

Clinical Practice Guidelines: Delirium and Acute Change in Mental Status

Goal

To establish evidence based standards of care for the prevention, assessment and treatment of delirium.

Definition and Diagnostic Criteria

Delirium is the acute onset of impaired cognition, attention, consciousness, perception, sleep-wake cycle or emotional states that fluctuate over the course of the day.

DSM-IV Criteria

1. Disturbance of consciousness (awareness of environment) and reduced attention;
2. Change in cognition or perception (not related to patient's dementia);
3. Acute onset (hours to days), fluctuating course;
4. Evidence from H&P or lab value of a medical cause

Subtypes of Delirium

Hyperactive: Characterized by behavioral disturbances, agitation, florid hallucinations and delusions, emotional lability, restlessness and hyperalert state. (less common)

Hypoactive: Characterized by confusion, inattention, being quiet or sedated. (more common)

Mixed: A fluctuation between hypoactive and hyperactive delirium during the day. (more common)

Prevention of Delirium

Identify risk factors: Predisposing factors include age over 80, multiple medical problems, dementia, polypharmacy, psychoactive drugs, anticholinergics, benzodiazepines, opioids, steroids, alcohol abuse, infection, fractures, visual and hearing impairment, fever, dehydration, fecal impaction, environmental change, any brain lesion, and metastatic cancer.

Supportive and environmental strategies: See nonpharmacologic methods of management.

Diagnostic Screening Tool

Confusion Assessment Method (CAM): The diagnosis of delirium requires the presence of:

1. Acute onset of mental status changes or a fluctuating course *and*
2. Inattention (easily distracted or has difficulty keeping track of what is being said) *and*
3. Either
 - a. Disorganized thinking (rambling or irrelevant conversation, unclear or illogical flow of ideas, unpredictable switching from subject to subject) *or*
 - b. Altered level of consciousness [vigilant (hyperalert, overly sensitive to environmental stimuli, startled very easily), lethargic (drowsy, easily aroused), stuporous (difficult to arouse), or comatose (unable to arouse)]

Identify Reversible Causes of Delirium

Reversible causes include hypo/hyperglycemia, hypo/hyponatremia, hypercalcemia, renal failure, hepatic failure, CHF, hypercapnea, hypoxemia, withdrawal (alcohol, opioids, steroids or benzodiazepines), infection, medications (especially anticholinergics, benzodiazepines, and opioids), acute brain insult, fecal impaction and urinary retention.

Terminal Delirium

This is delirium during the dying process when there is not a reversible cause and the patient is expected to die in the following hours, days to a week. Frequently there is restlessness, agitation, moaning, and purposeless vocalization.

Nonpharmacologic Methods of Management of Delirium

Provide support and orientation: Communicate clearly, concisely, and calmly (give repeated verbal reminders of the day, time and location); provide clear signposts to patient's location, including clock and date; include family and caregivers to encourage feeling of security and orientation, and familiar objects from patient's home. TV may cause more agitation.

Provide an unambiguous environment: Try to avoid frequent change in bed location; avoid using medical jargon in front of the patient; avoid extremes of bright lighting and darkness; control excess noise; and keep room temperature between 70-75°.

Maintaining competence: Identify and correct sensory impairments (ensure patients have their glasses, hearing aid and dentures); use an interpreter as needed; encourage self care and participation in treatment (e.g., have patient give feedback on treatments of symptoms); maintain activity levels; and arrange treatments to allow for maximum periods of interrupted sleep.

Pharmacological Treatment of Delirium (see order set)

- A. Hyperactive delirium
 1. Haloperidol is drug of choice for symptom of agitation (or other symptom causing suffering) except in alcohol or benzodiazepine withdrawal where benzodiazepines are drug of choice
 2. Both scheduled and prn Rx are needed due to unpredictable symptoms and clinical course
- B. Hypoactive delirium
 1. Rx as per hyperactive delirium is **not** needed unless prn Rx is needed due to the concern of mixed delirium where agitation is expected
- C. Mixed delirium
 1. Rx as per hyperactive delirium with less Rx during hypoactive part of the day
- D. Terminal delirium (see order set)
 1. Palliative Care consultation recommended
 2. Sedation is main treatment and benzodiazepines are more important

Nursing Responsibility

Nonpharmacologic methods of prevention and treatment of delirium: Document supportive and environmental methods

Early diagnosis: Document use of CAM screening tool

Early treatment of delirium: Nurse should notify the attending physician (and show documentation of such) of the probable diagnosis of delirium unless already documented in the chart. The nurse should work together with the physician to decide on further evaluation and treatment of the cause of the delirium. The nurse should assess and document if the delirium is causing suffering (e.g., agitation) and discuss with the physician the need for pharmacologic treatment.

Reassessment of the suffering of delirium: If a nonpharmacologic or pharmacologic method has not resulted in adequate relief of suffering within an hour, further nonpharmacologic and probable pharmacologic treatments should be implemented and provided to the patient and documented. If the pharmacologic treatment is not effective in relieving suffering, the physician should be notified for further orders (see Pharmacologic Treatment Order Set).

Physician Responsibility

Prevention of delirium: Education should be provided to the medical staff about the prevention, diagnosis and treatment of delirium. Special attention should be given to medication causes of delirium and the fact that delirium is common and unrecognized.

Early diagnosis, assessment and treatment of the cause, and treatment of the symptoms of delirium: With the help of the nurse the physician will establish goals of care and need for further laboratory and diagnostic studies to assess for reversible causes, if they will lead to change in the treatment plan. The physician, with the help of the nurse, will decide on pharmacologic treatment for the suffering and symptoms of delirium.

Pharmacologic management of delirium: See order sets

Chemical Restraints

If the purpose of the drug is to sedate the patient and **not** relieve the suffering or symptoms caused by the delirium, then follow the chemical restraint policy. This is more likely with the use of benzodiazepines **unless** there is documentation that the antipsychotic has not relieved the suffering/symptoms of delirium, there is alcohol or benzodiazepine withdrawal or the patient has irreversible or terminal delirium, where benzodiazepines are appropriate for the treatment of delirium.

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