

Palliative Care Tip – Issue #1: DELIRIUM IN PATIENTS WITH ADVANCED CANCER AND THOSE WHO ARE IMMINENTLY DYING. February, 2019.

Background

- Delirium is a common neuropsychiatric condition characterized by acute onset of change in attention or awareness, accompanied by change in cognition. Delirium can signify an acute medical emergency.
- Impact on caregivers: high level of distress, anxiety, and other negative emotions (fear, embarrassment, anger sadness and guilt) experienced and affected relationships. Clearer information about delirium and advice on how to respond to person with delirium is desired.¹
- Impact on symptom management: emotional lability may trigger increased symptom expression.²
- Prevalence:
 - In advanced cancer in palliative care unit: 30-40% at admission.^{3,4,5} Up to 90% at the end of life.⁶
 - Over 50% of delirium was unrecognized by primary care providers in hospitalized older adults.^{7,8}
 - When applied CAM (confusion assessment methods) without a formal cognitive assessment (Mini-Mental State Exam), the risk for unrecognized was 20-fold when 4 risk factors (hypoactive delirium, ≥80 y, visual impair, dementia) present.⁷
- Predisposing factors: older age, cognitive impairment, multiple comorbidities
- Classification (motor subtypes): hypoactive; mixed; hyperactive

Approach

- Step 1. Prevention: orientation and therapeutic activities, fluid and electrolyte balance, early mobilization, feeding assistances, vision and hearing aids, sleep enhancement, O₂ delivery to the brain, pain management, reduction of psychoactive drugs, bowel and bladder function, infection prevention.³
- Step 2. Screening: maintain a high index of suspicion
 - Bed-side assessment (Nu-DESC, CAM, SQiD)^{7,9}
 - Assessment of severity: CAM-S has strong psychometric performance and high predictive validity for important clinical outcomes related to delirium, including length of stay, hospital costs, nursing home placement and death.¹⁰
- Step 3. Diagnosis: comprehensive history, physical exam. An acute change in mental status from baseline may distinguish from other conditions such as dementia, depression and psychosis.
- Step 4. If appropriate for goals of care, investigate and address precipitating factors.
 - Precipitating factors: infections, metabolic derangement, drugs
 - Tests: neuroimaging, electrolytes, metabolic derangements, infection or organ failure, etc; lumbar puncture may be considered if suspicion of meningitis.
 - Other conditions presenting with symptoms of delirium: hepatic, uremic encephalopathy, acute drug intoxication, alcohol withdrawal (delirium tremens), Wernicke-Korsakoff syndrome, etc.
- Step 5. Symptom management:
 - Non-pharmacological: calm environment, clocks, calendar, family objects from home, limit room and staff changes, regular reorienting, low level of noise, light, interruption (vitals, medications, procedures) at night, activities during daytime.³
 - Pharmacotherapy: Current recommendations reserve pharmacotherapy (antipsychotics and other sedating agents) for severe agitation that poses risk for patient or staff safety or threatens interruption of essential medical therapies. Systematic review has not found supportive evidence for antipsychotics for treatment of delirium in hospitalized non-ICU patients.¹¹ Antipsychotics have the potential to cause harm (e.g. extrapyramidal side effects, QT prolongation, dysrhythmias, sudden death, etc. even short term use).

EDMONTON ZONE – PALLIATIVE AND END OF LIFE CARE

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- American Geriatric Society recommends against antipsychotics for treating older adults with hypoactive delirium.¹²
 - A pharmacovigilance study (N=218) demonstrated antipsychotics and sedating agents for hypoactive delirium in advanced cancer worsened especially those death expected within a few days, and with organ failure.¹³ Another trial in mixed delirium in advanced cancer and imminently dying revealed non-superiority in haloperidol or risperidone compared with placebo.¹⁴
 - If antipsychotics are required, use low doses (eg. oral haloperidol 0.5-1.0 mg twice daily, methotrimeprazine 2.5-5.0 mg, risperidone 0.5 mg twice daily, olanzapine 2.5 to 5.0 mg once daily, quetiapine 25 mg twice daily, lorazepam 0.5-1.0 mg orally with additional doses every 4 hours as needed, trazadone 25-150 mg orally at bed time)^{3,15}
- Step 6. Educate and support family.

References

1. Finucane AM, et al. *The experiences of caregivers of patients with delirium, and their role in its management in palliative care settings: an integrated literature review* *Psychooncology* 2017;26: 291-300.
2. Hui D, et al. *A personalized approach to assessing and managing pain in patients with cancer.* *J Clin Onc* 2014;32:1640-1646.
3. Inouye SK. *Delirium in older persons.* *N Engl J Med* 2006;354:1157-1165.
4. Centeno C, et al. *Delirium in advanced cancer patients.* *Palliat Med* 2004;18:184-194.
5. Siddiqui N, et al. *Occurrence and outcome of delirium in medical in-patients: a systematic literature review.* *Age Ageing* 2006;35:350-364.
6. Hosie A, et al. *Delirium prevalence, incidence, and implications for screening in specialist palliative care inpatient settings: a systematic review.* *Palliative Med* 2013;27(6):486-498.
7. Inouye SK, et al. *Nurses' recognition of delirium and its symptoms.* *Arch Intern Med* 2001;161(20):2467-2483.
8. de la Cruz M, et al. *The frequency of missed delirium in patients referred to palliative care in a comprehensive cancer center.* *Support Care Cancer* 2015;23(8):2427-2433.
9. Lenard MM, et al. *Practical assessment of delirium in palliative care.* *J Pain Symptom Manage* 2014;48:176-190.
10. Inouye SK, et al. *The CAM-S: development and validation of a new scoring system for delirium severity in 2 cohorts.* *Ann Intern Med* 2014;160(8):526-533.
11. *Cochrane Database of Systematic Reviews 2018, Issue 6. Art. No.: CD005594. DOI: 10.1002/14651858.CD005594.pub3.*
12. *American Geriatrics Society abstracted clinical practice guideline for postoperative delirium in older adults.* *J Am Geriatr Soc* 2015;63:142-150.
13. Okuyama T, et al. *Current pharmacotherapy does not improve severity of hypoactive delirium in patients with advanced cancer: pharmacological audit study of safety and efficacy in real world.* *Oncologist* 2019; Jan 4. pii: theoncologist.2018-0242. doi: 10.1634/theoncologist.2018-0242.
14. Agar MR, et al. *Efficacy of oral risperidone, haloperidol, or placebo for symptoms of delirium among patients in palliative care: RCT.* *JAMA Intern Med* 2017;177:34-42.
15. Hohl CM, Stenekes S, Harlos MS, et al. *J Palliative Care* 2013 Autumn;29(3):187-185.

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