Prevention and Recognition of Delirium in the Hospitalized Older Adult: It's Not that Easy

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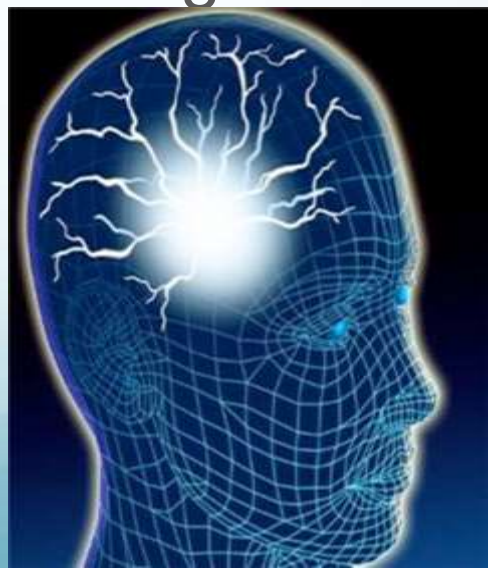
Objectives

- **Discuss the challenges faced in the acute care setting in the prevention and recognition of delirium**

Definition

- Delirium is a ***disturbance of consciousness*** with ***impaired attention*** and ***disorganized thinking*** or ***perceptual disturbances*** that ***develops acutely***, has a ***fluctuating course***, and with evidence that there is an ***underlying physiologic or medical condition*** causing the disorder

DSM-IV-TR diagnostic criteria



Acute Care Prevalence

- 50% of all adults admitted to hospital
- In patients admitted to acute care with preexisting dementia was 68%
- 85% of older adults admitted to ICU
- Older adults undergoing surgery are vulnerable (65% of orthopedic surgery, hip facture repair)

Acute Care Prevalence

- **At discharge from hospital 30 to 90% of patients who experience delirium continue to have symptoms**
- **In a study of patients admitted to home care agency, 46% of the patients admitted after hospitalization had delirium and 50% of that group live alone**
- **The older adult with dementia is 3 to 5 times more likely to develop delirium and it is less likely to be recognized in this group**

Delirium

- **Estimated that 68-87% of patients with delirium are not identified in acute and long-term care settings**
- **Contributing Factors**
  - Inadequate education
  - Lack of formal assessment methods
  - Ageist attitudes
  - Labeled as confusion and normal for the aged

Predisposing Risk Factors

- Age 65 or older, male
- Cognition: Dementia, cognitive impairment, history of delirium, depression
- Functional Status: dependence, immobility low level of activity history of falls
- Sensory impairment (visual and hearing)
- Decreased oral intake (dehydration, malnutrition)
- Medications (multiple psychoactive medications, poly-pharmacy, alcohol abuse)
- Coexisting medical

Precipitating Risk Factors

- Medications
- Primary neurologic diseases
- Inter-current illness
- Environmental
- Pain
- Emotional stress
- Prolonged sleep deprivation

Delirium

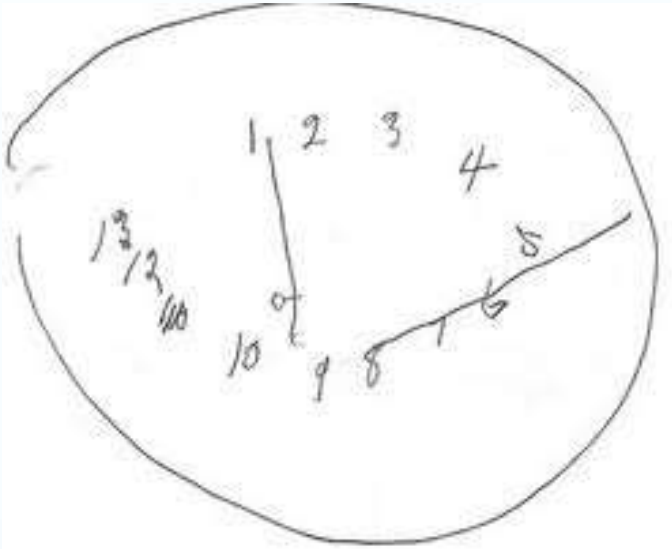
- Associated with negative outcomes
- Longer length of stay
- Increase risk of complications
- Higher mortality
- Loss of independence
- Increase risk of cognitive decline

Delirium

Hyperactive	Hypoactive	Mixed
Agitation	Lethargy	Alternating features of hyperactive and hypoactive
Vigilance	Decreased motor activity	
Hallucinations	Associated with a poorer prognosis due to development of complications	
Restlessness	Increased hospital stay, longer length of delirium and increased mortality	
Hyperactivity		

Recognizing Delirium

- **Cognitive Assessment Tools**
  - Mini-Mental State Examination
  - The Clock Draw Test
  - Mini-Cog
  - MoCA Screening



- **Screening Tools for Delirium**
  - Confusion Assessment Method (CAM)
  - CAM-ICU
  - Delirium Symptom Interview

Recognizing Delirium

Confusion Assessment Method (CAM)

1. ACUTE CHANGE IN MENTAL STATUS AND FLUCUATING COURSE
2. INATTENTION
3. DISORGANIZED THINKING
4. ALTERED LEVEL OF CONSCIOUSNES

*The diagnosis of delirium requires the presence of features 1 and 2 and either 3 or 4

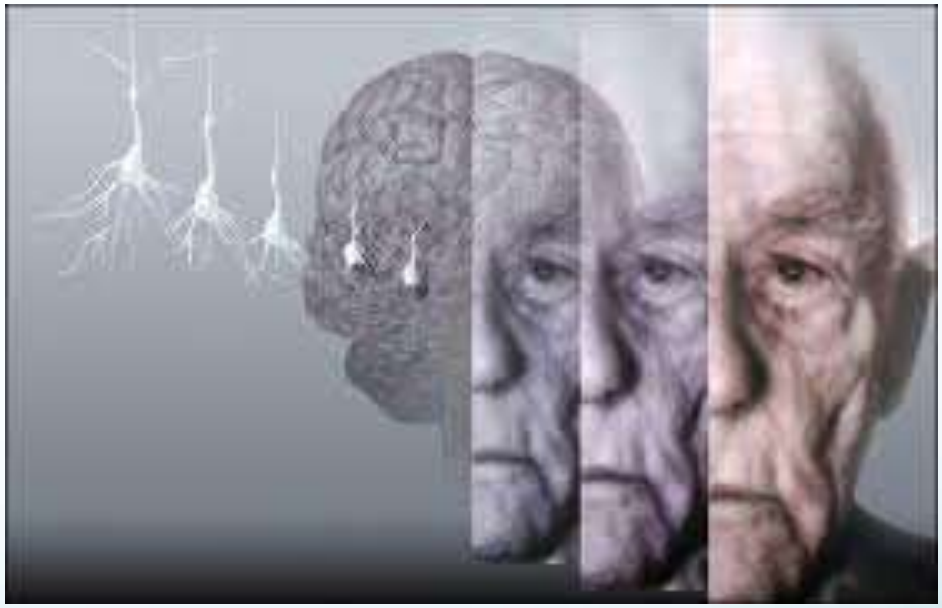
Delirium In the Older Adult

- **Assessed older adults for delirium "on the fly"**
  - Use frequent observation or restraints to manage care
- **Nurses identified the care environment does not meet the need of this group**
- **Negative beliefs and attitudes are factors that prevent effective care**
- **To improve the care, nurses require**
  - Support for education
  - Provide appropriate systems of care
  - Address the moral distress of nurses'

Dahlke & Phinney, 2008

Case Study: Mr. A

- 85 year old presents to ER with sudden onset of increasing confusion
- Level of conscious fluctuates from reduced to agitated and climbing out of bed
- Disoriented to time, place, speech incoherent and is easily distracted
- Lives independently with spouse with no community supports



Recognizing Delirium

- **WHEN IT'S EASY IT'S EASY**
  - An acute change in mental status, fluctuating course, inattention, disorganized thinking and altered level of consciousness from baseline is highly suggestive of delirium
  - Good collateral information on the patient's presenting history, baseline function and medical history was obtained from the family
  - Underlying cause
    - Community Acquired Pneumonia

Challenges

- **Agitation:**
  - Potential violence outbursts, pacing, won't take medication
- **Vigilance:**
  - Hyperactive
- **Hallucinations:**
  - May result in fear, exit seeking

- **Restlessness:**
  - Trying to get out of bed, pulling out IV, removing O2
- **Hyperactivity:**
  - Sleep disturbances


He is likely delirious...How should we treat it?

Care Strategies for Delirium

- **Eliminate or minimize risk factors**
  - Administer medications judiciously; avoid high-risk medications
  - Prevent/promptly and appropriately treat infections
  - Prevent/promptly treat dehydration and electrolyte disturbances
  - Provide adequate pain control
  - Maximize oxygen delivery (supplemental oxygen, blood, and BP support as needed)
  - Use sensory aids as appropriate
    - hearing aids and glasses
  - Regulate bowel/bladder function
  - Provide adequate nutrition

Care Strategies

- **Foster orientation**
  - Frequently reassure and reorient patient; use easily visible calendars, clocks, caregiver identification; carefully explain all activities; communicate clearly. Introduce one task at a time: provide structure and predictable routine
- **Provide appropriate sensory stimulation**
  - Quiet room; adequate light; one task at a time; noise-reduction strategies. Provide light in day and reduce light at night
- **Facilitate sleep**
  - Back massage, warm milk or herbal tea at bedtime; relaxation music/tapes; noise-reduction measures; avoid awakening patient
- **Foster familiarity**
  - Encourage family/friends to stay at bedside; bring familiar objects from home; maintain consistency of caregivers; minimize relocations

Care Strategies

- **Maximize mobility**
  - **Avoid restraints (Physical Restraints and Side Rails) and urinary catheters; ambulate or active ROM three times daily**
- **Communication**
  - **Clearly, provide explanations, provide one-step directions, use gestures and demonstrations. Allow time for a response**
- **Reassure and educate family**
- **Minimize invasive interventions**
- **Consider psychotropic medications to treat specific symptoms**

What do we need to do for Mr. A?

- **Ensure care strategies are being instituted**
  - Monitor patient for response to treatment and care strategies initiated and adjust as needed
- **Monitor the patient for a relapse**
- **Frequent standard assessment (CAM) at a minimum of every day and/or if a change is noted in mental status**
- **Document mental status assessment**

Prevention: What do we need to do about discharge?

- **Ensure accurate summary is available to community practitioner**
- **Starting discharge early to identify needs or changes in home supports**
- **Does the patient need community support service**
  - Referral to Geriatric Rehabilitation
  - Community Care Access Centre Referral

Delirium

- The classic presentation is thought to be hyperactive however …
- There is a tendency to identify hyperactive delirium and under-recognized hypoactive delirium!

Case Study: Ms. B

84 yr old female, admitted 1 month ago to hospital ICU after a fall, with NSTEMI, AKI. Complications pneumonia, UTI and delirium

Ms. B had no fever, despondent, not interacting with staff, V/S stable, medical work-up delirium was negative, not eating or drinking well, not sleeping as well at night

Recognition of Delirium

- **What are the nursing staff seeing?**
  - Cooperative
  - No fever
  - Taking medication as ordered
  - Vital signs stable
  - Not combative

What is really happening to this patient?

1. Did this patient have preexisting cognitive impairment?
2. Does this patient have ongoing delirium?
3. Does this patient have depression?

Case Study: Ms. B

- Good collateral information obtained
- Patient was having difficulties:
  - with memory
  - prior fall history
  - difficulty with mobility
  - most meals prepared
  - history of depression
  - family recognized mother failing

Case Study: MRS. C

- 83 year old woman Alzheimer's Dementia diagnosed 3 years ago
- Presents to the ER ↓LOC, fever, and UTI. Not oriented to time or place, difficulties focusing and unable to follow with commands

Delirium Recognition

- It is often difficult to differentiate delirium from dementia
- Both have global disturbance in cognition
- More advanced stages of dementia the changes may be difficult to detect

System Barriers in Acute Care

- **Environmental**
  - Patients in ER too long
  - Physical layout – not conducive to older adults
  - Activity and noise on the units
  - Frequent movement of patients on between units and on unit
- **Education**
  - Updating and continuing always problematic
- **People**
  - Teaching hospital – Lots of Learners
  - Frequent turnover of staff assignments nurses, physicians and medical students
  - Lack of availability of family or caregivers who know the patient care needs, medical history and/or baseline cognitive status

System Facilitators

- Patient and Family Centered Care
- Patient Care Advisors
- Community Partners – CCAC, Providence Care, HDH
- Referral to Geriatrician or Community Liaison Psychiatry
- CL Psychiatry – Geriatric Psychiatry Rounds
- Multidisciplinary Teams
- Medication Reconciliation on admission and discharge

System Facilitators

- Spiritual Care
- Trained staff in defusing and assisting with violent or agitated patients
- Process Improvement Initiatives
  - MOVE ON PROJECT
    - Mobilization of Vulnerable Elders in Ontario
  - Advanced Care Planning
  - HOUDINI Project
  - Nutrition Tactic
  - Communication Service philosophy H.E.A.R.T.
    - Medicine Program has provided education to 200 staff

System Facilitators

- **Training for all staff at orientation**
  - **PIECES and Gerontology**
- **Short Stay Unit established**
- **Hospital Elder Life Program**
- **Active Volunteer Program**
  - Music therapy
  - Arts program
  - Daily visiting
  - Pet therapy
- **Engaged Staff**


We ourselves feel that what we are doing
is just a drop in the ocean.
But the ocean would be less
because of that missing drop.
Mother Teresa

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