

Management of Delirium, Agitation, and Terminal Restlessness

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Objectives

- Define delirium and its subtypes
- Describe the clinical significance and prevalence of delirium and its impact on patients, caregivers, and the healthcare system
- Apply appropriate delirium screening tools to guide the diagnosis of delirium
- Identify both pharmacological and non pharmacological management strategies for treating patients with delirium



What is Delirium?

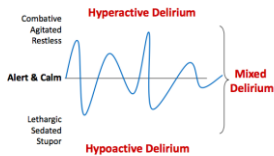
- Delirium is a state of confusion that comes on very suddenly and lasts hours to days.
- It means the patient cannot think very clearly, can't pay attention and is not really aware of their environment.
- Sometimes people will call it other things such as a change in mental status, "sundowning", "terminal agitation", or "ICU psychosis", but it is all delirium.



Subtypes of Delirium

- Hypoactive
 - Least recognized
 - Apathy • Lethargy • Sedation
- Hyperactive
 - Most recognized
 - Restlessness • Agitation • Combativeness
- Mixed Type
 - Fluctuating periods of both

Delirium Subtypes



Risk Factors for Delirium

- Demographic
 - Gender : Male
 - Age: >65 years
- Cognitive Status
 - Dementia, Depression, Previous Delirium
- Functional Status
 - Immobility, Dependence for ADLs, Falls tx
- Sensory Impairment
 - Hearing or Vision
- Nutritional Status
 - Malnutrition or Dehydration
- Medications
 - Polypharmacy, Psychoactive Meds, ETOH
- Medical History
 - Stroke, Neurological Dz, Metabolic Dz, Hepatic or Renal Failure, severity of illness, fracture or trauma



Differential Diagnoses

- D: Drugs
- E: Electrolytes (Na, Ca, BUN, Glucose)
- L: Lack of Drugs (pain, ETOH, Rx)
- I: Infection
- R: Reduced Sensory Input
- I: Intracranial (stroke, seizure, meds....rare)
- U: Urinary retention, fecal impaction, meds
- M: Myocardial (PE, MI, CHF)



Delirium v. Dementia

Feature	Delirium	Dementia
Onset	Acute	Insidious
Course	Fluctuating	Constant
Attention	Disordered	Generally Preserved
Consciousness	Disordered/Often Present	Generally Preserved
Hallucinations		Generally Absent
Involvement	Often Present	Generally Absent



- **Reversible:**
 - Underlying principle diagnosis
 - Comorbidities
 - Functional Status
 - Prognosis
 - Goals of Care (GOC)
- **Irreversible:**
 - Time limited diagnostic and therapeutic trial:
 - Failed
 - Inconsistent with GOC
 - Underlying physiological processes are unclear or irreversible.
 - Prognosis (hours to days)

Incidence/Prevalence

- Approximately 1/3 of patients 70 years and older admitted to a general medical service are delirious.
- 50% have symptoms upon admission and the other 50% develop them in-house.
- 67% of delirium cases are missed.
- In general, 30-80% of patients admitted to the ICU will experience delirium
- In the geriatric population, however, the incidence is as high as 70-87%
- The most common risk factor for elderly patients to develop delirium is underlying dementia which is present in 66% of all cases of delirium.
- It is estimated that 30-40% of cases of delirium are preventable, therefore utilization of prevention strategies is essential

Delirium in hospice and palliative care settings

- Delirium is common across clinical settings but is particularly common in palliative care, where its prevalence has been found to be up to 12% at initial community assessment and 88% in the final weeks of life.
- Delirium indicates a poor prognosis in palliative care patients, precipitating increased hospital admissions, morbidity and mortality, as well as communication loss and patient and family distress.
- Management of delirium encompasses treating potentially reversible causes and using non-pharmacological and pharmacological interventions. Up to half of all delirium cases in terminally ill patients are reversible if the underlying causes are identified and treated.
- Many terminally ill people prefer to be cared for at home. Delirium management can be provided in patients' homes but delirium may still contribute to unplanned admissions if the patient or caregivers become distressed
(Harris et al., 2020)

Consequences

- Utilization
 - Institutionalization
 - PTSD
 - Caregiver burden
 - Long-term cognitive deficits
 - Increased rates of dementia
- Costs
 - Hospital costs > \$11 billion/per (USD)
 - Post-hospital costs > \$153 billion/year (USD)
 - Rehospitalization
 - ED visits
 - Institutionalization
 - Rehabilitation
 - Formal home care services



Delirium and Mortality

- Analysis of data from Project Recovery, a controlled clinical trial of a delirium prevention intervention from 1995 to 1998 with follow-up through 2000.
- Patients > 70 years old without delirium and were at immediate to high risk and were receiving usual care (n = 469)
- 70 developed incident delirium (15%)
- Patients with delirium were more likely to: be restrained (37%), develop a hospital acquired condition (37%), develop other noxious insults (63%), 90 day mortality (24%).
- Restraining devices, HACs, and additional noxious insults were more frequent among patients with delirium, increased mortality in a graded manner, and were responsible for a significant percentage of the association of delirium with death
- Dharmarajan et al. (2017). Pathway from Delirium to Death: Potential In-Hospital Mediators of Excess Mortality. *JAGS*, 65(5): 1026-1033.



The Patient Experience

- PTSD in one-in-three ICU survivors

"But she wasn't prepared for the flashbacks. She was drowning, poisoned by nurses, crawling on the floor of a walk-in freezer full of amputated limbs. The images came to her unbidden, memories of events she had never experienced."



The Patient Experience



Caregiver Burden

- Several papers report that moderate to severe levels of distress are experienced by the majority of caregivers of patients with delirium
- Distress was found to be greater in caregivers compared with patients experiencing delirium
- Patient correlates of caregiver distress include poor physical performance status, the presence of hyperactive delirium, hallucinations, agitation, cognitive decline and incoherent speech

Effect on caregivers at end-of-life

- If symptoms are severe, the patient may need to be moved to an inpatient setting, thus preventing the goal of dying at home
- Delirious patients may behave in ways that are surprising and disturbing to those who know them
- Delirium may impair communication between the dying loved one and the caregiver, thus limiting quality time spent together
- Lack of understanding of terminal delirium can cause uncertainty among family members and can negatively impact grieving

Screening

Confusion Assessment Method (CAM)

- Assesses the presence, severity, and fluctuation of 9 delirium features: acute onset, inattention, disorganized thinking, altered level of consciousness, disorientation, memory impairment, perceptual disturbances, psychomotor agitation or retardation, and altered sleep wake cycle
 - Grover S, Kate N. Assessment scales for delirium: A review. *World J Psychiatr* 2012; 2(4): 58-70

Confusion Assessment Method (CAM)

- Acute onset and fluctuating course:**
 - Is there evidence of an acute change in mental status from the patient's baseline? Does the behavior fluctuate during the day, tend to come and go, or increase/decrease in severity?
- Inattention:**
 - Does the patient have difficulty focusing attention, for example, being easily distracted or having difficulty keeping track of what is being said?
- Disorganized thinking:**
 - Is the patient's thinking disorganized or incoherent, such as rambling and irrelevant speech, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?
- Altered level of consciousness:**
 - What is the patient's level of consciousness: alert (normal), vigilant (hyper-alert), lethargic (drowsy, easily aroused), stupor (difficult to arouse), or coma (unarousable)
- If features 1 and 2 and either 3 or 4 are present, a diagnosis of delirium is suggested

Nursing Delirium Screening Scale (NuDESC)

- Five item scale that combines items from the Confusion Rating Scale (CRS) which looks at disorientation, inappropriate behavior, inappropriate communication, and illusions/hallucinations plus a fifth item rating unusual psychomotor retardation



Nursing Delirium Screening Scale (NuDESC)

- **Disorientation**
 - 0 = alert: oriented to person, place, and time, 1 = disoriented but easily oriented, 2= disoriented x 2 or x3 and not easily oriented
- **Inappropriate Behavior:**
 - 0 = calm and cooperative, 1 = restless but cooperative, 2 = agitated: ex: pulling at devices, climbing over side rails, etc
- **Inappropriate Communication:**
 - 0 = appropriate, 1 = unclear thinking or rambling speech, 2 = incoherence, nonsensical or unintelligible speech
- **Illusions/hallucinations:**
 - 0 = none, 1 = paranoia, fears, 2 = hallucinations, distortions of visual objects
- **Psychomotor Retardation:**
 - 0 = none, 1 = delayed or slow responsiveness, 2 = excessive sleeping, somnolent, lethargic
- Score of > or = to 2 indicates the patient is screening positive for delirium



Ivan

- 87 year old Russian speaking gentleman, PWH significant for Vascular Dementia, hx of CVA 3 years ago with residual R hemiparesis and dysphagia on ground diet, crushed meds and thin liquids. He is a long-term care resident and was brought into the hospital d/t AMS (lethargy), reduced PO intake and found to have aspiration PNA and dehydration with AKI. Pertinent labs on admission: WBCs 17, Na 154, BUN 54, Creat 1.9 (1.0 at baseline), Alb 2.9, Tot Protein 5.4. He remains hemodynamically stable and was admitted to the medical floor. He is hypoxic with pulsox of 89-91% on RA, requiring O2 via NC. He is not O2 dependent at baseline.
- This admission, SLP evaluated and made recommendations for strict NPO. A dohoff tube was placed to provide nutrition and ensure ability to administer medications. He self-removed x 1 and it was replaced, and he was placed in restraints.
- You find him very agitated, picking at the sheets, yelling out in Russian, he does not make eye contact and cannot be redirected. He is restrained and needs 1:1 supervision. Staff reports that he has periods of agitation fluctuating with periods of unresponsiveness.
- His wife states that although he has been confused in the past, he has never been this agitated, this is a marked change in his status.



Non Pharmacological Interventions for Delirium

- Prevention
- Early Detection
- Elimination or correction of underlying causal factors
- General symptomatic and supportive measures and interventions



Treatment

Interventions should be chosen based on goals of care as well as where the patient is in their illness trajectory!!



Early Recognition and Training

- Train staff on how to screen at risk patients with a standard screening tool (CAM, etc)
- Educate staff on the essential aspects of delirium: risk factors, prevention, screening, interventions



Assess and Intervene

- Polypharmacy
 - Review all medication at least every 24 hours
 - Keep sedatives to a minimum
 - Check drug interactions
 - Don't forget about drug withdrawal
- Pain
 - Assess and medicate for pain appropriately
 - Use non opioid analgesia if possible
 - Consider rotating agent
- Hypoxemia
 - O2 appropriate?
- If appropriate, check for metabolic and electrolyte disturbances
- Treat infections if appropriate and in line with goals of care
- Hydration/nutrition
 - If tolerated, encourage oral hydration
 - Consider short term IV hydration if appropriate
 - Assist with feeding
- Sleep



Assess and Intervene

- Assess bowels
 - When was the last BM?
- Assess urinary status
 - ? urinary retention
 - ? d/c urinary catheters
- Don't forget about drug and alcohol withdrawal: both rx and recreational
- Mobility
 - Minimize 'attachments'
 - Ambulate if safe
 - ROM
 - Get them OOB
- Environment
 - Soft lighting
 - Minimize noise
 - Orientation board with names of care team and date
- Familiarity
 - Family or familiar objects, *during Covid this is often impossible due to restrictions*
 - Consistent staff
 - Avoid moving people unless necessary
- Communication
 - Orienting communication
 - Slow, simple repetitive
 - Address the patient by name






ADDRESS SENSORY ISSUES!!!!

Glasses, hearing aids, interpreters if needed!



The T-A-DA method of management:
Tolerate,
Anticipate,
and Don't Agitate



The American Delirium Society

T-A-DA

- **Tolerate:** Allow patients to respond naturally to their situation while under close observation
- **Anticipate:** Anticipate behaviors:
 - Ex: patients with delirium will pull on anything not normally present - minimize 'attachments'
- **Don't Agitate:** Decrease environmental agitators: lights, noise, visitors, television, music, etc. If reorientation helps, use it, if not: don't keep doing it

Pharmacological Management

- *No medications have been approved by the US Food and Drug Administration (FDA) for treatment of delirium*
- *In addition, there are few controlled studies of pharmacologic management in delirium*
- *However, most advocate for a trial of pharmacologic management of symptoms (after non pharmacological management strategies have been applied) if the patient is in significant distress, they pose a safety risk to themselves or others, or their behaviors are impeding essential aspects of his or her medical care*

What the is rationale for using antipsychotics??

- It is thought that delirium is due in part to an imbalance of neurotransmitters with reduced cholinergic activity and/or and excess of dopamine
- Antipsychotics are dopamine receptor antagonists, goal is to decrease dopamine and increase cholinergic activity



Use is controversial!

- **FDA black box warning** of increased risk of death when antipsychotics are used to treat elderly patients with dementia related psychosis
- **SNF's dont like them!!**
 - 2017 CMS issued a rule revising the requirements for LTC facilities surrounding antipsychotics
 - No one wants to impact their STARS rating
- FDA has issued a warning against risk of QTc prolongation and torsades de pointes with IV haldol
- The Agar et al Study



The Agar et al Study

- Double blind, parallel-arm, dose titrated randomized trial conducted at 11 Australian inpatient hospice or hospital palliative care sites from 8/08-8/14 with patients identified as experiencing delirium
- The aim of the study was to determine if risperidone or haldol, given in addition to managing the precipitants of delirium and providing supportive nursing care, provided additional benefit in symptom reduction compared with placebo
- Study duration was 72 hours
- Study sample of 247 patients (82 received risperidone, 81 received haldol, 84 received placebo)

* Agar, et al. Efficacy of Oral Risperidone, Haloperidol, or Placebo for Symptoms of Delirium Among Patients in Palliative Care. JAMA Intern Med. 2017; 177(1):34-42.



Results

- Behavioral, communication, and perceptual symptoms of delirium associated with distress in patients receiving palliative care were greater in those treated with antipsychotic drugs than in those receiving placebo
- The outcomes and direction of findings were similar for both the risperidone and haldol arms, suggesting that this may be an antipsychotic class effect
- Poorer overall survival was noted in the haldol group (73% more likely to die than placebo) as well as the risperidone group (29% more likely to die)
- Compared with placebo, participants in both groups had more extrapyramidal side effects



The Details

- Participants in the risperidone arm had delirium symptom scores that were significantly higher than those in the placebo arm (on average 0.48 units higher)
- Participants in the haldol arm had delirium scores that were higher than in the placebo arm (on average 0.24 units higher)
- In addition midazolam use was significantly lower among those in the placebo arm compared with the risperidone and haldol arms combined



Their conclusion...

- “Antipsychotic drugs should not be added to manage specific symptoms of delirium that are known to be associated with distress in patients receiving palliative care who have mild to moderately severe delirium. Rather, management relies on ensuring systematic screening..., reversing the precipitants of delirium, and providing supportive interventions”



So what do we do now?

- Up to Date (literature review through December 2020):
 - “ A cautious trial of psychotropic medication should be reserved for treatment of severe agitation or psychosis”
 - They suggest a short term trial of haldol 0.5-1mg
- Cochrane review January 2020:
 - “We found no high quality evidence to support or refute use of drug therapy for delirium symptoms in terminally ill adults. We found low-quality evidence that risperidone or haloperidol may slightly worsen delirium symptoms of mild to moderate severity for terminally ill people compared to placebo. We found moderate to low-quality evidence that haloperidol and risperidone may slightly increase extrapyramidal adverse events for people with mild to moderate severity delirium. Given the small number of studies and participants on which current evidence is based, further research is essential”



Antipsychotic drugs

	Dose	Route of administration	Level of sedation
Haldol	-Starting dose 0.5-1mg Can be given q 1 hour prn Max dose 50mg/day	PO, IM, SC, IV	Less sedating
Atypicals Olanzapine	-Starting dose 2.5-5mg Max dose 30mg/day	PO, ODT, IM, SC	More sedating
Risperidone	-Starting dose: 2.5-5mg Max dose 30mg/day	PO, ODT, IM, SC	Less sedating
Quetiapine	-Starting dose 12.5-50mg Max dose 600-900mg/day	PO only	Very sedating
Chlorpromazine	-Starting dose 25-50mg Max dose 200-800mg/day	PO, IV, IM, SC, PR	Very sedating



What about benzodiazepines????



Hui, et al. study...

- Objective was to compare the effect of lorazepam vs placebo as an adjuvant to haloperidol for persistent agitation for patients with delirium in the setting of advanced cancer
- Double blind, parallel group, placebo controlled, randomized clinical trial in which patients with hyperactive or mixed delirium received either lorazepam + haloperidol or placebo + haloperidol
- Conducted at the MD Anderson Cancer Center
- Protocol was all received 2mg of IV haloperidol every 4 hours with another 2mg every hour prn, those in the lorazepam arm got a single dose of 3 mg of IV lorazepam, placebo arm got identically appearing IV NS



Results

- Those who received lorazepam + haloperidol had a greater reduction of RASS score than those who received placebo + haloperidol and were perceived as being more comfortable by both blinded caregivers and nurses
- Those who received lorazepam + haloperidol required significantly lower doses of rescue neuroleptics
- There was no significant between group differences found in delirium related distress and survival

Conclusion was that in this preliminary trial of hospitalized patients with agitated delirium in the setting of advanced cancer, the addition of lorazepam to haloperidol as compared with haloperidol alone resulted in significantly greater reduction in agitation



Ivan

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- You speak to staff and find out that a live Russian interpreter has not been available, they have been trying to use the language line with little success. His wife has not been able to visit frequently due to Covid restrictions
- Wife's goal is for comfort, she is devastated seeing him in this agitated state



Palliative Sedation

- Sometimes patients experience distressing symptoms at end of life that are refractory to intensive palliative care interventions
- The intention of palliative sedation is to deliberately induce a temporary or permanent light to deep sleep, not hastening death, but with the goal of relief of symptoms
- The goal is to relieve unendurable physical, spiritual, or psychological distress in patients close to death, it requires that comfort is the priority goal of care



Hospice and Palliative Nurses Association (HPNA) Position Statement on Palliative Sedation

- Palliative sedation can be used for imminently dying patients to manage refractory symptoms unrelieved by optimal palliative care
- Hospice and palliative nurses must possess sufficient knowledge about the use of palliative sedation (including the ethical and legal justification of use) in order to inform patients, families and other health care providers in making decisions around its use
- Interventions and/or sedative doses should be used to relieve suffering without the intention of hastening death



- A nurse can object to the use of palliative sedation and has the right to transfer care. However, those nurses who choose not to participate in palliative sedation are directed to continue to provide care until responsibility for care is transferred to an equally competent colleague to avoid abandonment
- ***Informed consent must be used*** (either the patient or the surrogate decision maker)
- It requires interdisciplinary assessment of the patient to determine the refractory nature of their symptoms



▪ The full position statement from HPNA can be viewed here:
<https://advancingexpertcare.org/position-statements/>

NH Board of Nursing Position Statement

- The NH BON endorses the Position Statement on Palliative Sedation from the Hospice and Palliative Nurses Association
- The administration of sedation requires continuous monitoring of the patient and ability to respond immediately and appropriately to any adverse reaction or complication

Hospice and Palliative Care Federation of Massachusetts

- The justification for use is based on the ethical principles of beneficence, non-maleficence, autonomy and fidelity
- The intent is the relief of suffering and not to end the patient's life
- The decision to initiate sedation must be preceded by a comprehensive interdisciplinary assessment of the patient and a discussion of treatment expectations and options
- Informed consent is required

- The patient's primary physician will be involved in the decision to initiate palliative sedation. The patient's physician and the hospice medical director must agree on the decision
- Palliative sedation may be implemented in an inpatient setting or at home. For patients who remain at home, a continuous care nurse must be provided for at least 24 hours
- Once the patient is sedated, medications are not increased unless there is evidence of renewed distress

Drug	Starting dose	Titration	Maintenance dose	Considerations
Midazolam (versed)	Loading dose of 1-2mg IV or SQ, followed by an infusion of 0.5-1.5mg/hr	May titrate q 1-2 hour per based on the number of pm doses	1-20mg/hr, may give per bolus starting of 2.5-5mg every 20-60 min IV needed	It has a short half life and is easily reversible
Lorazepam	Loading dose of 1-2mg IV or SQ followed by infusion of 0.5-1.5mg/hr	Titrate in increments of 0.5-1mg every 15 minutes q 3, then hourly as needed	4-40mg/day	May cause paradoxical agitation
Phenobarbital	May be given orally 60-200mg about every 8 hours 1-3mg/kg IV or SQ loading dose followed by infusion of 0.5mg/kg/hr	PR may increase in increments of 30mg IV/SQ increase in increments of 1mg/kg every hour as needed	Approx 50mg/hr (weight based)	It has a long half life and reversal is difficult

COVID

Special Article: COVID-19 Palliative Care for People With COVID-19-Related Symptoms

Authors: A. Philip Mills, MD, Jeffrey S. Grune, MD, Christopher M. Meehan, MD, Jeffrey S. Grune, MD, Christopher M. Meehan, MD, Jeffrey S. Grune, MD, Christopher M. Meehan, MD, Jeffrey S. Grune, MD, Christopher M. Meehan, MD

KEY POINTS
 Palliative care is a critical component of the overall care for people with COVID-19-related symptoms. Palliative care can help improve quality of life, manage symptoms, and provide emotional and spiritual support. Palliative care should be integrated with medical and nursing care from the start of the illness and throughout the course of the illness.

Special Article: COVID-19
WORLDWIDE MANAGEMENT OF DELIRIUM IN PEOPLE WITH COVID-19

ELNEC

NURSING MANAGEMENT OF DELIRIUM IN PEOPLE WITH COVID-19

DELIRIUM DURING COVID-19

Delirium is very common in serious illness. Although usually associated with terminal illness, many episodes of delirium are reversible. In a study of COVID-19 patients referred to hospital palliative care, 24% experienced delirium.

Types of delirium:

- **Hyperactive** – usually includes agitation
- **Hyperactive - withdrawn** behaviors (more likely to be missed on assessment)
- **Mixed**

Presentation of delirium:

- Agitation
- Impaired cognition
- Altered attention span
- Change in consciousness
- Altered perceptions and hallucinations

POTENTIAL CAUSES OF OR CONTRIBUTORS TO DELIRIUM:

- Constipation or bladder distention especially with older adults
- Dehydration
- Delirium
- Electrolyte imbalance (hyponatremia, hyponatremia, hypernatremia)
- Hypoxemia
- Hearing impairment
- Hypoxemia
- Immobility
- Infection (pneumonia, urinary tract infection)
- Intracranial disease (primary or metastatic brain tumor, leptomeningeal disease, stroke)
- Medications (opioids, anticholinergics, corticosteroids, antidepressants, benzodiazepines)
- Metabolic abnormalities (hypoglycemia, hypothyroidism)
- Nutritional or vitamin deficiencies
- Older age (> 75 years of age)
- Rapid withdrawal of medications (opioids, benzodiazepines) and/or alcohol, nicotine
- Renal, cardiac and/or hepatic failure
- Unrelieved pain
- Urinary tract infection
- Use of restraints



ASSESSMENT

Several delirium assessment tools are available; select a tool based upon your setting and population. In many circumstances, delirium can be identified based upon a strong history and physical examination.

Conduct history and physical assessment:

- Review common signs including disturbed sleep/wake cycle, agitation, restlessness, moaning, hallucinations, and delusional thoughts.
- Assess for signs of sepsis, dehydration, urinary retention or urinary tract infection, constipation, unrelieved pain.
- Evaluate the medication list for possible causes or contributors; consider polypharmacy.
- Weigh the potential for possible withdrawal from alcohol, nicotine, opioids, benzodiazepines, antidepressants, cannabis, or other sedatives.

Consider laboratory and neurological tests, depending on the patient's goals of care (e.g., CBC, electrolytes, calcium, renal/liver function, UA, CXR, O2 saturation, imaging of the brain via CT or MRI).

The Confusion Assessment Method (CAM) is a commonly used, sensitive, and brief (5 minutes) tool. There is a brief version (CAM - 2, minutes), critical care (CAM-ICU), family caregiver recognition (FAM-CAM) and a 3 minute diagnostic version (3D-CAM). Mobile apps are also available.

PHARMACOLOGIC MANAGEMENT

When possible address potentially reversible etiologies such as fever (antibacterials/antivirals), constipation (bowel regimen), dehydration (oral or IV/SQ fluids), urinary retention (catheterization), polypharmacy (discontinue unnecessary medications), metabolic abnormalities (correct electrolytes), and sleep deprivation (promote day/night cycles). Benzodiazepines are generally not recommended in the treatment of delirium, except for midazolam given IV or SQ for palliative sedation.

1 st Generation Antipsychotics	
• Haloperidol	0.5-2 mg PO every 2-4 hours as needed (lower doses in elderly); IV or SQ – use 50% of oral dose
2 nd Generation Antipsychotics	
• Chlorpromazine	25-15 mg PO at night
• Olanzapine	2.5-10 mg PO daily
• Risperidone	1-2 mg PO at night
Depressants	
• Propofol	1-30 mg PO bid

NONPHARMACOLOGIC MANAGEMENT

- Ensure eyeglasses and/or hearing aids are in place and functioning
- Promote sleep/wake cycle with daytime light, reduce nighttime interruptions
- Provide soothing or favorite music
- Orient gently; do not aggressively restrain
- Reduce noise, pump alarms
- Use clocks, calendars and whiteboards
- Support family – this is extremely distressing to loved ones!



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Controversies in Care

ABH Gel: Comforting Cure or Pricey Placebo?

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ABSTRACT

Despite a lack of evidence of benefit, the compounded product ABH gel (lorazepam, diphenhydramine, and hydrocodone) continues to be prescribed for individuals in hospice and palliative care settings for the treatment of nausea and vomiting and terminal delirium. More effective and reliable pharmacological and nonpharmacological strategies exist for the treatment of these conditions in the palliative care and hospice settings. We discuss the pharmacokinetic and clinical evidence for the individual components of ABH gel, as well as the compounded product, and attempt to understand the mechanisms of effect the same purport to see, as well as why the compound continues to enjoy such a high following. Thus, the continued use of ABH gel makes for a pricey placebo and delays the treatment of end-of-life symptoms with modalities that work.

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A note on compounded medications in hospice

- Despite a lack of evidence of benefit, the compounded product ABH gel (lorazepam, diphenhydramine, and haloperidol) continues to be prescribed for individuals in hospice and palliative care settings for the treatment of nausea and vomiting and terminal delirium.
- More effective and reliable pharmacological and nonpharmacological strategies exist for the treatment of these conditions in the palliative care and hospice settings.
- The continued use of ABH gel makes for a pricey placebo and delays the treatment of end-of-life symptoms with modalities that work.
 - (Taggart Blaszczyk et al., 2021)



Conclusions

- Screen patients at risk for delirium
- Try to find the etiology of the problem and 'fix it' if it is in line with goals of care
- Always use non pharmacological interventions
- Reserve medication for patients in severe distress, and use the lowest dose for the shortest time



Ivan

- 87 year old Russian speaking gentleman, PMH significant for Vascular Dementia, hx of CVA 3 years ago with residual R hemiparesis and dysphagia on ground diet, crushed meds and thin liquids. He is a long-term care resident and was brought into the hospital d/t AMS (ethargy), reduced PO intake and found to have aspiration PNA and dehydration with AKI. Pertinent labs on admission: WBCs 17, Na 154, BUN 54, Creat 1.9 (1.0 at baseline), Alb 2.9, Tot Protein 5.4. He remains hemodynamically stable and was admitted to the medical floor. He is hypoxic with pulsox of 89-91% on RA, requiring 2L via NC. He is not O2 dependent at baseline.
- This admission, SLP evaluated and made recommendations for strict NPO. A dobhoff tube was placed to provide nutrition and ensure ability to administer medications. He self-removed x 1 and it was replaced, and he was placed in restraints.
- He is full code.
- Palliative care was consulted to assist in clarification of goals of care and to assist in symptom management.
- Upon initial consultation:
 - You find this patient:
 - Restrained, yelling out. On 1:1 supervision
 - His wife (also Russian speaking) is at the bedside, distraught and her primary concern is his inability to eat or drink.



David

- David is a 64 yo gentleman with prostate cancer with mets to the bone and liver. He was recently admitted to hospice after a hospitalization for pneumonia and is receiving care at home. Upon admission to hospice he was alert and oriented. He has intense back pain radiating to his right leg which started increasing 5 days ago. Due to his increasing pain, his team has ramped up his pain medication quickly. His MS contin was increased to 90mg bid and he has been receiving 15-30mg of MSIR about every 2 hours for the last 3 days. Gabapentin was added as well and his current dose is 600mg tid. He was started on dexamethasone 4mg bid 2 days ago. Over the last few days, his po intake has been poor. He became restless, and his team added lorazepam 0.5mg q 6 hours prn 2 days ago, average use about 3 times a day. This morning his wife called stating that he is 'not himself'. Upon exam, he is restless, climbing out of bed and picking at his pajamas. He is mumbling incoherently and does not make eye contact. She states at times he yells out and appears afraid, this fluctuates with periods of unresponsiveness.



David

- His last BM was 3 days ago. He has been urinating regularly, but his wife states that in the last 24 hours, his urine has become "very dark in color and has an odor". Upon exam, his mucous membranes are dry. He has a congested cough with bilateral rhonchi. His BP is 90/52, pulse is 102, respiration rate is 28 and his O2 sat is 87% on room air
- His wife is distraught, their daughter and her family are flying in from California in a few days and they were hoping he could spend some quality time with him. She is visibly exhausted from having been up with him all night.



Louise

- 85 year old woman with PMH of cognitive impairment, atrial fib on warfarin, prior CVA, CAD, hyperlipidemia, hypothyroidism, vit b12 deficiency. ALF resident, recently returned to her apartment after hospitalization for CVA and STR stay. HCP invoked during her STR stay. She returned to the ALF with hospice services. She is now experiencing paranoid persecutory delusions, poor PO intake, incontinence and ataxia. Urinalysis negative, Vit b12 is 800, TSH 38
- Widowed, adult step-children. Masters degree in Education. Prior to this CVA was driving and managing finances with assistance from her POA. HCP is a friend and former colleague.
- Meds: Levothyroxine, Atenolol, Losartan, Zoloft, Vit B 12 injection monthly, Warfarin, Melatonin, Zyprexa PRN



Edith

- Edith is an 82 yo woman with widely metastatic pancreatic cancer on hospice services. She had been cared for at home by her daughter but unfortunately they both tested positive for Covid. Her daughter became symptomatic and Edith was moved to the hospice house for respite care. Because of her Covid status, she was placed on the designated Covid precaution suite at the house and was somewhat isolated. Shortly after she was admitted, she became increasingly agitated and was transitioned to GIP care. She started spitting out oral medications. she was given Haldol but this seemed to make her agitation worse.



Management of Agitation Video

- <https://youtu.be/GrJypBgHUxk>



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