Trauma Center Practice Management Guideline

Iowa Methodist Medical Center – Des Moines

Delirium, Sleep, Anxiety Management Guideline for Older Adult / Geriatric Patients (Frail, Elderly, Age ≥ 65 Years Old)	
ADULT **Practice Management Guideline**	**Effective: 8/1/2025**
Contact: Trauma Center Medical Director	**Last Revised: 8/1/2025**

- Prior to treatment, assess the type of "agitation" the patient is experiencing.
- The best "treatment" for delirium is prevention.
    - Recommended Prevention Measures at UPH-DM:
        - Consult to Geriatric Providers ("IP Consult to Geriatric")
        - Nursing Interventions
        - Consult to HELP [Hospital Elder Life Program] ("IP Consult to HELP")
        - Use of Nonopioid Analgesics
        - Regional Anesthesia (Surgery, Post-Op)

Depression / Anxiety	**Hyperactive Delirium**	**Sleep**

Depression +/- Anxiety
• Escitalopram (Lexapro)
  ○ 5 - 10 mg daily
  ○ Oral
• Sertraline (Zoloft)
  ○ 25 - 50 mg daily
  ○ Oral
• Duloxetine (Cymbalta)
  ○ 30 mg daily
  ○ Oral
Anxiety
Pharmacologic:
• Hydroxyzine (Atarax)
  ○ 10 - 25 mg/dose (up to 4 times daily)
  ○ Oral
• Buspirone (Buspar)
  ○ 10 - 15 mg/day
  ○ (2-3 divided doses)
  ○ Oral
• Lorazepam (Ativan)
  ○ 0.25 - 0.5 mg/dose
  • (every 4 hours as needed)
  ○ Oral, IM, or IV
 	
Non-Pharmacologic:
• Music
• Aromatherapy
• Weighted Blankets
	Able to administer oral/enteral:
	• Quetiapine (Seroquel)
	  ○ 12.5 - 25 mg per dose
	  ○ Oral
	• Olanzapine (Zyprexa)
	  ○ 2.5 mg per dose
	  ○ Oral
	
	Risk for harm to self/others or unable to take oral/enteral:
	• Olanzapine (Zyprexa)
	  ○ 2.5 mg per dose
	  ○ IM or IV
	• Haloperidol (Haldol)
	  ○ 0.5 mg per dose
	  ○ IM or IV
	
	Delirium with Acute Alcohol Withdrawal:
	• Benzodiazepines
	  ○ Lorazepam (Ativan)
	  ○ Chlordiazepoxide (Librium)
	  ○ Oxazepam (Serax)
	• Phenobarbital
	  ○ Consider if the patient meets systemwide protocol criteria.
		Oral:
		• Melatonin
		  ○ 3-6 mg per dose
		  ○ Max: 9 mg/night.
		  ○ 0.5 - 1 hour half-life.
		  ○ Give 2-5 hours prior to sleep to be most effective.
		  ○ Not good evidence supporting use.
		  ○ Low effectiveness but lowest side effect profile.
		
		• Trazodone
		  ○ 25-50 mg per dose
		  ○ Max: 100 mg/day
		  ○ 5 - 9-hour half-life.
		  ○ Best for use with anxiety and sleep.
		  ○ Can be used with Melatonin.

Additional Notes for Pharmacologic Interventions in Table *(Sorted alphabetically)*:

- Buspirone (Buspar)
  - Max Dose: 60 mg/day.
  - Can increase every 2-3 days by 5 mg.
  - Two weeks to achieve full effectiveness.
  - SE: dizziness, nausea, drowsiness.
- Duloxetine (Cymbalta)
  - Max Dose: 120 mg/day.
  - Increase by 30 mg, every 2 weeks as tolerated.
  - Best if chronic pain also present.
- Escitalopram (Lexapro)
  - Max Dose: 10 mg/day
  - Best for depression + anxiety.
  - SE: prolonged QTc (lower risk).
- Haloperidol (Haldol)
  - Max Dose IM or IV: 5 mg / day.
  - Avoid use in Parkison's Disease.
  - Need to wait at least 2 hours after the first dose to reassess the need for additional doses.
  - SE: Sedation, prolonged QTc (higher risk).
- Hydroxyzine (Atarax)
  - SE: Dry mouth, sedation, prolonged QTc (lower risk).
- Lorazepam (Ativan)
  - SE: Sedation, hypotension, prolonged QTc (lower risk).
- Quetiapine (Seroquel)
  - Max Dose: 50-100 mg/day
  - Once symptoms are controlled, half dose for 2-3 days, then taper off.
  - SE: Sedation, prolonged QTc (lower risk).
- Olanzapine (Zyprexa)
  - Max Dose Oral: 10 mg/day
  - Max Dose IM or IV: 12.5 mg/day
  - Recommended with fewer side effects yet similar efficacy to Haldol.
  - Need to wait at least 2 hours after the first dose to reassess the need for additional doses.
  - SE: Sedation, prolonged QTc (lower risk).
- Sertraline (Zoloft)
  - Max Dose: 200 mg/day.
  - Increase by 25 mg weekly.
  - Best for "sad" thoughts.
- Trazodone
  - Max Dose: 200 mg/night.
  - SE: Prolonged QTc (lower risk).

QTc Prolongation:

- Ensure baseline ECG was obtained.
- If QTc not prolonged (< 500 ms) ok to proceed.
    - Consider repeating EKG if given many doses of higher risk medications during hospital stay.
- If QTc is prolonged (> 500 ms) consider heart rate and rhythm.
    - Arrythmias and heart rate can affect QTc calculation on EKG result (i.e. tachycardia, bradycardia, a-fib).
    - Consider medication adjustment or dose reduction. If unable to adjust, then obtain daily ECG while administering medication(s).
    - Repeat ECG every 3 days while administering medication(s).
        - If QTc < 500 ms on 3 EKG's, can adjust to weekly.
- Ensure electrolytes are at target ranges to reduce risk. (Mg ≥ 2 mEq/L, K ≥ 4 mmol/L).
- Consult Pharmacy for further assistance.

Delirium:

- Definition:
    - Acute decline in cognitive function and attention.
    - Types: Hyper-, Hypo-, and Mixed
- Goals for Treatment:
    - 1) Prevention
    - 2) Non-pharmacologic and pharmacologic interventions for treatment, if applicable.
- In older adults, they are more likely to develop hyperactive symptoms in the evening and night hours (sometimes referred to as "sundowning") when they are fatigued.

Identify at Risk Patients:

- National Institute for Health and Care Excellence (NICE) Guidelines:
    - 1 or More: Age 65 years and older, any cognitive impairment (past or present) and/or dementia, current hip fracture, or severe illness.
    - Increased length of operation, extensiveness of operation.
- Trauma ISAR Score (Identification of Seniors at Risk)
    - "Yes" to 2 or More Criteria = "Consult to Geriatric" Providers

Non-Violent or Violent Restraints:

- Only use for patients at risk of harming themselves or others, or interfering with care (pulling tubes, lines).
- Can increase or worsen hyperactive delirium behaviors (agitation, confusion, aggression).

Inpatient Medication Selection and Dosing for Older Adult / Geriatric Patients:

Medication Administration:

- Consider the patient's ability to swallow and if pills need to be crushed.
- Can adjust most medications to liquid solution.
    - Consult with Pharmacy for assistance.

Avoid:

- These medications can increase the risk for confusion, delirium, sedation, falls, anticholinergic effects (dry mouth, constipation, urinary retention) in older adults.
    - Benzodiazepines, Anticholinergics (e.g., cyclobenzaprine, oxybutynin, prochlorperazine, promethazine, tricyclic antidepressants, paroxetine and drugs with high anticholinergic properties), Diphenhydramine, Hydroxyzine [moderate to high dose], Histamine2-receptor antagonists (e.g., cimetidine), Sedative-hypnotics, and Meperidine.

Discharge Considerations:

- Recommend stopping or tapering off antipsychotics and benzodiazepines as soon as possible.
    - Once stable behaviors, recommend tapering dose down over 2-3 days.
- Recommend continuation of SSRI and SNRI's at discharge.
    - Need to taper off if taking consistently more than 4 weeks.
    - Gradually taper over 2-4 weeks to minimize withdrawal.

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