Implementing a Delirium Precautions Order Set at Osceola Regional Medical Center

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Introduction

• Delirium is a state of confusion and disorientation that is a common complication of inpatient hospitalization in the elderly, impacting long-term functional/cognitive outcomes and life expectancy1.
• Risk factors include older age, limited mobility, cognitive decline, and impairment of sensory perception at baseline2.
• Episodes of acute agitation are common among patients with delirium, often posing harm to themselves and to staff, necessitating the use of restraints or sedating medications that worsen the delirium state and prolong hospitalization3,4.
• Available 2021 data reveals that, of the emergency codes called for agitated or violent patients at Osceola Regional Medical Center:
  - 79% were noted to be confused
  - 40% were adults 65+
  - 40% required emergency medication
  - 3% required restraints

Objectives

1. To decrease the rate of diagnosis of acute encephalopathy (cases/1000 patient days) in patients age 65+ by 15%
2. To decrease the rate of order placement for restraints (orders/1000 patient days) in patients age 65+
3. To decrease length of stay in patients age 65+ by 1 day

Methods

• Dataclear request was placed to obtain the following de-identified pre-intervention data (01/01/2021-12/31/2021) and post-intervention data (01/01/2022-12/31/2022) for the Osceola Regional Medical Center site.
  - Rate of diagnosis of delirium (cases/1000 patient days) in patients age 65+, defined by ICD codes at any point in hospitalization
  - Rate of order placement for restraints (orders/1000 patient days)
  - Length of stay
  - Data will be analyzed using paired samples t-test and reviewed quarterly to inform future interventions

Interventions (continued)

Delirium Prevention
Notifications/Reminders: Resident to evaluate patient to determine eyeglasses, hearing aids, dentures
• Case Management Consult
  - Communicate with caregiver to determine baseline level of functioning (ADLs, mobility, cognition, dementia/psychiatric/neuropsychiatric diagnoses, who administers patient’s medications at home)
  - Encourage family/caregiver visits and/or rooming in, per current hospital guidelines
• Discharge planning
• Nursing Order: Orientation
  - Orient patient to person, place, date, time, situation; Q shift
• Nursing Order: Environment
  - Lights on, blinds open, TV on, encourage cognitive stimulation (books, TV, music) during day; repeat daily
  - Lights off, blinds closed, TV off, decrease ambient noise (close door) at night; repeat daily
• Nursing Order: Bed
  - Adjust bed to lowest level
• Nursing Order: Bathroom
  - Accompany patient to bathroom; QHR
• Nursing Order: Fluids
  - Encourage PO fluids
• Nursing Order: Feeding
  - Assist with Feeding Patient
• Activity
  - Up to Chair; Q meals
• Fall precautions
• Intake and Output
  - Strict ID & Q Shift
• UA with culture
• Change Foley
• DC Foley
• Bladder scan for urinary retention
• Bowel regimen
  - Senokot; T tablet QHS
  - Miralax 1 packet PO BD PRN for no BM > 24h
  - Bisacodyl suppository OD daily PRN for no BM > 48h
• PT Eval & Treat
  - Ensure appropriate mobility DME available at bedside (wheelchair, walker, cane, etc.)
• OT Eval & Treat
• Speech-Swallow
• ST Eval & Treat
• Dietary Consult
• Ensure
  - Vanilla Ensure; Q meals
• Pharmacy consult
• Review med list for drug interactions

Interventions (continued)

Delirium Management
Option to monitor QTc
• ECG
Scheduled oral medications to consider to promote sleep and maintain day/night rhythm
• Melatonin 5mg PO QHS
Scheduled oral medications for behavioral control (select only one)
• Haloperidol 2mg PO BD
• Risperidol 0.5 mg PO bid
• Seroquel 25mg PO BD
  - Consider in patients with Parkinson’s disease or Lewy Body Dementia
Oral medication options for acute agitation (select only one)
• Haloperidol 2mg PO QBH PRN for acute agitation
• Zyprexa Zada 5mg SL QHR PRN for acute agitation
• Seroquel 25mg PO QBH PRN for acute agitation
IM medication options for acute agitation (select only one)
• Haloperidol 2mg IM QHR PRN for acute agitation
• Zyprexa 2.5mg IM QHR PRN for acute agitation
• Zyprexa 5mg IM QHR PRN for acute agitation

Conclusion

• Preliminary 2021 data indicates that, at Osceola Regional Medical Center, 40% of emergency codes for acute agitation are called on patients age 65+
• In this population, episodes of acute agitation are often due to underlying delirium, a serious but preventable condition.
• Our proposed interventions emphasize the importance of non-pharmacological interventions to prevent delirium and associated agitation.

References