

WHAT IS DELIRIUM?

Delirium is characterized by disturbances in awareness, cognition, and attention.¹

- Delirium develops over a short period and fluctuates over hours or days.
- It is often temporary and reversible if the underlying cause is identified and treated.
- At the end of life, delirium often is caused by medication side effects or the body's response to changes that occur in the last days or hours of life.

Delirium has three behavioral subtypes:

- Hyperactive: the most easily recognized form of delirium; restlessness, agitation, increased psychomotor activity, irritability
- Hypoactive: may go undiagnosed; reduced activity, sluggishness, abnormal drowsiness
- Mixed: both hyperactive and hypoactive symptoms; may switch rapidly back and forth

Possible causes of delirium include intracranial processes (e.g., infection, hemorrhage, tumor), infection (e.g., urinary tract, respiratory), infarction (cardiac or cerebral), acute nicotine withdrawal (hyperactive delirium), alcohol or medication withdrawal, hypoxia, hepatic or renal failure, medications, discomfort (pain), restricted movements such as restraints, electrolyte/metabolic imbalances, change in environment, reduced sensory input, multiorgan failure, and retained urine or stool.¹

SIGNS & SYMPTOMS

It is important to distinguish acute delirium from dementia, which has a chronic progression. Commonly used, validated assessment tools include the following:

- The Confusion Assessment Method (CAM) is used to screen for the presence of delirium and to assess diagnostic criteria.
- The Delirium Symptom Severity Scale and/or Delirium Rating Scale (DRS) can be used to assess severity of delirium.
- The Mini-Mental Status Exam (MMSE) and/or Mini-Cog™ are tools for evaluating cognitive function.¹

Signs of delirium include disorientation to person, place, or time; changes in cognition; withdrawal from interactions; inability to focus; confusion; agitation; and reduced ability to respond accurately to questions during assessment.

INTERVENTIONS

The healthcare team should rule out potentially reversible or treatable causes of delirium to hasten its resolution and improve outcomes. Identification of underlying etiologies and review of laboratory and diagnostic data will assist the healthcare team in choosing a course of treatment.

The underlying cause of delirium may be multifactorial. The healthcare team should evaluate the impact of medical interventions carefully and review medications (such as steroids, cannabinoids, benzodiazepines, and anticholinergics) that may contribute to delirium.

Optimize the patient's overall function by addressing nutritional issues (e.g., intake, elimination), preserving the sleep-wake cycle, and preventing and treating concomitant symptoms such as pain, dehydration and/or infection.

Discussion with the family should include:

- Advance care planning documentation of the patient's wishes when available.
- The family's goals and wishes and definition of quality of life when discussing and evaluating treatment options
- Strategies to equip family members with environmental and nonpharmacological approaches to ease distress over their loved one's delirium.

The management of delirium encompasses nonpharmacological, pharmacological, interventional, environmental, behavioral and interpersonal approaches.

NONPHARMACOLOGICAL INTERVENTIONS	PHARMACOLOGICAL INTERVENTIONS
<ul style="list-style-type: none"> • Begin with investigation of reversible causes while optimizing quality of life and symptom management strategies. • Explore patient's and family's needs for spiritual and psychosocial support and identify resources for coping. • Use environmental cues and employ aids to maintain orientation (e.g., glasses, hearing aids, involvement of family members). • Ensure a safe environment to prevent falls and injuries (e.g., night-lights, low bed) <p>Utilize other environmental manipulations, such as:</p> <ul style="list-style-type: none"> • Calm environment • Aromatherapy • Minimization of noise and stimulation • Reduction of sleep disruption <p>Utilize and model interpersonal techniques for family members, such as:</p> <ul style="list-style-type: none"> • A quiet and reassuring voice • Music favored by the patient • Gentle verbal indications of any proposed interventions (e.g., "Rose, I'm going to put some lotion on your hands now, OK?") 	<ul style="list-style-type: none"> • All pharmacological interventional strategies should begin with assessing the patient's current medication regimen and treating underlying etiologies. • No pharmacological treatment is approved specifically for delirium, but some medications may be used to manage distressing symptoms. • For agitation or psychosis: Consider antipsychotics such as haloperidol (standard for acute agitation but carries risk of prolonged QT and extrapyramidal signs) OR quetiapine (less likely to cause extrapyramidal symptoms and may cause sedation). Benzodiazepines such as lorazepam should be used with caution because they may cause delirium. They can be used to reduce anxiety, manage alcohol withdrawal, and regulate the sleep/wake cycle. Risperidone also may be considered for agitation but has increased risk of extrapyramidal symptoms.¹ • For sleep/wake disruption: hypnotics such as zolpidem or melatonin given at night¹ • For mood regulation: antipsychotics (quetiapine) or antidepressants (e.g., escitalopram¹) for treatment of concomitant depression

FAMILY & TEAM DISCUSSIONS

- Educate the patient and family about the underlying etiologies of delirium if known, as well as treatment options, benefits and burdens of management strategies, potential adverse reactions, and anticipated responses to therapy.
- Treatments are to be aligned with the patient's and family's goals of care.
- Provide guided instructions on safety measures and nonpharmacological strategies.

Interprofessional Team:

Successful interventions in caring for patients with delirium are enhanced by multiple perspectives to anticipate, prevent, and treat physical, psychological, social, and spiritual causes when feasible. Consider social work, counseling, or spiritual care specialists for palliative and hospice support and interventions.

SYMPTOM DOCUMENTATION EXAMPLE

An 82 yr old, wheelchair-bound, non-verbal woman with Alzheimer's disease

(Functional Assessment Staging Scale 7A) currently residing at a nursing facility is noted by the nurse on duty to have new onset of sleeping more during the day and being restless and mumbling throughout the night over the past two nights. A urine sample indicates a urinary tract infection with culture pending. The patient is prescribed a broad-spectrum antibiotic for a suspected urinary tract infection, which her daughter (power of attorney) says is in line with patient's goals of care to assist with her comfort. The patient returns to baseline sleep-wake patterns and, as reported by Nurse Faculty RN, is resting comfortably at night with treatment of her suspected infection. RN will follow up on urine culture results when available.

DESIRED NURSING OUTCOMES

- Provide optimal patient comfort and safety.
- Ameliorate delirium to support improved functionality; physical, psychological, and spiritual well-being; and quality of life.
- Update the plan of care to reflect interventions for delirium and patient's responses to therapeutic interventions.

REFERENCES

1. Goldberg W, Mahr G, Williams A, Ryan M. Delirium, confusion, agitation. In: Ferrell B, Paice J, eds. *Oxford Textbook of Palliative Nursing*. 5th ed. New York, NY: Oxford University Press; 2019.
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