Treatment of Delirium at End of Life

Judy Wheeler, MSN, MA, GNP-BC
Nurse Practitioner-Palliative Care Service
Detroit Receiving Hospital

Disclosure

Judy Wheeler declares that she does not have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.

Delirium Defined

Serious and acute neuropsychiatric syndrome with core features of inattention and global cognitive dysfunction (Fong, 2009)

Delirium is a medical-surgical diagnosis with psychiatric manifestations (Wiesenfeld, 2008)

Transient, usually reversible cause of cerebral dysfunction and manifests clinically with a range of neuropsychiatric abnormalities (Kannayiram, 2007)

Diagnostic Criteria

Diagnostic and Statistical Manual of Mental Illness

Delirium Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Leuкоencephalitis</th>
<th>Altered levels</th>
<th>Psychotic Disorders</th>
<th>Delirium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>Malaise</td>
<td>Anxiety</td>
<td>Hallucinations</td>
<td>Relaxed</td>
</tr>
<tr>
<td>Somnolence</td>
<td>Decreased</td>
<td>Confusion</td>
<td>Auditory Hallucinations</td>
<td>Fatigue</td>
</tr>
<tr>
<td>Attention</td>
<td>Wandering</td>
<td>Depressed</td>
<td>Motoric Hallucinations</td>
<td>Agitation</td>
</tr>
<tr>
<td>Memory Loss</td>
<td>Confused</td>
<td>Psychosis</td>
<td>Thought Disorder</td>
<td>Flyaway</td>
</tr>
<tr>
<td>Cognitive Dysfunction</td>
<td>Agitated</td>
<td>Agitated</td>
<td>Emotion Disorder</td>
<td>Disoriented</td>
</tr>
<tr>
<td>Attention Loss</td>
<td>Fatigued</td>
<td>Delirious</td>
<td>Motoric Dysfunction</td>
<td>Distracted</td>
</tr>
<tr>
<td>Reaction Loss</td>
<td>Hypoactive</td>
<td>Delirious</td>
<td>Motoric Dysfunction</td>
<td>Distracted</td>
</tr>
</tbody>
</table>

Types of Delirium

- Hypoactive – excessive somnolence, inactivity, flat affect, poor participation
- Hyperactive – aggressive or manic behavior, paranoia, uncooperative with treatment
- Mixed – hypoactive and hyperactive behavior
“Take Away” Regarding Prevention of Delirium

There is very little evidence to support the use of any one nursing intervention. Studies seem to show that multiple interventions in combination may prevent delirium. Nursing awareness and vigilance may make a difference. Non-pharmacologic interventions seem to pose little risk to patients and little burden to staff. More research is needed.

Overview of Delirium at End of Life

About half of those with delirium experience agitation. May occur at end of life as an irreversible event. May not be appropriate for aggressive medical intervention if death is imminent. Decision to intervene is based on the degree to which delirium is distressing.

Management Approach at End of Life

The standard management approach involves searching for reversible causes and providing treatment for specific symptoms. Uncorrectable risk factors include cachexia, hepatic impairment, general comorbidities, impaired functional status. Potentially correctable risk factors include psychoactive medications, dehydration, opioid-induced delirium.

Drug Treatment

Aim of drug treatment is to reduce distressing or dangerous behavioral disturbance. Haloperidol is the drug of choice for hyperactive and mixed subtypes. It is a potent neuroleptic, dopamine-blocking, relatively low-anticholinergic and can be given orally, IV, IM or subQ administration. Role of newer antipsychotic agents has not been systematically evaluated. Fewer reported extrapyramidal adverse effects offer a potential advantage, but parenteral formulations are currently unavailable.
Haldol for End of Life Delirium

Haloperidol is an agent of choice for management of delirium associated with hyperactivity at end of life.

Double-blind study of haloperidol (high-potency neuroleptic), chlorpromazine (low-potency neuroleptic) and lorazepam (benzodiazepine) in treatment of delirium in hospitalized patients with AIDS found haloperidol to be the preferred drug.

Methadone in the Treatment of Delirium

Trialed in patients with uncontrolled pain and severe delirium admitted to a tertiary cancer palliative care service.

- 20 patients switched to methadone
  - 15 had significant pain control
  - 3 had moderate pain control
  - 2 had unchanged pain control
- Improvement in cognitive status was significant in 9, moderate in 6, partial in 2, none in 3
- 10 expired in first two weeks

Sedation for Delirium at End of Life

Active sedation may be required in up to 25 percent of patients.

- Induction of deeper levels of sedation (e.g., with higher doses of neuroleptics or continuous infusion of midazolam hydrochloride-Versed)
- May compromise patients’ ability to protect their airway
- Is sometimes necessary to control severe agitation and other symptoms of agitated delirium while pursuing treatment of reversible causes.
- May also be appropriate maintenance strategy to control refractory symptoms of agitated delirium when other treatment is not feasible or is incompatible with the wishes of family members

Thank you for inviting us!
What questions do you have?