Terminal Restlessness

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Learning Objectives
- Different Terminology
- Most Common Signs and Symptoms
- Most Common Types
- Multiple Etiologies
- Non-Pharmacologic Management
- Pharmacologic Management
- Clinical Outcomes

Delirium
- Definition: “general medical disorder” affecting the brain
- Approximately > 80% of all terminally ill patients will develop delirium prior to their death
- Very important symptom to detect and manage
  - High prevalence and frequency
  - Distress it causes patients and families

Terminal Restlessness
- Spectrum of behaviors and symptoms seen in the last few days of life
- Can overlap with but does not fit the diagnostic criteria of delirium
- Ensure reversible causes are addressed

Delirium
- Clinical signs and symptoms
  - Acute or subacute onset (hours – days)
  - Fluctuating course
  - Short-term duration if cause is reversible
  - Impaired consciousness with a reduced environmental awareness
  - Inability to focus, sustain, or shift attention
  - Hallucinations and delusions are common

Delirium
- Clinical signs and symptoms continued....
  - Global cognitive impairment
  - “Sundowning”
  - Labile mood
Hyperactive Delirium
- Restlessness
- Agitation
- Hypervigilance
- Delusions
- Hallucinations
- More recognizable

Hypoactive Delirium
- Confusion
- Somnolence
- Delusions and hallucinations present in > 50% cases
- Less noticeable
- Accounts for up to 86% of HPC patients with delirium
- Misdiagnosed as depression or fatigue

Mixed Delirium
- Subtype with alternating features of hyperactive and hypoactive delirium

Delirium
- Multiple etiologies
  - Pain
  - Urinary retention
  - Constipation
  - Dehydration
  - Infection
  - Electrolyte imbalances
  - Drug/alcohol withdrawal

Delirium
- Multiple neurotransmitters involved
  - Dopamine excess
  - Acetylcholine and GABA deficiency
  - Elevated levels of cytokines
  - Due to the advanced illness state in this patient population, multiple etiologies may be responsible

Delirium
- Multiple etiologies continued....
  - Medication side effects
    - Anticholinergic drugs
    - Anti-emetics, antihistamines, TCA's, scopolamine, etc.
    - Opioids
    - Sedative-hypnotics
      - Benzodiazepines
    - H2 blockers and metoclopramide
    - Corticosteroids
    - NSAIDS
Delirium

- Multiple etiologies continued....
  - Blood loss anemia
  - Immobilization
  - Environment
    - Unfamiliar
    - Social isolation
    - Vision and/or hearing impairment
  - Cardiac or Pulmonary disease
  - Renal failure
  - Hepatic failure
  - CNS dysfunction
    - Central lesion (e.g., Metastatic brain disease)
    - Seizure
    - CVA

Non-Pharmacologic Treatment

- Identify reversible causes
- Environment
  - Safety
    - Minimize risk of injury (especially for agitated patients)
  - Familiar objects (clocks, calendars, etc.)
  - Photographs
  - Familiar music
  - Windows with outside views
- Provide education to family and/or caregivers

Pharmacotheraphy

- Determine goals of care
- Attempt to reverse the delirium
  - Restores meaningful cognitive connection to family
  - Initiate palliative sedation
  - Irreversible delirium without agitation
  - May only require comfort measures

Pharmacologic Management

- Benzodiazepines
  - Anxiolytic
  - Not first line therapy for underlying delirium
  - Try to avoid as they can cause paradoxical worsening of delirium and agitation

- Alcohol and/or substance withdrawal
- Neuroleptic malignant syndrome
- Second-line agent for delirium in patient's with Parkinson's Disease
- Short-term adjunct for agitated delirium
Pharmacologic Management

- Typical Neuroleptics
  - Haloperidol (Haldol) 0.5-1.0 mg PO/SL/SQ/IV q4-12h ATC or PRN
  - Chlorpromazine (Thorazine) 12.5-50 mg PO/SL/PR/IM q4-8h ATC or PRN

- Atypical Neuroleptics
  - Olanzapine (Zyprexa) 2.5-5 mg PO Daily
  - Quetiapine (Seroquel) 25 mg BID
  - Risperidone (Risperdal) 0.25-1 mg PO BID

Pharmacologic Management

- Key Points
  - Start at the lower end of the dosage range
  - Frequent assessments of response to treatment and potential side effects are needed
  - Consider palliative sedation if symptoms not controlled with optimal doses of antipsychotics

Clinical Outcomes

- Prolonged hospitalizations
- Functional and cognitive decline
- Institutionalization
- Higher mortality
  - 1 and 6 month mortality 14 and 22%, respectively
  - Protracted delirium (6 months) increased 1 year mortality

References

- American Academy of Hospice and Palliative Medicine (http://www.aahpm.org)
- UNIPAC Series: Hospice and Palliative Care Training for Physicians (Self-Study); AAhPM.