JOURNAL OF GERIATRIC EMERGENCY MEDICINE

April 7, 2021

Volume 2, Issue 3- Topic Supplement





Palliative Care in the Emergency Department: Simplified Symptomatic Management

Phillip D. Magidson, MD MPH, Danya Khoujah MBBS MEHP, Robert S. Anderson Jr., MD

You are working the Friday overnight, single coverage shift at your community emergency department (ED). One patient needs your help right now and another needs a plan to get them through the weekend. Both need your expertise.

Box 1: Patient Scenarios

Case One: In extremis, needs help now.

The charge nurse calls you to the resuscitation bay to assess a woman presenting with "respiratory distress." This is a 97-year-old with a history of mild dementia and chronic obstructive pulmonary disease who is currently on home hospice for stage IV metastatic breast cancer. She presents in obvious distress crying out in pain, and her daughter is at the bedside. The daughter reports that the patient has been on home hospice for a week with worsening bilateral hip pain, nausea, vomiting, and shortness of breath. The patient's family and home hospice team have been working on symptom management at home. However, the patient is progressively more uncomfortable. This evening, the patient's family called 911 out of desperation as the patient's condition is deteriorating.

You note a cachectic, older woman, moaning in pain. She appears delirious and is not consistently answering your questions. She will only tell you her stomach hurts and she is having trouble breathing. Her vital signs are notable for a heart rate of 109 beats per minute, blood pressure of 108/60 mmHg, oxygen saturation of 91% on room air, and a temperature of 36.7°C. Her physical exam is notable for bilious emesis on her nightgown, bilateral crackles, tachycardia, and abdominal distention with diffuse tenderness. She has exquisite tenderness on palpation of her bilateral iliac crests, sites of known bone metastasis. The patient's physician orders for life-sustaining treatment (POLST) states that she has a Do Not Resuscitate/Intubate (DNR/DNI) order with comfort care measures only.

Case Two: Suffering, needs a plan.

Meanwhile, a 78-year-old retired mechanic with metastatic prostate cancer quietly checks in. Triage notes reads "Back pain, constipation". His vital signs are reassuring but he is clearly suffering; laying still on the bed, uncomfortable appearing, and intermittently moaning. His neurologic exam is normal and there is no stool in the rectal vault. His labs, aside from mild hypercalcemia, are normal. He was diagnosed with prostatic cancer a year ago but, despite treatment, recent scans showed spinal metastasis. He was prescribed tramadol two weeks ago by his primary care doctor. His other medications include metformin, lisinopril, and zolpidem. He has not had a bowel movement in a week and his back pain is getting worse. His primary care doctor is not on call this weekend.

DISCUSSION

Older adults in the ED are more likely than their younger counterparts to suffer from chronic, debilitating illnesses. As the population ages, ED physicians will face a growing need to master advanced symptom management. This includes symptoms of both chronic disease and those at the end of life. 1,2,3 Consultation with specialists such as pain management or palliative care, as well as collaboration with hospice teams are important, but may not always be available. Acquiring palliative care expertise is an opportunity for emergency physicians to reduce discomfort and improve the quality of life for ED patients with serious illness. In this short discussion, we outline some common interventions that can alleviate suffering and address subacute issues in the ED; treatments should be tailored to the individual patient based on goals of care and medical history. As with all interventions, the risks, benefits, and alternatives should be discussed with patient or surrogate decision maker.

Table 1: SYMPTOMATIC MANAGEMENT OPTIONS			
Symptom	Management Options*		
Dyspnea	Acute	Subacute	
	 Sensation of breathlessness: bedside fan.^{4,5} Morphine: 1-4 mg IV every 1-2 hours as 	Humidification and cooler room temperature ⁶	
	needed; may require an infusion (start at 1mg/h)	 Dyspnea associated with anxiety: low- dose lorazepam (0.25-1mg IV q6h as needed)**7 	
		 In patients eligible for discharge: sustained release morphine (10mg PO once daily).^{8,9} 	
Pain	Acute	Subacute	
	Continuous infusion of opioid, e.g. morphine 1-2mg/hr. Does depends on prior opioid use. ¹⁰	Addition of long-acting opioids (morphine or oxycodone) to improve overall pain control. Consult pain	
	 Low dose ketamine for pain of advanced malignancy and associated depression 	management or an opioid conversion table. 14,15	
	(0.2mg/kg/h) (minimal evidence; use with caution due to psychoperceptual adverse effects) ^{11,12,13}	 Topical lidocaine or NSAIDs (e.g. diclofenac) for localized pain and inflammatory conditions.^{16,17} 	
Constipation	Routine bowel regimen, e.g. standing docusate BID) for older adults prone to constipation.	e (1 to 2 tablets BID) and senna (1 to 2 tablets	
	Polyethylene glycol 17 gm TID as needed		
	Opioid-induced constipation:		
	 Aggressive standing regimens including polyethylene glycol or lactulose Methylnaltrexone (0.15mg/kg).¹⁸ (May be restricted in some EDs). 		
	 Manual disimpaction, if applicable (risks include bleeding, iatrogenic perforation, anal fissures, and syncope from vagal stimulation)¹⁹ 		
Delirium	Low dose haloperidol (0.5-1mg) sublingually q4 hours prn. ²⁰		
	Non-pharmacological interventions and avoidance of antipsychotics is preferred. ²¹		
Nausea/ vomiting	Topical scopolamine patches (1.5mg q72h) especially in patients without IV access or with a plan for discharge. ²²		
	Haloperidol (0.5-2mg q 4 to 6 h) PO or IM (controversial). ^{23,24}		
	Lorazepam (0.5 to 2mg q2 to 6 h) PO or IV. ²²		
	 Dexamethasone (2 to 8mg q8 h) PO or IV, especially in malignant bowel obstruction-related symptoms.²⁵ 		

^{*} Medication dosages should be individualized for each patient.

Abbreviations: BID, twice daily; ED, emergency department; IM, intramuscular; IV, intravenous; NSAIDs, non-steroidal anti-inflammatory drugs; PO, orally; q, every; TID, three times daily.

^{**} Use with caution as benzodiazepines increase risk of delirium in older adults.

Box 2: Patient Scenario Resolutions

Case One: In extremis, needs help now.

You express condolences to daughter that her mother appears to be at the very end of life and confirm the family's desire for aggressive symptom management. You huddle with the staff and family and outline a treatment plan. You explain that focus will be on treating her breathlessness which appears to be the main cause of her distress. You remove all monitoring equipment and quiet the room. A bolus of morphine IV is ordered while a morphine drip is prepared. Someone hunts for a fan. You also have lorazepam ready if the morphine is not sufficient. After two doses of 4gm IV morphine, the patient appears more comfortable. A drip is started at 1mg/hr. You ask if daughter would like to summon other family or clergy. The patient is accepted for admission but dies peacefully in the ED. You reconvene staff to the bedside with the family and hold a moment of silence.

Case Two: Suffering, needs a plan.

You review the electronic record and learn that outpatient practitioners have started discussing palliative options. However, the patient's comments to you indicate that he is struggling with his diagnosis and prognosis. You feel at loss for words but then remember the three W's framework often used in palliative care: I wish, I worry, I wonder. You tell him you wish he wasn't suffering, that you worry he's going to have make some hard decisions going forward, and you wonder how you can best help him now. You partner with him to come up with a short-term plan. You share your concerns about the challenges of safe pain management with opioids in older adults; over sedation, confusion, falls, and constipation. However, you also recognize the value of opioids in treating cancer pain. You advise him to discontinue the tramadol and zolpidem. You start a standing acetaminophen dose at 1,000mg TID, topical non-steroidal anti-inflammatory drugs, and oxycodone 5 to 10 mg every 4 hours as needed. For his constipation, you advise polyethylene glycol 17 gm TID until he has a bowel movement. Finally, you connect with the on-call oncologist to relay your plan and need for prompt follow up in the coming week. You specifically mention that he needs help accepting his diagnosis, understanding his prognosis, and managing his symptoms.

KEY WORDS

Palliative Care, Pain Management, Geriatrics, Dyspnea, Delirium

AFFILATIONS

Danya Khoujah MBBS, MEHP, FACEP, FAAEM	Attending Physician, MedStar Franklin Square Hospital Adjunct Volunteer Assistant Professor, University of Maryland School of Medicine Department of Emergency Medicine Baltimore, MD
Phillip D. Magidson, MD MPH	Department of Emergency Medicine Division of Geriatric Medicine and Gerontology Johns Hopkins University School of Medicine
Robert S. Anderson Jr., MD	Departments of Emergency Medicine and Internal Medicine Maine Medical Center

CONFLICT OF INTEREST

Authors have no conflicts to report.

REFERENCES

- 1. Lowery DS, Quest TE. Emergency medicine and palliative care. Clin Geriatr Med. 2015;31(2):295-303. doi:10.1016/j.cger.2015.01.009
- 2. McEwan A, Silverberg JZ. Palliative Care in the Emergency Department. Emerg Med Clin North Am. 2016;34(3):667-685. doi:10.1016/j.emc.2016.04.013
- 3. Smith AK, Fisher J, Schonberg MA, et al. Am I doing the right thing? Provider perspectives on improving palliative care in the emergency department. Ann Emerg Med. 2009;54(1):86-93.e1. doi:10.1016/j.annemergmed.2008.08.022
- 4. Kako, J, Morita T, Yamaguchi T, et al. Fan therapy is effective in relieving dyspnea in patients with terminally ill cancer: a parallel-arm, randomized controlled trial. J Pain Symptom Manage. 2018;56(4):493-500.
- 5. Kamal, AH, Maguire JM, Wheeler JL, et al. Dyspnea review for the palliative care professional: treatment goals and therapeutic options. J Palliat Med. 2012;15(1):106-114.

- 6. Ross DD, Alexander CS. Management of common symptoms in terminally ill patients: Part II. Constipation, delirium and dyspnea. Am Fam Physician. 2001;64(6):1019-1026.
- 7. Clemens KE, Klaschik E. Dyspnoea associated with anxiety-symptomatic therapy with opioid in combination with lorazepam and its effect on ventilation in palliative care patients. Support Care Canc 2001;19(12):2027-33.
- 8. Currow, DC, McDonald C, Oaten S, et al. Once-daily opioids for chronic dyspnea: a dose increment and pharmacovigilance study. J Pain Symptom Mange. 2011;42(3):388-399.
- 9. Light RW, Muro JR, Sato RI, et al. Effects of oral morphine on breathlessness and exercise tolerance in patients with chronic obstructive pulmonary disease. Am Rev Respir Dis. 1989;139(1):126–133.
- 10. Glare P, Walsh D, Groh E, et al. The efficacy and side effects of continuous infusion intravenous morphine (CIVM) for pain and symptoms due to advanced cancer. Am J Hosp Palliat Care. 2002;19(5):343-50.
- 11. Sexton J, Atayee RS and Bruner HC. Case report: ketamine for pain and depression in advanced cancer. J Palliat Med. 2018;21(11):1670-1673.
- 12. McQueen AL, Baroletti SA. Adjuvant ketamine analgesia for the management of cancer pain. Ann Pharmacother. 2002;36(10):1614-9.
- 13. Motov S, Mann S, Drapkin J, et al. Intravenous subdissociative-dose ketamine versus morphine for acute geriatric pain in the Emergency Department: A randomized controlled trial. Am J Emerg Med. 2019;37(2):220-227. doi:10.1016/j.ajem.2018.05.030
- 14. Rauck RL. What is the case for prescribing long-acting opioids over short-acting opioids for patients with chronic pain? A critical review. Pain Pract. 2009;9(6):468–479.
- 15. Paice JA, Noskin GA, Vanagunas A, et al. Efficacy and safety of scheduled dosing of opioid analgesics: a quality improvement study. J Pain. 2005;6(10):639–643.
- 16. Zacher J, Altman R, Bellamy N, et al. Topical diclofenac and its role in pain and inflammation: an evidence-based review. Curr Med Res Opin. 2008;24(4):925-50.
- 17. Gammaitoni AR, Alvarez NA, Galer BS. Safety and tolerability of the lidocaine patch 5%, a targeted peripheral analgesic: a review of the literature. J Clin Pharmacol. 2003;43(2):111-7.
- 18. Chamberlain BH, Cross K, Winson JL. Methylnaltrexone treatment of opioid-induced constipation in patients with advanced illness. J Pain Symptom Manage. 2009;38(5):683-90.
- 19. Hussain ZH, Whitehead DA, Lacy BE. Fecal impaction. Curr Gastroenterol Rep. 2014;16(9):404.
- 20. Albert RH. End-of life care: managing common symptoms. Am Fam Physician. 2014.90(1):26-32.
- 21. Agar MR, Lawlor PG, Quinn S. Efficacy of oral risperidone, haloperidol, or placebo for symptoms of delirium among patients in palliative care: a randomized clinical trial. JAMA Intern Med. 2017;177(1):34-42.
- 22. Markowitz AJ, Rabow MW. Management of intractable nausea and vomiting in patients at the end of life: "I was feeling nauseous all of the time...nothing was working." JAMA. 2008;299(15):1826.
- 23. Büttner M, Walder B, von Elm E, et al. Is low-dose haloperidol a useful antiemetic? A meta-analysis of published and unpublished randomized trials. Anesthesiology. 2004;101(6):1454–1463.
- 24. Murray-Brown F, Dorman S. Haloperidol for the treatment of nausea and vomiting in palliative care patients. Cochrane Database Syst Rev. 2015;2015(11):CD006271. Published 2015 Nov 2. doi:10.1002/14651858.CD006271.pub3
- $25. \ \ Feuer DJ, Broadley KE. Corticosteroids for the resolution of malignant bowel obstruction in advanced gynaecological and gastrointestinal cancer. Cochrane Database Syst Rev. 2000; (2): CD001219.$