

3.1 Delirium

Key Points

1. Delirium is deadly.

When people become delirious, they stop eating, drinking fluids, and taking medicines. They may injure themselves or be placed in restraints. The prognosis is grave if the delirium does not clear. The delirium complicates and interferes with treatment of other aspects of the illness and often results in the use of restraints.

2. Delirium is common.

15–20% of people who are hospitalized may experience delirium, and 80–90% may have some delirium in the days and weeks before death.

3. Delirium causes extreme emotional suffering.

A delirious individual is often frightened, agitated, and upset. Most important, the delirium interferes with meaningful personal interactions with family, friends, and professional staff at Life's End.

4. Delirium is treatable and in some cases reversible.

The physician must individualize the treatment of delirium to maximize the patient's comfort and safety. The physician must temper the search for etiology and any corrective efforts with consideration of the burden of treatment on individuals at Life's End. In any case, treatment of the symptoms with neuroleptics (haloperidol) is usually appropriate.

5. Mistreatment with benzodiazepines (lorazepam) often exacerbates delirium.

Health-care providers often misinterpret the agitation associated with delirium as anxiety and fear. Treatment with benzodiazepines (lorazepam) for agitation may lead to a vicious cycle of escalating doses that exacerbates the underlying delirium.

Delirium

The Palliative Response



A Definition

- Confusion
- Sudden onset
- Waxing and waning
- Disturbed level of consciousness
- Labile emotions
- Delusions
- Disorientation
- Hallucinations (usually visual)
- Altered sleep/wake cycle
- Psycho-motor agitation or somnolence
- Decreased cognitive function

Delirium Is Deadly

Delirious patients

- Stop eating
- Stop drinking fluids
- Stop taking important medications
- May fall and injure themselves
- Often are placed in restraints and suffer complications such as aspiration and decubitus
- Interferes with assessment and treatment of other symptoms

Delirium Is Deadly

Delirious patients have a grave prognosis

- The delirium may herald the last days of life in a hospice patient with irreversible illness
- In the last days of life, the treatment may concentrate on the control of the symptoms rather than correction of the underlying cause

Delirium Is Deadly

- Failure to recognize and adequately treat delirium in patients who do not have life-limiting illnesses greatly increases their morbidity and mortality

Delirium Is Common

- 80% of people experience some delirium during the final week of life
- 15–20% admitted to hospitals with cancer experience some delirium

Delirium Causes Extreme Emotional Suffering

- Causes a person to be frightened, agitated, and upset
- Increases the use of restraints

Delirium Causes Extreme Emotional Suffering

Most important, delirium at Life's End interferes with meaningful communication and interaction:

with family and friends

with professional staff (physician, nurses, clergy, counselors)

Management of Delirium

Symptomatic and supportive therapies

Indicated when the burden of evaluation and treatment of the underlying causes of the delirium outweighs the benefits.

Management of Delirium

Considerations

- Work-up of delirium may be limited by the home and hospice setting
- Causes of delirium are often multifactorial
- When a distinct cause is found, it often is irreversible

Management of Delirium

- The comfort of the person suffering from delirium is paramount
- Symptomatic treatment can begin with or without a diagnostic work-up
- Good clinical judgment determines the extent to which to look for and pursue reversible causes of delirium

Management of Delirium Medications

benzodiazepines opioids anticholinergics antiemetics steroids

- It is important to simplify the regimen
- It is important to stop unnecessary medications
- It is inappropriate to stop opioids if necessary to control pain and dyspnea
- It may be more reasonable to treat the delirium and continue the medication

Management of Delirium

Differential Diagnosis

- Electrolyte disturbances
- Hypercalcemia
- Hyper/Hypoglycemia
- Hyponatremia
- Uremia
- Hepatic encephalopathy
- Hypoxia

Management of Delirium

Differential Diagnosis

- Infections
 - Pneumonia*
 - UTI*
- CNS
 - Metastatic spread of tumor*
 - Seizures*
 - Stroke or bleed*
- Impaction/Constipation
- Urinary Retention

Management of Delirium

Agitation

Treatment with benzodiazepines (Ativan) for agitation associated with delirium may lead to a vicious cycle of escalating doses that only worsens the underlying delirium.

Evaluation of Delirium

- Relevant history
 - New medications*
 - Known metastatic disease*
- Physical exam
- Simple blood test
- More extensive work-up (CT scans, X-rays)
 - May be warranted but physician must make the decision in light of the overall situation and course of the illness.*

Treatment of Delirium

Specific Reversible Causes

- Fluids for dehydration
 - IV, PO, SC*
- Antibiotics
- Oxygen
- Lactulose
- Bladder catheterization
- Disimpaction

Treatment of Delirium

Fluids for Dehydration

- Caution must be used in using IV fluids
- Placement of IV line and restraints to protect the access may traumatize patient
- Fluid overload with edema and pulmonary congestion can add to suffering at Life's End
- Use of fluids indicates a cautious, time-limited trial of therapy

Symptomatic Therapy

Neuroleptics

Haloperidol (Haldol) PO, IV, SC

- 0.5–1mg q2–12 hours
- May need to use multiple dose at first to control severe agitation

Chlorpromazine (Thorazine) PO, IV, IM

- 12.5–50mg q4–12 hours
- Use when more sedation is desirable
- Cannot be given SC

Symptomatic Therapy

Neuroleptics

Risperidone (Risperdal)

- 1–3mg PO q12 hours
- Popular because of reports of fewer side effects
- Only comes PO
- Costs \$150–\$250 for one-month supply

Symptomatic Therapy

Environmental

- Well-lighted room
- Quiet, calm, and familiar surroundings
- Presence of family or staff may be calming
- Restraints, IV lines, oxygen, and other instrumentation may contribute to agitation and suffering

Symptomatic Therapy

Benzodiazepines

Lorazepam (Ativan) PO, IV, SC

- 0.5–2mg q1–4 hours
- Sedation with the addition of a benzodiazepine may be appropriate if symptoms cannot be controlled and the delirium is causing suffering when death is imminent

Delirium

Palliative Care

Palliative-care consultation may be helpful with delirium at Life's End

- Reaching correct diagnosis
- Evaluation
- Treatment

Delirium

The Palliative Response

Delirium is common.
Delirium is deadly.
Comfort is paramount.

Delirium

Selected Readings

Prevalence of Delirium at Life's End

Nowels, D. E., C. Bublitz, C. T. Kassner, and J. S. Kutner. "Estimation of Confusion Prevalence in Hospice Patients." *Journal of Palliative Medicine* 5 (2002): 687–695.

Diagnosis and Management of Delirium at Life's End

Casarett, D. J. and S. K. Inouye. American College of Physicians—American Society of Internal Medicine End-of-Life Care Consensus Panel: "Diagnosis and Management of Delirium Near the End of Life." *Annals of Internal Medicine* 135 (2001): 32–40. Comments in: 137 (2002); discussion 295.

Ross, D. D. and C. S. Alexander. "Management of Common Symptoms in Terminally Ill Patients. Part II: Constipation, Delirium and Dyspnea." [Review] [39 refs]. *American Family Physician* 15; 64 (2001): 1019–1026.

Shuster, J. L. "Delirium, Confusion, and Agitation at the End of Life." *Journal of Palliative Medicine* 1 (1998): 177–186.