



Agitation & Delirium at End of Life

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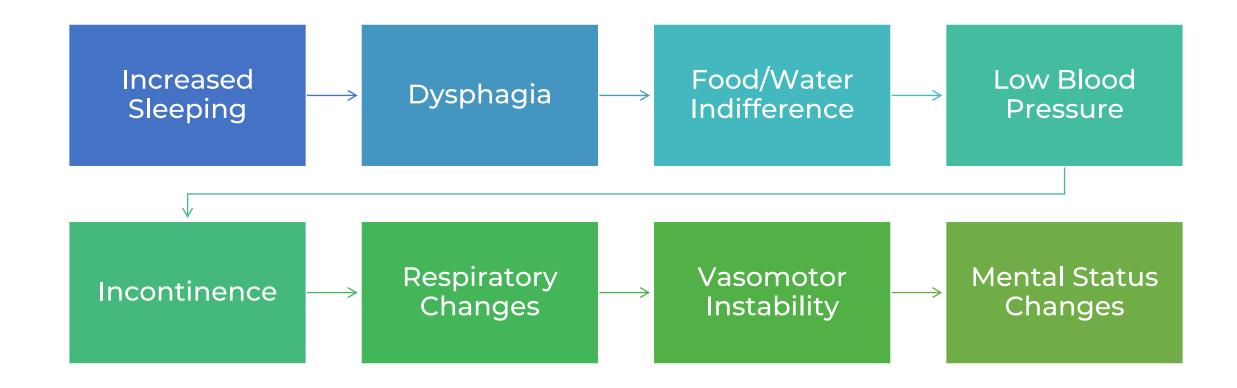


Objectives

- Identify common changes exhibited by dying patients
- Define agitation and delirium
- Discuss nonpharmacologic and pharmacologic treatment options for agitation and delirium
- Review palliative sedation for refractory symptoms



The Dying Patient





Symptom Identification

Terminal Restlessness Terminal Agitation Terminal Anguish

Terminal Delirium Psychiatric Disturbances

Confusion



Agitation

- State of excessive psychomotor activity with increased tension, irritability and restlessness
 - Agitated patients may present with or without delirium
- Non-purposeful motor movement
- Potential precipitating factors: pain, nausea, bladder distention, withdrawal, constipation, dyspnea, pain from immobility



Delirium

- Acute confused state, disturbance in mental abilities
 - Alteration of consciousness, reduced ability to focus
 - Difficulty sustaining and shifting attention
 - Confused thinking, reduced awareness
- Develops quickly
- Causes: medical conditions, intoxication, medication adverse effects
- Hyperactive, hypoactive, mixed
- Etiology and frequency



Delirium

Hypoactive

- · Withdrawn, lethargic, sedate
- Flat affect

Hyperactive

- · Restless, agitated, emotionally unstable
- · Hallucinations or delusions
- · Loud speech, anger, wandering, combative

Mixed

- Alternating features (hyper/hypo-active)
- · Difficult to diagnose



Risk Factors

- Age
- Severity of illness
- Cognitive impairment
- Hearing or vision loss
- Polypharmacy
- Isolation
- Organ damage
- Impending death



Triggers and Risk Factors

Environment

- Temperature
- Noise
- Residence
- Restraints

Reversible Causes

- Vision/hearing impairment
- Bowel or bladder issues

Drug Therapy

New Agents





Risk Factors: Medications!

- Anticholinergics
- Antipsychotics
- Benzodiazepines
- Chemotherapy
- Corticosteroids
- Dopamine agonists
- Opioids





Prevention

- No intervention reliably prevents delirium
 - Target modifiable risk factors
 - Multicomponent nonpharmacologic interventions

Orientation

Cognitive Stimulation

Sleep Hygiene

Mobilization & Restraints

Medication Appropriateness Symptom Management





Nonpharmacologic Therapy

- Caregiver education
- Frequently reorient patient
- Place familiar objects in the room
- Make clocks and calendars visible
- Calm environment
- Staff continuity
- Eyeglasses and hearing aids
- Monitor bowel and bladder function



Pharmacologic Interventions





- No FDA approved medications for delirium
 - Limited data
- Polypharmacy
- Antipsychotics
- Anticholinergic Activity





Haloperidol

- · Evidence of psychomotor agitation, delusions, hallucinations
- Dosing: 1-2mg po q2h until resolved/patient settled, repeat dose q6-8h prn
- · Routes: SL, PR, IV, SC, IM
- Tablets, oral solution, injectable formulations
- 50% dose reduction for frailty
- · Alternatives: olanzapine, risperidone, quetiapine



Lorazepam

- Persistent agitated delirium
- Dosing: 1mg po q4-6h prn
- · Routes: SL, PR, IV, SC, IM
- · Tablets, oral concentrate, injectable formulations available
- Preferred in Lewy Body Dementia or Parkinson's



Chlorpromazine

- Dose: 10-25mg q8h prn or scheduled
- · Routes: PO, SL, PR, IM
- Formulations
 - Tablets: 10mg, 25mg, 50mg, 100mg, 200mg
 - · Injectable: 25mg/mL
- Notes: sedating, orthostatic hypotension, potential for QT prolongation, should be avoided in Parkinson's and Lewy Body Dementia



Aripiprazole

- Tabs, oral solution, ODT
- Delayed onset
- Long halflife

Olanzapine

- · Tabs, ODT
- Metabolic syndrome
- Monitor for EPS
- Injection: restricted access*

Quetiapine

- · Tabs, ER tabs
- Parkinson's or LBD
- Increased blood glucose
- Sedating

Risperidone

- Tabs, oral solution,ODT
- Long-acting injection*

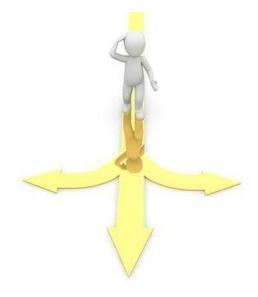
Ziprasidone

- Capsules
- Administer with food
- May increase blood glucose
- Injection*



Patient Case: Mr. A.

- 84-year-old male admitted to hospice with primary dx of Alzheimer's
- CC: sleep/wake cycle changes, behavioral disturbances
 - Requires full-time supervision and assistance with activities of daily living
- Hx: HTN, Hypercholesterolemia, Glaucoma
- Social: lives at home with wife of 60+ years; children and family live nearby





Patient Case: Mr. B.

- 43-year-old male admitted to hospice with primary dx of malignant neoplasm of rectosigmoid junction
- CC: abdominal and pelvic pain
 - Intensity rating 6/10
 - Describes as sharp, stabbing as well as dull and continuous
- Hx: Otherwise, healthy; non-smoker; recently diagnosed depression and anxiety
- Social: father of two children; wife is primary caregiver



Palliative Sedation



Exhaust Alternatives

Lower Consciousness

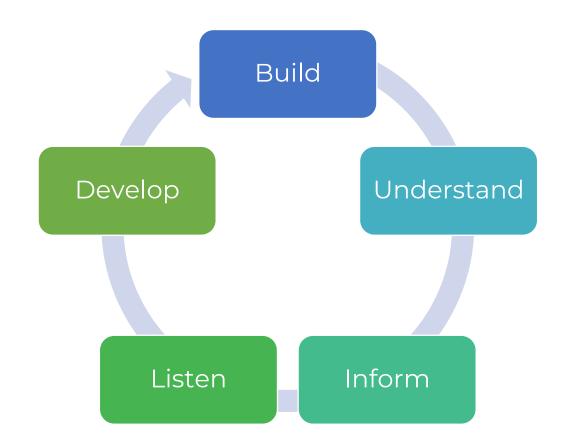
Preserve Ethics

Monitor Outcomes



Communication

- Compassionate behavior
- Open-ended questions
- Individualized care (goals of care oriented)
- Acknowledge limitations
- Consistent messages







Thank you

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Select References

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