      - May cause orthostatic hypotension
      - Lower risk QT prolongation vs first-generation antipsychotics
        - May require ECG if on other medications
    - If a patient is on an antipsychotic at home, continue using it in ED.
      - Brexpiprazole is the only antipsychotic approved for management of agitation in AD (despite black box warning), **but** there is no current evidence supporting its acute use in ED.

    - Escitalopram and dextromethorphan-bupropion are both currently under investigation for depression in AD, but may not be appropriate for acute use in ED setting.
- *NOTE: antipsychotics have increased risk mortality when used in long-term; no evidence when used once in ED.*
- No clear evidence supporting other antipsychotics on symptom duration, severity, hospital length of stay, mortality
- Patients previously on benzodiazepines can continue; benzodiazepine naïve patients risk prolonged sedation and paradoxical agitation, worsening delirium.
- If must use benzodiazepines (e.g., alcohol withdrawal/dependence): recommend short-acting agents such as lorazepam.
- Avoid diphenhydramine unless acute allergic reaction.
- No evidence supporting anticonvulsants for agitation/delirium in AD
- Anticholinergics may exacerbate delirium.

**care partner: We have chosen to use the term “care partner” because it implies a more collaborative and intimate relationship between the patient receiving the care and the person(s) providing the care. It refers to the person who either lives with the patient or sees them ≥1-2X/week and is a “softer” term than “caregiver.”

References

1. Goodwin L, Liddlard C, Manning S, et al. How do emergency department staff respond to behaviour that challenges displayed by people living with dementia? A mixed-methods study. BMJ Open. 2023;11(8):e075022.
2. Kennedy M, Koehl J, Shenvi CL, et al. The agitated older adult in the emergency department: a narrative review of common causes and management strategies. J Am Coll Emerg Physicians Open. 2020;1(5):812-823.
3. Millán-Calenti JC, Lorenzo-López L, Alonso-Búa B, et al. Optimal nonpharmacological management of agitation in Alzheimer’s disease: challenges and solutions. Cin Intervent Aging. 2016;11:175-184.
4. Mulkey MA, Munro CL. Calming the agitated patient: providing strategies to support clinicians. Medsurg Nurs. 2021;30(1):9-13.
5. Riker Agitation Sedation Scale. https://www.msdmanuals.com/professional/multimedia/table/riker-sedation-agitation-scale
6. Hogan TM, Celmins L. Emergency department care of an agitated older adult – a brief topic review. J Ger Emerg Med. 2020;1(3):1-4.

7. Shenvi C, Kennedy M, Austin CA, et al. Managing delirium and agitation in the older emergency department patient: the ADEPT tool. Ann Emerg Med. 2020;75(2):136-145.
8. Kim HK, Leonard JB, Corwell BN, Connors NJ. Safety and efficacy of pharmacologic agents used for rapid tranquilization of emergency department patients with acute agitation or excited delirium. Expert Opin Drug Saf. 2021;20(2):123-138.

Additional Resources

Alzheimer's Organization. Emergency Care Tips for People with Dementia. January 27, 2021. https://www.adrc.wisc.edu/dementia-matters/emergency-care-tips-people-dementia#:~:text=Dementia%20Matters.%20Emergency%20Care%20Tips%20for%20People%20with%20Dementia.%20Wednesday

Banerjee S, High J, Stirling S, et al. Study of mirtazapine for agitated behaviours in dementia (SYMBAD): a randomised, double-blind, placebo-controlled trial. Lancet. 2021;398(10310);1487-1497.

Cummings J, Sano M, Auer S, et al. Reduction and prevention of agitation in persons with neurocognitive disorders: an international psychogeriatric association consensus algorithm. Int Psychogeriatr. 2024;36(4):251-262.

Engstrom K, Mattson AE, Mara K, et al. Safety and effectiveness of benzodiazepines and antipsychotics for agitation in older adults in the emergency department. Am J Emerg Med. 2023;67:156-162.

Lee D, Clark ED, Antonsdottir IM, Porsteinsson AP. Brexpiprazole for Agitation Associated With Dementia Due to Alzheimer's Disease. J Am Med Dir Assoc. 2024;25(10):105173.