Delirium Protocol for Adult/Geriatric Trauma Patients

Increased risk

Advanced Age	Demented Patients
Functional Impairment/Multiple Medical Comorbid	Alcohol Abuse
Major Surgery (Hip, AAA, cardiac)	ICU Stay

Assessment: RN will Complete Bedside CAM on Floor and Step-Down units notifying for initial positive findings

Medical/Surgical Causes

- **D**rugs: New additions, increases dosages, Anticholinergic Burden, Multiple CNS medications, recreational drug use
- **E**lectrolyte Disturbances: Dehydration, Sodium, Hyperkalemia and Thyroid Imbalance
- **L**ack of Drugs: Withdrawal from substances poorly controlled pain, ETOH withdrawal
- **I**nfection: urinary and respiratory most common
- **R**educed Sensory Input: Poor vision, poor hearing
- **I**ntracranial: Hemorrhage, Ischemic, Tumor, Seizure
- **U**rinary/fecal: urinary retention and fecal impaction
- **M**yocardial/Pulmonary: MI, Arrhythmia, Hypoxia, Hypercarbia, Symptomatic Anemia

Management

-Non-pharmacological Management, Sleep Hygiene, De scalation of Lines, and/or Safety Sitter

-If threatening Self and Others or GCS < 13- Clinician expected to assess patient in conjunction with management

-Initial Medication Management if posing threat to self/others- Adopted-American Geriatric Society

Table 4—Pharmacologic Therapy of Agitated Delirium

Agent	Mechanism of Action	Dosage	Benefits	Adverse Events	Comments
Haloperidol[OL]	Antipsychotic	0.25–0.5 mg po, IM, or IV q4h prn; [a]Max dose 3 mg per 24h	Relatively nonsedating; few hemodynamic effects	EPS, especially if >3 mg/d	Usually agent of choice[a]
Risperidone[OL]	Second-generation antipsychotic	0.25–0.5 mg po q4h prn [a]Max dose 2 mg per 24h	Similar to haloperidol	Might have slightly fewer EPS than haloperidol	Small trials[b]
Olanzapine[OL]	Second-generation antipsychotic	2.5–5 mg po, SL, or IM q12h (cannot be given IV) [a]Max dose 20 mg per24h	Fewer EPS than haloperidol	More sedating than haloperidol	Small trials[b]; oral formulations less effective for acute management
Quetiapine[OL]	Second-generation antipsychotic	12.4–25 po q12h [a]Max dose 50 mg per 24h	Fewer EPS than haloperidol; can be used in patients with parkinsonism	More sedating than haloperidol; hypotension	Small trials[b]
Ziprasidone	Second-generation antipsychotic	5–10 mg po, IM [a]Max dose 20 mg per 24h	Fewer EPS than haloperidol; moderate sedation	Risk of cardiac arrhythmia, heart failure, agranulocytosis	Small trials[b]; large trial ongoing Due to risks, used primarily in ICU
Lorazepam[OL]	Benzodiazepine	0.25–0.5 mg po or IV q8h prn for agitation	Use in sedative and alcohol withdrawal; history of neuroleptic malignant syndrome	More paradoxical excitation, respiratory depression than haloperidol	Generally should not be used except for specific indications noted under "benefits"

NOTE: EPS = extrapyramidal symptoms

Use of all these drugs for delirium is off-label. Based on recent meta-analyses, the SOE=C.

Ongoing Management

- Deescalating behavior management interventions as indicated
- Consultation for underlying cognitive impairment and long-term management
    - Geriatrics vs Neurology vs Medicine

References

Inouye SK. The Short Confusion Assessment Method (Short CAM): Training Manual and Coding Guide. 2014; Boston: Hospital Elder Life Program.

Medina-Walpole A. Pacala JT, eds. *Geriatrics Review Syllabus: A Core Curriculum in Geriatric Medicine* 9th ed. New York: American Geriatrics Society

Guthrie PF, Rayborn S, Butcher HK. Evidence-Based Practice Guideline: Delirium. *J Gerontol Nurs*. 2018;44(2):14–24.

Marcantonio ER. Delirium in hospitalized older adults. *N Engl J Med*. 2017;377(15):1456–1466.

Oh ES, Fong TG, Hsheih TT, et al. Delirium in older persons: advances in diagnosis and treatment. *JAMA*. 2017;318(12):1161–1174.