# DELIRIUM

A nonspecific, potentially preventable, and often reversible disorder of impaired cognition, which results from several causes in ICU patients.

Prompt recognition is important to reduce modifiable risk factors and start treatment.

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## WHAT IS DELIRIUM?

- Acute state of confusion with:
  - Fluctuating levels of consciousness
  - Inattention
  - Disorganized thinking

**Hyperactive**
- Agitated, irritable, "ICU psychosis"
- <2% of cases

**Mixed**
- 54% of cases

**Hypoactive**
- Lethargy, flat affect
- Often unrecognized
- 44% of cases

## WHY DOES DELIRIUM MATTER?

- Increased risk of prolonged ICU and hospital stay
- Increased risk of mortality
- Increased risk of long-term cognitive impairment
- Reduced functional status at 3 & 6 months after ICU discharge
- Early sign of sepsis

## SCREENING TOOLS

- Assess level of consciousness before delirium screening
  - Richmond Agitation-Sedation Scale (RASS)
- Screening tools for delirium in adults will assess judgement and attentiveness, with deficits in either suggesting delirium
  - Confusion Assessment Method for the ICU (CAM-ICU)
    - 80% sensitivity, 96% specificity
  - Intensive Care Delirium Screening Checklist (ICDSC)
    - 74% sensitivity, 82% specificity

## RISK FACTORS FOR DELIRIUM

**Patient-related**
- Age ≥65 years
- Pre-existing cognitive impairment or neurologic disorder
- Comorbid conditions
- Malnutrition
- Alcoholism
- Prior history of delirium

**Illness-related**
- Illness severity
- Stroke
- Dehydration
- Infection
- Hypothermia/fever
- Hypoxia
- Electrolyte disturbances

**Environment-related**
- Social isolation
- Visual or hearing deficit
- Immobility
- Use of restraints
- Unfamiliar environment
- Stress
- Pain

**Medication-related**
- Polypharmacy (addition of ≥3 medications)
- Benzodiazepine use
- Nicotine or alcohol withdrawal
- Psychoactive medications, anesthetics, or anticholinergics

## TREATING DELIRIUM

- Assess and treat modifiable risk factors
  - Avoid benzodiazepines and other sedative-hypnotics
  - Avoid physical restraints to manage behavioral symptoms
  - Treat dehydration, infection, and other underlying causes
- **ABCDEF bundle**
  - Evidence-based guide of organizational changes needed for optimizing ICU patient recovery
  - **Early mobilization, promotion of sleep hygiene**, and **preventing sleep disruption** may reduce incidence and duration of delirium
- **Medications:** For symptomatic relief (may not affect delirium duration)
  - Haloperidol (Haldol)
    - Most titratable, used in acutely agitated
  - Quetiapine (Seroquel)
    - Slow onset, short half-life, used for insomnia or agitation
  - Olanzapine (Zyprexa)
    - Used acutely, long half-life
  - Dexmedetomidine (Precedex)
    - Useful in refractory hyperactive delirium