



# May 2022 - Central East PPSMC Educational Newsletter

Written by Brenda Derdaele RN, CHPCN (c) and Disa Clifford RN, MN, CHPCN (c)

## Delirium



### What is Delirium

Delirium DSM 5 criteria

- A disturbance in **attention** (reduced ability to direct, focus, sustain, and shift attention) and reduced clarity of **awareness and orientation** to environment.
- The disturbance develops over a **short period of time** (hours to a few days) and tends to **fluctuate** during the course of the day.
- A change in **cognition** (such as memory deficit, disorientation, language or perceptual disturbance) not explained by a pre-existing or evolving neurocognitive disorder and not occurring in the setting of a severely reduced level of consciousness.
- There is evidence (history, examination and investigations) of a **general medical condition** judged to be etiologically related to the disturbance.



### Types of Delirium

- Hyperactive Delirium
- Hypoactive Delirium
- Mixed Delirium



#### Hyperactive - 30%

The person becomes overactive (agitated or restless).



#### Hypoactive - 48%

The person is underactive (sleepy and slow to respond). No agitation.



#### Mixed - 22%

Patient oscillates between periods of hyperactivity and periods of hypoactivity.

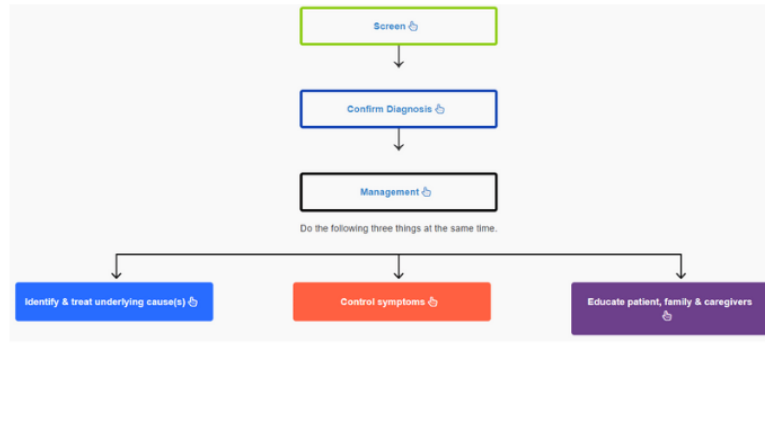
- Age
- Dementia
- Advanced Disease (80-90%)

## Risk Factors for Delirium

- Multiple comorbid conditions
- Renal Impairment
- Malnutrition/Dehydration
- Polypharmacy
- Change in environment
- Lack of sleep
- Pain

## Management of Delirium

1. Screen - make this part of your daily practice
2. Confirm Diagnosis
3. Management:
  - Identify and treat underlying causes
  - Control Symptoms
  - Educate patient, family and caregivers

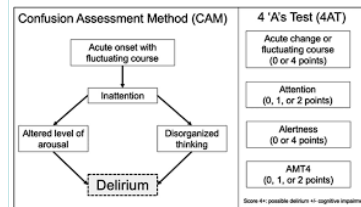


## How to Assess for Delirium

### Confusion Assessment Method (CAM)

- Feature 1: Acute Onset and Fluctuating Course
- Feature 2: Inattention
- Feature 3: Disorganized Thinking
- Feature 4: Altered Level of Consciousness

If features 1 and 2 and either 3 or 4 are present (CAM +/-positive), a diagnosis of delirium is suggested.



## Remember your OPQRSTUV!

### **O - Onset**

When did it begin? Has it happened before/ How long does it last? How often does it occur?

### **P - Provoking / Palliating**

What brings it on? What makes it better? What makes it worse?

### **Q - Quality**

What does it feel like? Can you describe it? Do you feel confused? Are you seeing or hearing anything unusual? How are you sleeping?

### **R - Region / Radiation**

Are there other symptoms that accompany this symptom? Do you know what day/month/year it is? Do you know where you are right now? Can you tell me your full name?

### **S - Severity**

How bothered are you by the symptom? Rate on a scale from 0-10 (right now / at its best / at its worst / on average / after treatment)?

### **T - Treatment**

What medications / treatments are you using (including non-prescription or naturopathic)? How effective are they? Are you having side effects? What medications have you tried in the past?

### **U - Understanding**

What do you believe is causing the symptom? How is it affecting you/your family? What is most

concerning for you?

### V - Values

What overall goals do we need to keep in mind while managing this symptom? What is an acceptable level for this symptom (0-10)? Are there any beliefs, views, or feelings about the symptom that are important to you/your family?

## Identify and Treat the Underlying Causes

- Don't simply **blame it on the opioids**. Look for other causes such as other drugs, infections (e.g. UTI), dehydration, hypercalcemia, etc.
- To what extent one will look for the **underlying causes** and treat them depends on several factors. These include:
  - The illness trajectory
  - Reversibility of the cause
  - Availability of treatments.
  - Goals of care and patient wishes and values.
- Common causes include: medications, dehydration, infection, metabolic causes (e.g. hypercalcemia, uremia, liver failure), hypoxia and brain metastases or disease.
- Physical Exam, Bloodwork, Urine, X-ray, CT, MRI
- Don't forget to exclude **urinary retention/constipation** as a cause/aggravating factor, which is often missed. Are they voiding appropriately? When was their last bowel movement and are they emptying?

### PRISME

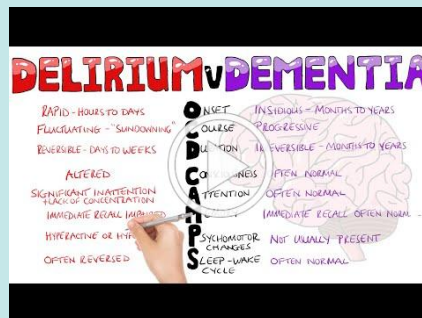
- P** - Pain / Poor nutrition
- R** - Retention (urinary or fecal) / Restraints
- I** - Infection / Immobile
- S** - Sleep / Skin / Sensory
- M** - Mental Status / Medication / Metabolic
- E** - Environment

Examples of underlying precipitating causes	Examples of treatments of underlying causes
Opioid Neurotoxicity	Opioid switch, dose reduction and/or hydration
Medications	Discontinue or reduce
Dehydration	IV or hypodermoclysis
Hypercalcemia	Bisphosphonate (or calcitonin if renal impairment) plus hydration or hydration only if mild
Infection	Antibiotics (therapeutic trial)
Brain metastases	Corticosteroid

## Delirium Awareness Video



## Delirium vs. Dementia Video



## Principles for Controlling Delirium Symptoms

1. Identify the key symptom and signs: agitation, hallucinations, somnolence, confused thinking.
2. Assess the severity and degree of distress.
3. Develop a plan: Pharmacological and Non-Pharmacological measures
4. Monitor the patient's response.

### Non-Pharmacological Interventions

- Gentle, repeated reassurances



- Reorientation
- Reduce stimulation
- Low ambient light
- Low noise
- Avoid physical restraints



## Pharmacological Interventions

### Mild Delirium

#### *Non-pharmacological Management is Preferred*

- Haloperidol (Haldol)
- Low doses Methotrimeprazine (Nozinan)
- Atypical Antipsychotics
  - Small doses of Olanzapine (Zyprexa), Risperidone or Quetiapine (Seroquel)

### Moderate Delirium

#### *Need to Control quickly*

- Methotrimeprazine (Nozinan)
  - More sedating than haloperidol
- Haloperidol at higher doses
- Atypical antipsychotics
  - Small doses of Olanzapine (Zyprexa), Risperidone or Quetiapine (Seroquel)

### Severe Delirium

#### *Emergent Situation - Need to Control quickly*

- Bring under control quickly using PRN doses
- Once under control use maintenance dose
- Methotrimeprazine

OR

- Midazolam
  - Palliative sedation may be needed in exceptional cases at end of life where delirium is refractory

### Central East Palliative Pain and Symptom Management Consultants:

For consultation support or education requests:

**Brenda Derdaele, RN, CHPCN (C)**  
Palliative Pain & Symptom Management Consultant  
Durham Region

[Email Me](#)

**Erin Newman-Waller RN, BScN, CHPCN(C)**  
Palliative Pain and Symptom Management  
Peterborough Hospice

## **Resources:**

[Cancer Care Ontario | Delirium Management Algorithm](#)

[Cancer Care Ontario | Delirium Guide-to-Practice](#)

[Cancer Care Ontario | Delirium Pocket Guide](#)

[B.C. Inter-professional Palliative Symptom Management Guidelines | Delirium](#)

[The 3 D's \(Delirium / Dementia / Depression\)](#)

[Pallium Pocketbook App | Delirium](#)

[Palliative SBAR](#)

[PPSMC Delirium Webinar](#)

Once the webinar is completed, please complete the [SurveyMonkey registration](#) to receive your certificate.

## **May Educational Opportunities:**

**Gastrointestinal Symptom Management**

**Wed, May 11:**

- Lunch & Learn
- 12-1pm

**Lunch & Learn Registration**

**Thurs, May 12:**

- Coffee & Palliative Care
- 3-4pm

**Coffee & Care Registration**

[Email Me](#)

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Scarborough

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