

Symptom Management in Palliative Care

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Types of Symptoms

- Delirium
 - Anxiety
 - Insomnia
 - Drowsiness
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Enlighten





Essential Elements of Symptom Management

- **Ongoing assessment & evaluation**
 - **Requires interdisciplinary teamwork**
 - Symptoms create suffering & distress
 - Psychosocial intervention is key to complement pharmacologic strategies
 - **Requires knowledge of patients goals**
 - **Requires knowledge of prognosis**
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Case:

- Anxious patient 68 yo with PMH of lung cancer presents to the hospital c/o severe pain that was making it difficult to breath. On admission her respiratory rate was 22, pulse of 110 and pulse oximetry was 89% saturated on 2 liters oxygen by nasal prongs. Her home medications included MS Contin 30 mg BID, Gabapentin 300 mg TID, Ibuprofen 600 mg PO TID, Morphine Liquid 10 mg Q 3 hr prn pain. In the ER, she is given a morphine PCA after a bolus of morphine 4 mg IV with significant pain relief. She is given lorazepam 1 mg Q 8 hr prn anxiety. She used an average of 40 mg Morphine per day with PCA for 2 days and Oxygen was titrated down to 1 liter via nasal canula as her pain was now under much better control. She is converted over to MS Contin 60 mg PO TID and is set to be discharged in 1-2 days while home health services are arranged.
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Case Continued

- The patient has previously expressed a wish for No Code status. Current treatments for the dyspnea include oxygen by nasal prongs and hand-held inhalers. Her Gabapentin, morphine and ibuprofen doses remain unchanged. She has used lorazepam twice since admission.
 - On the fourth hospital day while you are making rounds, a nurse interrupts to tell the team that the patient is drowsy, confused, and keeps taking her oxygen off which results in O2 saturations on Pulse – Ox of 86 %.
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Case Continued

- **The resident tells the nurse to**
 - 1) check respiratory rate, put oxygen back on patient, use soft restraints to prevent patient from removing oxygen
 - 2) Draw up 1 mg Naloxone and have it ready for administration
 - 3) call her in 15 minutes with status update
 - **What should be included in your assessment of this patient's drowsiness and confusion?**
 - **Is the proposed treatment plan appropriate, if not? Why?**
 - **Suggest an alternative treatment approach; specify non-drug and drug orders (drug / dose / schedule)**
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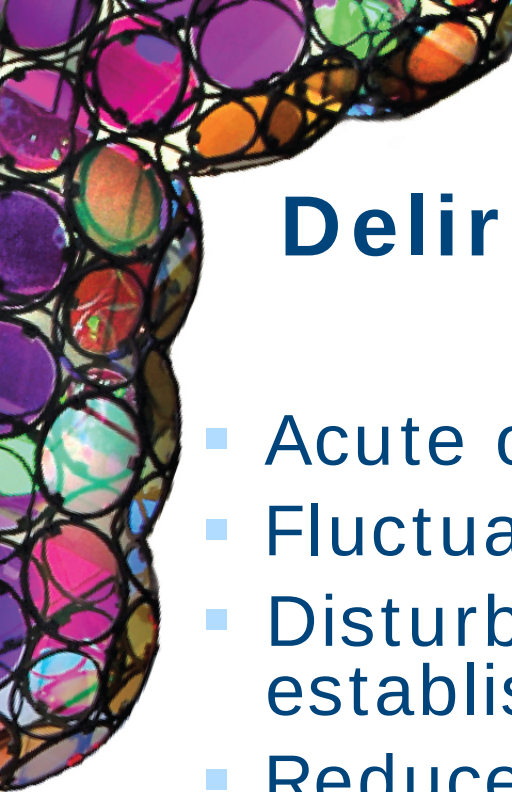


Case Delirium:

1. Describe an appropriate initial assessment for this patient.
 2. Develop a rank ordered differential diagnosis for this patient.
 3. Do you agree with the stated treatment plan?—if not, design a new plan.
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Delirium





Delirium

- Acute onset of days to hours
 - Fluctuating course
 - Disturbance or disorientation that is not accounted for by an established dementia
 - Reduced ability to focus, sustain or shift attention
 - Generally a reversible condition
 - Subtypes:
 - Hyperactive
 - Hypoactive
 - Mixed
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Causes of Delirium (I WATCH DEATH)

Infection	Encephalitis, meningitis, syphilis, HIV, Sepsis
Withdrawal	Alcohol, barbiturates, sedative-hypnotics
Acute metabolic	Acidosis, alkalosis, electrolyte disturbance, hypercalcemia, hepatic failure, renal failure.
Trauma	Closed head injury, burns, heatstroke
CNS Pathology	Abscess, hemorrhage, subdural hematoma, infection, seizure, stroke, tumors, metastases, vasculitis
Hypoxia	Anemia, CO Poisoning, pulmonary or cardiac failure
Deficiencies	Vitamin B12, folate, niacin, thiamine
Endocrinopathies	Hyper/hypoglycemia, hypercalcemia, myxedema
Acute Vascular	Hypertensive Encephalopathy, stroke, arrhythmia, shock, dehydration
Toxins or drugs	Medications, chemotherapeutics, illicit drugs, pesticides
Heavy Metals	Lead, manganese, mercury





Delirium

- Reversible Causes:
 - Medications
 - Dehydration
 - Infection
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Delirium vs. Dementia

	Delirium	Dementia
Change in alertness	Yes	No
Onset	Hours to days	Gradual
Fluctuation	Yes	No





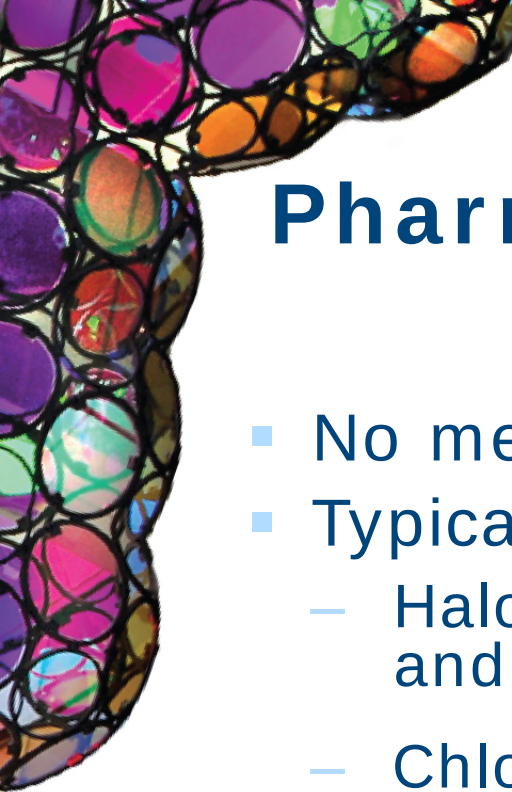
Medications Associated With Delirium

- Anticholinergics
 - Antineoplastic agents
 - Benzodiazepines
 - Opiates
 - Sedative / hypnotics
 - Steroids
 - Antihistamines
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Delirium Assessment

- History:
 - Context of the patient: Illness, Medications
 - Symptoms: Quality, Severity, Temporal Profile, Effects of treatment
 - Mental Status Exam
 - Physical Exams: Asterixis, Tremor, Myoclonus.
 - Look for Reversible Causes:
 - Workup
- 



Pharmacological Rx of Delirium

- No medication is FDA Approved
 - Typical Antipsychotics
 - Haloperidol: Most commonly used. Can use for both hyperactive and hypoactive.
 - Chlorpromazine
 - Atypical Neuroleptics:
 - Risperidone: less risk of extrapyramidal symptoms
 - Olanzapine: promotes weight gain, seizure threshold
 - Quetiapine: can use in Parkinson's, hypotension
 - Benzodiazepines: Avoid, it can worsen the condition
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Non-Pharmacologic Rx Delirium

- Evaluate Medications
 - Reorientation
 - Relaxation / Distraction
 - Hydration
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Non-Pharmacologic Treatment



Table 1. Clinical Features of Delirium.*

Acute onset

- Occurs abruptly, usually over a period of hours or days
- Reliable informant often needed to ascertain the time course of onset

Fluctuating course

- Symptoms tend to come and go or increase and decrease in severity over a 24-hour period
- Characteristic lucid intervals

Inattention

- Difficulty focusing, sustaining, and shifting attention
- Difficulty maintaining conversation or following commands

Disorganized thinking

- Manifested by disorganized or incoherent speech
- Rambling or irrelevant conversation or an unclear or illogical flow of ideas

Altered level of consciousness

- Clouding of consciousness, with reduced clarity of awareness of the environment

Cognitive deficits

- Typically global or multiple deficits in cognition, including disorientation, memory deficits, and language impairment

Perceptual disturbances

- Illusions or hallucinations in about 30 percent of patients

Psychomotor disturbances

Psychomotor variants of delirium

Hyperactive

- Marked by agitation and vigilance

Hypoactive

- Marked by lethargy, with a markedly decreased level of motor activity

Mixed

Altered sleep–wake cycle

- Characteristic sleep-cycle disturbances
- Typically daytime drowsiness, nighttime insomnia, fragmented sleep, or complete sleep-cycle reversal

Emotional disturbances

Common

- Manifested by intermittent and labile symptoms of fear, paranoia, anxiety, depression, irritability, apathy, anger, or euphoria

* Additional details are provided in Table 2 in the Supplementary Appendix.

Table 3. Precipitating Factors or Insults That Can Contribute to Delirium.

Drugs

- Sedative hypnotics
- Narcotics
- Anticholinergic drugs
- Treatment with multiple drugs
- Alcohol or drug withdrawal

Primary neurologic diseases

- Stroke, particularly nondominant hemispheric
- Intracranial bleeding
- Meningitis or encephalitis

Intercurrent illnesses

- Infections
- Iatrogenic complications
- Severe acute illness
- Hypoxia
- Shock
- Fever or hypothermia
- Anemia
- Dehydration
- Poor nutritional status
- Low serum albumin level
- Metabolic derangements (e.g., electrolyte, glucose, acid–base)

Surgery

- Orthopedic surgery
- Cardiac surgery
- Prolonged cardiopulmonary bypass
- Noncardiac surgery

Environmental

- Admission to an intensive care unit
- Use of physical restraints
- Use of bladder catheter
- Use of multiple procedures
- Pain
- Emotional stress

Prolonged sleep deprivation

Pharmacologic Treatment of Delirium

Table 4. Pharmacologic Treatment of Delirium.

Class and Drug	Dose	Adverse Effects	Comments
Antipsychotic Haloperidol	0.5–1.0 mg twice daily orally, with additional doses every 4 hr as needed (peak effect, 4–6 hr) 0.5–1.0 mg intramuscularly; observe after 30–60 min and repeat if needed (peak effect, 20–40 min)	Extrapyramidal symptoms, especially if dose is >3 mg per day Prolonged corrected QT interval on electrocardiogram Avoid in patients with withdrawal syndrome, hepatic insufficiency, neuroleptic malignant syndrome	Usually agent of choice Effectiveness demonstrated in randomized, controlled trials ^{20,37} Avoid intravenous use because of short duration of action
Atypical antipsychotic Risperidone Olanzapine Quetiapine	0.5 mg twice daily 2.5–5.0 mg once daily 25 mg twice daily	Extrapyramidal effects equivalent to or slightly less than those with haloperidol Prolonged corrected QT interval on electrocardiogram	Tested only in small uncontrolled studies Associated with increased mortality rate among older patients with dementia
Benzodiazepine Lorazepam	0.5–1.0 mg orally, with additional doses every 4 hr as needed*	Paradoxical excitation, respiratory depression, oversedation	Second-line agent Associated with prolongation and worsening of delirium symptoms demonstrated in clinical trial ³⁷ Reserve for use in patients undergoing sedative and alcohol withdrawal, those with Parkinson's disease, and those with neuroleptic malignant syndrome
Antidepressant Trazodone	25–150 mg orally at bedtime	Oversedation	Tested only in uncontrolled studies

* Intravenous use of lorazepam should be reserved for emergencies.



Prevalence of Insomnia

- Cancer Patients
 - 30-50%
- General Population
 - 15%

Portenoy et al. Qual Life Res 3:183-189, 1994

Sarna, L Cancer Pract 1:21-28,1993

Malone et al. J R Soc Med 87:386-389, 1994





Precipitating Factors

- Mutilating Surgery
- Hospitalization
- Radiotherapy
- Pruritus



Precipitating Factors

- Nausea
- Chemotherapy
- Pain
- Delirium



Consequences of Insomnia in Cancer Patient

- Fatigue
- Cognitive Impairment
- Mood Disturbances
- Pain
- Immunosuppression



Treatment of Insomnia in Cancer Patient

- Pain
 - Delirium
 - Nausea/Vomiting
 - Itching
 - Psychological Disturbances
- 



Depression

- Experience by up to 40 % patients at EOL
 - Often goes undiagnosed or undertreated
 - Not a “normal” part of a terminal disease
 - Can be misdiagnosed as anxiety d/o
 - Secondary symptom burden should help guide therapy
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Depression

- Life expectancy of weeks
 - Methylphenidate fastest acting medication
 - Dose 5 mg with breakfast (2.5 mg frail or heart dz)
 - Titrate to effect by 2.5-5 mg divided doses every 1-2 days
 - Effective dose 20-30 mg
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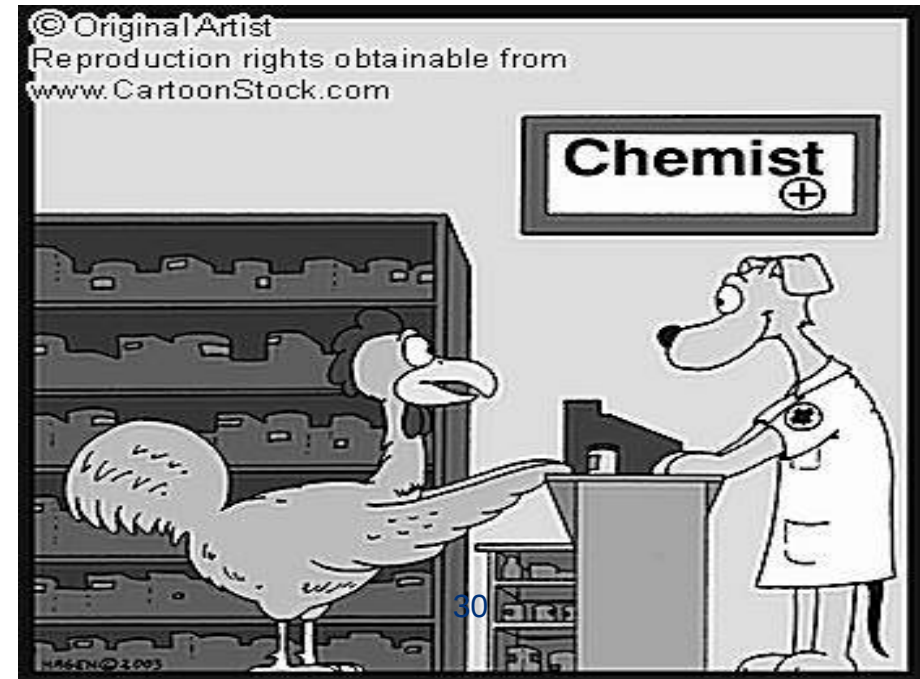


Depression

- **Depression with neuropathic pain**
 - Duloxetine (cymbalata) and Venlafaxine (effexor)
 - **Depression with psychomotor retardation**
 - Fluoxetine, Effexor are activating
 - **Depression with insomnia**
 - Mirtazapine – sedating at low doses
 - Additional benefit of stimulating appetite
 - **Depression with anxiety**
 - Citalopram, escitalopram, paroxetine
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Opioid-Induced Somnolence

- Common during initial treatment
- Common during dose escalation
- Tolerance Usually Develops
- Driving?
- Non-Opioids?
- Stimulants to treat?



Are you sure it's non-drowsy?
I cannot afford to oversleep...



Pharmacologic Treatment for Opioid-induced Sedation

- Opioid Dose Reduction
- Opioid Rotation
- Caffeine 200 mg PO/IV Daily
- Dextroamphetamine 2.5 – 15 mg PO Daily or Twice Daily
- Donepezil 2.5 – 15 mg PO Daily
- Methylphenidate 2.5 – 5 mg PO Twice Daily
- Modafinil 100 – 200 mg PO Daily

Cataratas Llanos de Cortes



Mucho Gusto



