Confusional Conundrum: an Approach to Managing Delirium in the Palliative Care Patient

Dr. Sharon Watanabe

Director, Dept. of Symptom Control and Palliative Care

Cross Cancer Institute

Objectives

By the end of this session, the attendee will be able to:

- Define and characterize delirium
- Describe the significance of delirium
- Outline an approach to the management of delirium

Case

- 66 y.o. married ♂, retired carpenter
- Dx'ed 15 mos. ago with R pleural mesothelioma; no sx → observation
- Progressive pleural and chest wall disease
- Now admitted for palliative RT to chest

Case (cont'd)

- Reports pain R lower chest, deep/heavy, constant, 7/10, ↑ with sitting/moving, no relief with ↑'ing doses of HM
- Feeling confused at times over the past week
- *Is this pt delirious?*

DSM-IV criteria for delirium

A Disturbance of consciousness with reduced clarity of awareness and decreased ability to focus, sustain or shift attention

B Cognitive change or perceptual disturbance, not better explained by a pre-existing or evolving dementia

C Acute onset (hours to days) and fluctuating course

D Caused by a general medical condition

Clinical features of delirium: neuropsychiatric/behavioural

Symptom	Freq.
– Sleep-wake cycle disturbance	97%
– Motor agitation	62%
– Motor retardation	62%
– Language	57%
– Thought process abnormalities	54%
– Lability of affect	53%
– Perceptual disturb./hallucinations	50%
– Delusions	31%

Clinical features of delirium: cognitive

Symptom	Freq.
– Attention	97%
– Long-term memory	89%
– Short-term memory	88%
– Visuospatial ability	87%
– Orientation	76%

Meagher DJ et al. Br J Psychiatry 2007; 190:135-141

Subtypes of delirium

	Psychomotor activity	Level of consciousness
Hypoactive/hypoalert	↓	↓
Hyperactive/hyperalert	↑	↑
Mixed	↓/↑	↓/↑

Case (cont'd)

- Pt is mildly drowsy
- Sensation of standing when he is lying in bed
- Folstein MMSE is 25/30 (expected normal 27/30)
- *Why is it relevant to identify delirium in this pt?*

Significance of delirium in palliative care patients

- Frequent occurrence
- Significant impact on patient, family and staff
- Under-diagnosed
- Complicates assessment of symptoms
- Often reversible

Frequency of delirium

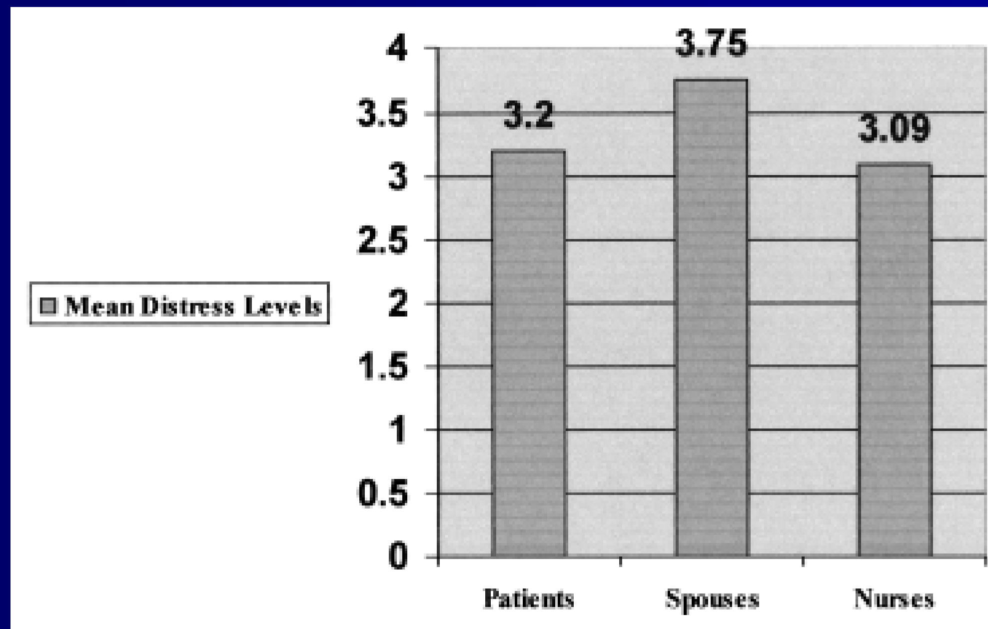
- Varies with population, method of assessment
- Almost 90% of advanced cancer patients
- Increases as death approaches

Impact of delirium

- Distressing for patient, family, staff
- Ability to communicate with loved ones is impaired (“double bereavement”)
- Participation in decision-making is hindered

Distress related to delirium

- 101 ca. pts recovered from delirium
- 54 pts recalled experience



Breitbart W et al. Psychosomatics 2002; 43: 183-194

Distress related to delirium (cont'd)

- 200 caregivers of advanced cancer pts
- 38 caregivers perceived pts to be in delirium → 12 times more likely to have generalized anxiety disorder than caregivers who did not perceive pts to be in delirium

Buss MK et al. J Palliat Med 2007; 10:1083-1092

Underdiagnosis of delirium

- 1/3-2/3 of cases misdiagnosed, diagnosed late, or not diagnosed at all
- Contributing factors
  - Fluctuating symptoms
  - Hypoactive/hypoalert subtype
  - Failure to systematically assess cognitive function
  - Overlap with other syndromes

What is the best tool for identifying delirium?

- >10 validated tools (e.g. DRS, CAM, MDAS) – no consensus
- Main point: use tool consistently and recognize limitations
- Folstein MMSE
  - Assesses cognition but not other aspects of delirium → false negatives

Hjermstad MJ et al. Palliat Med 2004; 18:494-506

Red flags for delirium

- Suspect delirium when
  - ↑ in previously stable pain
  - ↑ pain at night
  - ↓ mood

Differential diagnosis

- Dementia
  - Slow onset, level of consciousness intact
- Depression
  - Slow onset, level of consciousness intact, perceptual disturbance uncommon
- Psychosis
  - Level of consciousness and cognition intact

Delirium and pain assessment

- Patient’s pain report is unreliable
- Need to distinguish pain from agitation
- Disinhibition → exaggerated pain expression

Distinguishing pain from agitation

- Did the patient have the pain before the delirium?
- Is the patient able to localize the pain in a consistent manner?
- Does the pain respond to analgesics? Does it respond to neuroleptics?
- What is the patient’s level of consciousness?

Reversibility of delirium

- Approximately 50% of episodes may be reversible
- Reversibility rate decreases with subsequent episodes

Lawlor PG et al. Arch Int Med 2000; 160: 786-794

Common reversible causes of delirium

- Usually multifactorial (median 3 causes)
- Medications
  - Opioids
  - Benzodiazepines
  - Antidepressants
  - Anticholinergics
  - Antihistamines
  - Corticosteroids
- Infection

Common reversible causes of delirium (cont’d)

- Dehydration
- Metabolic
  - ↑Calcium
  - ↓Sodium
  - Renal failure
- Hypoxia
- Withdrawal (nicotine, EtOH, BDZ)
- CNS metastases

Case (cont'd)

- Meds: HM IR 10 mg po q4h
  HM IR 5 mg po q1h prn (x6)
  Temazepam 60 mg po qhs (40 ys.)
  IV fluids
- Opioid hx: Vivid dreams on OX, irritability on MO
- Habits: Previous smoker. No EtOH.

Case (cont'd)

- No symptoms or signs infection
- Occasional myoclonus
- O2 sat 93% RA
- Lab: CBC, chemistry normal
- *How would you manage this pt?*

Approach to management of delirium

- Diagnose (screen)
- Identify and address reversible causes, *in accordance with goals of care*
- Treat symptoms with non-pharmacological and pharmacological measures
- Educate and support family

Address underlying cause(s)

- Consider reducing or switching opioid
- Minimize psychotropic medications
- Correct dehydration and metabolic abnormalities
- Consider antibiotics if infection suspected
- Correct hypoxia
- Address withdrawal
- Consider steroids/RT if CNS metastases suspected/documented

Case (cont'd)

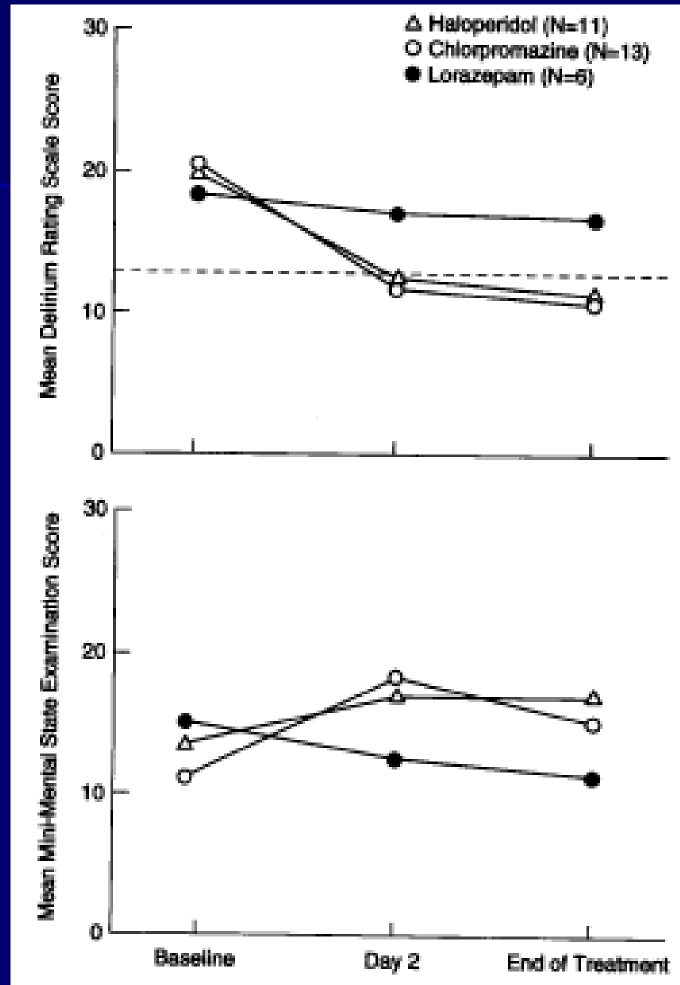
- Add dexamethasone 10 mg bid and reduce HM to 8 mg po q4h ATC
- Reduce temazepam to 30 mg po qhs
- *What symptomatic measures would you apply?*

Symptomatic treatment: non-pharmacological

- Structure and routine
- Quiet, well-lit room
- Proximity to nursing station
- Visible clock and calendar
- Familiar objects and people
- Continuity of nursing staff
- Calm, respectful attitude
- Simple explanations

Symptomatic treatment: pharmacological

- Only one RCT in palliative care setting
  - 30 pts with AIDS and delirium
  - Haloperidol vs. chlorpromazine vs. lorazepam



Breitbart et al. Am J Psychiatry 1996; 153: 231-237

Typical antipsychotics

- Haloperidol
  - Advantages: less sedating, convenient dosing
  - Disadvantages: ↑ extrapyramidal side effects with higher doses
- Phenothiazine (e.g. methotrimeprazine)
  - Advantages: more sedating
  - Disadvantages: anticholinergic properties may aggravate delirium

Atypical antipsychotics

- Only 2 RCTs of risperidone/ olanzapine vs haloperidol in non-palliative setting
  - Advantages: equivalent efficacy, less EPS
  - Disadvantages: limited evidence, less convenient dosing, expense

Lonergan E et al. Cochrane Database of Systematic Reviews 2007

Education and support of family

- Acknowledge their distress
- Explain delirium
- Help them to differentiate between agitation and pain
- Provide guidance re role as surrogate decision-makers (what do you think your loved one would want in this situation?)

Case (cont'd)

- Haloperidol 1 mg po/sc q12h ATC and q1h prn
- Severe agitation overnight
- ↓ Dexamethasone to 4 mg bid, ↑ temazepam to 45 mg qhs
- Switch opioid to fentanyl infusion
- Start methotrimeprazine 12.5 mg po/sc q8h ATC and q1h prn

Case (cont'd)

- Ongoing agitation despite ↑ methotrimeprazine to 25 mg po/sc q8h ATC and q1h prn
- *What other options are available?*

Palliative sedation

- Process of inducing/maintaining deep sleep in order to relieve refractory symptoms in pts who are close to death
- Most common indications: delirium, dyspnea
- ?Risk of hastening death → no evidence
- Midazolam: benzodiazepine with short t1/2 → easily titratable by sc infusion

Communicating with family about palliative sedation

- Discuss proactively
- Review understanding of illness/prognosis, goals of care
- Sedation used only if symptoms refractory to all other measures
- Patient will lose ability to communicate
- Usually irreversible, with death from underlying illness occurring within days
- Not euthanasia

Case (cont'd)

- Not appropriate for palliative sedation (life expectancy months)
- Zuclopenthixol 75 mg IM → effective for 48 hours

Zuclopenthixol acetate

- Typical antipsychotic agent with affinity for D1 and D2 receptors
- Highly sedating
- 50-150 mg IM q2-3d

Tarumi Y et al. J Pain Symptom Manage 2008; 35:336-339

Case (cont'd)

- Transfer to TPCU
- Switch to methadone, ↑ zuclopenthixol to 150 mg q2d
- Remains confused, but agitation settled → transfer to local hospital

Objectives revisited

By the end of this session, the attendee will be able to:

- Define and characterize delirium
- Describe the significance of delirium
- Outline an approach to the management of delirium

Additional reading

- Breitbart W, Alici Y. Agitation and delirium at the end of life. JAMA 2008; 300:2898-2910

Questions?