Trauma Delirium Management Guideline

Monitoring and Treatment

I. The confusion assessment method for the ICU (CAM-ICU) should be monitored each shift and reported to the team during rounds
   a. CAM-ICU should NOT be reported as unable to assess unless RASS <-3
   b. Consider RASS and CAM-ICU status when choosing treatment options
      i. Hypoactive delirium – CAM positive and RASS 0 to -3
         • Non-pharmacological management
         • Minimize sedating medications
      ii. Hyperactive or mixed hyper/hypoactive delirium – CAM positive and RASS -3 to +4
         • See algorithm
   b. Goal RASS should be specified on ALL patients

II. If CAM positive, consider differential diagnosis (hypoxia, sepsis, CHF, over-sedation, deliriogenic medications)

Non-pharmacologic management**
   • Orient patient (provide visual/hearing aids, re-orient, encourage communication, encourage proper sleep hygiene, and provide cognitively stimulating activities during the day)
   • Environment (Mobilize patients early and often, provide familiar objects in patient’s room, minimize noise at night, and remove unnecessary lines/drains)
   • Adjunctive (perform SATs daily, provide adequate pain management, correct dehydration and electrolyte disturbances)

Deliriogenic Medications**
   • Benzodiazepines
   • Anticholinergics (diphenhydramine, glycopyrrolate, metoclopramide, H2 blockers, TCAs, cyclobenzaprine)
   • Steroids
   • Pain medications (if pain is not cause of agitation/delirium)
     o Decrease opioid dose
     o Utilize multimodal pain regimen

Special Considerations
   • Traumatic Brain Injury
     o Avoid large doses of haloperidol in traumatic brain injury patients.
     o Consider early use of propranolol 10-20mg q8h for agitation related to neurologic storming.
       • Maximum dose 360mg/day
   • Geriatric population
     o Reduced antipsychotic (50%) doses should be initially used in patients > 65 years old
     o Avoid haloperidol doses >5mg or quetiapine doses >100mg in patients > 65 years old
Hyperactive Delirium
(includes mixed delirium with hyperactive component, ex: attempting to wean sedation)

**Delirious (CAM-ICU positive)**

**Consider Differential Diagnosis (Sepsis, CHF, etc)**
- Remove Deliriogenic Medications**
- Non-pharmacologic Protocol**

**CAM +, RASS +1 to +2**
- Ensure adequate sleep and pain control
  - Quetiapine 50mg q8-12hrs or olanzapine 5mg q 8-12hrs
  - Haloperidol 1-10mg IV q4h prn breakthrough agitation

No response at 24hrs or multiple IV doses of haloperidol

- Reassess analgesia
  - ↑quetiapine dose to 100mg q8-12hrs or olanzapine to 10mg q8-12hrs***
  - Continue haloperidol breakthrough

No response at 24hrs or multiple IV doses of haloperidol

- Reassess analgesia
  - ↑quetiapine dose to 200mg q6-12hrs or olanzapine to 10mg q6-8hrs
  - May add clonidine (max: 0.3mg TID) or guanfacine (max: 2mg BID)
  - Continue haloperidol breakthrough

No response maximal treatment over 48hrs

- Reassess analgesia
  - Change atypical antipsychotic agents (DO NOT combine multiple daytime antipsychotics)

Move to CAM +, RASS +3 to +4 algorithm at any point as needed

**CAM +, RASS +3 to +4**
- Ensure adequate pain control
  - Haloperidol 5-20 mg IV/IM q15min prn extreme agitation

RASS remains +3 with multiple doses of IV haloperidol

**ETT and NOT ready for extubation ≤ 24 hrs**
- Propofol per protocol to reach goal RASS, attempt RASS +1 to +2 algorithm

ETT but ready for extubation in ≤ 24hrs or NO ETT and NO indication for ETT

Dexmedetomidine 0.2-1.5 mcg/kg/hr

RASS remains ≥ +3
RASS decreases to ≤ +2

- STOP dexmedetomidine
- Continue ≤ 24 hrs
- Continue clonidine or guanfacine

Move to CAM +, RASS +1 to +2 algorithm at any point as needed

***Maximize 1 agent PRIOR to altering delirium/agitation regimen.

***If refractory to all above measures, may trial Geodon (max: 40mg BID). If unsuccessful, consult psychiatry for additional recommendations.
References:


CAM ICU Assessment: http://www.icudelirium.org/docs/CAM_ICU_flowsheet.pdf

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