Acute Confusion
Case Study
Mr. C. Arrives to ER (6 pm)

- Patient’s son found 85 year old father lying on floor, incontinent of urine, confused, abrasion on left elbow. Mr. C has been experiencing a productive cough x/3days.
- Son called EMS.
- ER assessment:
  - B/P (L) 102/54, HR 90
  - B/P (S) 84/42, HR 120
  - T 37°C, O₂ Sat. R/A 88%
  - BS 6.2, Glasgow Coma Scale (GCS) 13
Son is interviewed.

Normal functioning - alert, orientated X 3, independent with ADL, family assist with meal preparation, continent, ambulatory, wears glasses. Son states that his oral intake of fluids has decreased since cough began.

Past Medical History:

Rheumatoid arthritis, MI 2007, COPD, HTN

Medications:

NKDA

Plain Tylenol prn, ASA 81 mgs. daily
ER Interventions:
Blood work, Blood cultures, IV and fluids at 100 ml./hr., Foley insertion (urine C&S, UA), CXR, Sputum C&S, CAT Head

Patients’ Behaviour:
Disorientated, restless, yelling, striking out, pulling at IV and Foley, attempting to climb off stretcher, fluctuates throughout the day.

Medical Orders:
Admit under Medicine Service, confusion NYD
Give Ativan (Lorazepam) 1 mg PO x 1 STAT
ER notified that there are no inpatient beds so Mr C stays in the ER 3 days. Ativan is administered on a regular basis. Confused state does not change.

Mr. C is transferred to the Medical floor to a ward room with 4 beds. His family is unable to stay with him but they are very emotionally supportive. That evening he is moved to the nursing station in a Geri Chair, with table top on.
Pause
Reflect
Can you explain the cause for Mr. C.’s confusion?

Brainstorm
In Mr. C’s situation confusion could be due to dehydration, stroke, respiratory infection which all contribute to acute confusion or also known as *Delirium.*
Red Flags for Potential Delirium

- Over 75 years old
- Post surgery
- Chronic illness
- Previous delirium episode
- Diagnosis of cognitive impairment / dementia
- Drugs (polypharmacy)
- Alcohol abuse
- Poor nutritional status
Other Contributing Factors for Potential Delirium

- Vision, hearing, smell and other sensory losses
- Change in their environment
- Social losses
Causes for Delirium

- **Medicines**
  - Prescribed-new, recently withdrawn, syndrome of sudden compliance, adhering to correct time, dosages etc.
  - OTC-or borrowing medications from others
  - Substance Misuse-alcohol, street drugs

- **Medical Illness**
  - MI
  - Respiratory
  - Hypoxia
  - Exacerbations of chronic disease
Causes for Delirium

- **Microbial Causes**
  - UTI
  - Pneumonia etc.

- **Metabolic**
  - Fluid balance – Hydration
  - Electrolyte balances – Hyponatremia
  - Blood sugar level etc.
What quick and simple tool can be used to assess objectively if Mr. C. does in fact have Delirium?

Brainstorm
Delirium in individuals is indicated where the clinician identifies a positive response to the first two questions in the screen, and at least one positive response for the last two questions. The questions address four main areas, including: acute and fluctuating course, inattention, disorganized thinking and altered level of consciousness.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td><strong>1. ACUTE ONSET/FLUCTUATING COURSE</strong></td>
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<td>Is there a history of an acute change in mental status with evidence of fluctuation in the degree of symptoms?</td>
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<td><strong>2. INATTENTION</strong></td>
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<td>Does the patient have difficulty focusing attention (e.g., being easily distractible, or failing to focus on the discussion or sustain an effort)?</td>
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<td><strong>3. DISORGANIZED SPEECH</strong></td>
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<td>Is the patient's speech disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching of subjects?</td>
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<td><strong>4. ALTERED LEVEL OF CONSCIOUSNESS</strong></td>
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<td>Is the patient's level of alertness either hyper-alert (e.g., vigilant, overly sensitive to environmental stimuli, easily startles); or hypo-alert (e.g. lethargic, stuporous, drowsy, difficult to arouse)?</td>
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Is Delirium a Medical Emergency?

Brainstorm
Delirium can be a Life-threatening Event

- Compared to similarly aged individuals, older hospitalized persons who are delirious have a worse prognosis. They have prolonged lengths of hospital stay, worse functional outcomes, higher institutionalization rates, increased risk for cognitive decline and higher mortality rates (Leentjens & van der Mast, 2005; Rockwood, 2001).
I WATCH DEATH

- I – Infections
- W – Withdrawal (e.g. benzodiazepines, sedative-hypnotics)
- A – Acute Metabolic
- T – Toxins & Drugs
- C – CNS pathology
- H - Hypoxia
- D – Deficiencies (e.g. Thiamine, B 12)
- E – Endocrine (e.g. Thyroid)
- A – Acute Vascular
- T - Trauma
- H – Heavy Metals (e.g. lead, mercury, manganese)
How would you treat the underlying causes of the Delirium?

Brainstorm
- Dehydration – Administer IV fluids
- Stroke – Apply GCS, CT Head
- Respiratory infection – CXR, Sputum C&S, administer IV antibiotics
Why was Ativan prescribed? Is it the drug of choice?

Brainstorm
Patients with acute confusion are most often prescribed the antipsychotic medication, haloperidol (*Haldol*), alone or in combination with benzodiazepines, usually administered IM.

The recommended adult dose of Haldol 2 to 5mg IM. However *start low - go slow* is the rule of thumb with a smaller dose of 0.5 mg of Haldol combined with a like amount of benzodiazepine ( ativán) for the senior population.

Higher doses will result in increased adverse extrapyramidal effects.
What six priority patient care areas should be focused on and why?

Brainstorm
Patient Care Priority Areas include:

#1 Safety
#2 Privacy
#3 Reduction of stimuli
#4 Frequent monitoring of confusion status
#5 Reality orientation (if not distressing to client)
#6 is …
# 6 Patient Care Priority is Discharge Planning Action on Day 1
Key Take AWAY Message

*Delirium can be a life-threatening event*
On-Line Resources

- Screening for Delirium, Dementia and Depression in Older Adults (www.rnao.org)