

JOURNAL OF GERIATRIC EMERGENCY MEDICINE: Journal Club

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The Journal of Geriatric Emergency Medicine is happy to present succinct expert reviews of high impact articles in GEM. Reviews are provided by members of both the SAEM Academy of Geriatric Emergency Medicine, and the ACEP Geriatric Emergency Medicine Section. This GEM Journal Club focuses on the Interface of Emergency Medicine and Palliative Care. We feature a patient case showing how knowledge of the featured articles can improve clinical care.

TOPIC

The Interface of Emergency and Palliative Care

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INTRODUCTION

The SARS-CoV-2 pandemic has taught emergency medicine providers that palliative and goals of care discussions should be at the forefront of most critically ill ED patient presentations. We summarize three articles that discuss the interfacing of palliative and emergency medicine. This multidisciplinary journal club primarily focused on the initiation of palliative care utilization in the ED. As discussed in this article, randomized studies have demonstrated that integration of palliative care into the ED increases the frequency of palliative care consults and improves a patient's self-reported quality of life¹. Other studies have suggested that palliative care is not well-incorporated into emergency medicine training or practice.

CASE

A 79-year-old male with a history of stage 4 small cell lung cancer, not currently on chemotherapy or radiation, presents to the emergency department (ED) for shortness of breath. Upon presentation, Pulse Oximetry = 80% on RA with improvement to 88% on a non-rebreather. Chest x-ray is significant for a large left-sided pleural effusion and a CT pulmonary angiogram is negative for pulmonary embolism. This is his third presentation for a similar complaint and recurrence of the pleural effusion. During his first presentation, he required ED intubation due to hypoxia and airway protection. When questioned about his code status in the event he would need an intubation or mechanical ventilation again, he states that he is unsure if he would want to go through an intubation again. He states that he lives alone and ran out of oxygen one week ago. He has no one to contact and calls for an ambulance when he is short of breath. The ED resident notes that he is not currently seeing an outpatient palliative care provider or a geriatrician.

Article 1
Prognosis After Emergency Department Intubation to Inform Shared Decision-Making ¹
Presenters
Phraewa Thatphet, MD and Thiti Wongtangman, MD
What Question Did this Investigation Aim to Answer?
What is the in-hospital mortality rate of older adults after undergoing emergency intubation?
What Study Design Did the Authors Choose?
The author conducted a retrospective cohort study using Vizient's database, which included 226 hospitals (total 35,036 patients) data of patients aged 65 and older who were intubated in the ED from January 1, 2008 to December 31, 2015.
How did the Authors Interpret the Results?
The outcomes of patients aged 65 and older who were intubated in the ED were categorized into 3 groups; survived and discharged to home (27%), survived and discharged to a location other than home (40%), and died in hospital (33%). The factors associated with a higher in-hospital mortality rate were older than 89 years old (OR=2.6), transferred from another hospital (OR=1.7), had CCI>4 (OR=1.5), admission diagnoses of cerebrovascular disease and sepsis (OR=2.4, OR=1.5). The factors associated with a lower odds were black patients (OR=0.8), patients came from the Midwestern Region (OR=0.9), admission diagnoses of congestive heart failure (CHF, OR=0.5), respiratory failure (OR=0.5), and altered mental status/seizure (OR=0.7). To improve shared decision making between clinicians and patients/surrogates this study can help clinicians and patients/surrogates make decisions regarding intubation for their patients/their loved ones.
Discussion/How Might this Study Affect your Clinical Practice in the Emergency Department?
This study shows the factors associated with both higher and lower odds of in-hospital mortality for the adults aged 65 and older who meet intubation criteria in the ED. As we know from prior studies, intubations can lead to prolonged mechanical intubation, ventilator associated pneumonia, and a high probability of living in a long-term care facility. These factors can help emergency physicians counsel patients/surrogates in the shared decision-making regarding ED intubation for older adults. Furthermore, this would help surrogates understand and prepare loved ones after the patients have been discharged to a location other than home. However, this study did not show post-hospitalization outcomes, compare patients who refused intubation and intubated patients, or pre-post intubation status. These data would help in shared decision-making and should be further explored in future studies.

Article 2
Palliative Care in the Emergency Department: A Survey Assessment of Patient and Provider Perspective ²
Presenters
Anita Chary, MD PhD, Alexander Zirulnik, MD MPH
What Question Did this Investigation Aim to Answer?
What are ED patients' and providers' perceptions of barriers to outpatient palliative care consultations and referrals from the ED?
What Study Design Did the Authors Choose?
At a single academic ED, the authors conducted a written survey with a convenience sample of 51 ED patients deemed at risk of functional decline by clinician gestalt or a scoring system (the Elderly Risk Assessment) (67% response rate). The authors also conducted a web-based survey with a convenience sample of 48 emergency clinician respondents from the same department (47% response rate).
How did the Authors Interpret the Results?
Nearly half of patients reported needing more resources and care at home to prevent hospital visits (44%) and had visited the ED at least once due to lack of resources at home (49%). Almost all providers reported caring for patients who would benefit from palliative care consultation (98%). Patients and providers alike perceived patient understanding of palliative care and access to appointments as barriers to consultation. About half of emergency providers additionally cited emergency provider understanding of palliative care as a barrier (52%). From these findings, the authors highlighted lack of understanding of palliative care and lack of access to appointments as contributors to underutilization of ED referral to outpatient palliative care.
Discussion/How Might this Study Affect your Clinical Practice in the Emergency Department?
This study suggests a role for increased education of patients and EM providers about palliative care as well as increased referral of ED patients to outpatient palliative care consultations. Further training or continuing medical education opportunities could address providers' self-identified lack of comfort with palliative care and goals-of-care discussions. However, results from this single academic site may not be generalizable to community EDs. The absence of demographic information about patient and provider respondents raises questions about how patients' sociocultural identities and providers' training backgrounds affect understandings of and acceptance of referrals to palliative care; these attributes may also vary significantly by ED site. As understanding of palliative care is cited as a barrier to consultation, qualitative research could better characterize patients' and providers' perceptions and meanings associated with palliative care.

Article 3
Emergency Department Admission Triggers for Palliative Consultation May Decrease Length of Stay and Cost ³
Presenters
Brian Gacioch, MD
What Question Did this Investigation Aim to Answer?
Does early ED consultation of palliative care have direct effects on hospital length of stay, direct hospital costs, and effect on workflow for both emergency medicine and palliative care end-users of the system?
What Study Design Did the Authors Choose?
This study was a quasi-experimental prospective cohort design, conducted over an 18-month period in a community academic center with over 70,000 annual ED visits. Patients screened in if 3 of 3 inclusion criteria were met: presence of an end stage illness as determined by the treating emergency physician, functional limitation to mostly bed or chair, and the physician would not be surprised if the patient died during this admission. There were no exclusion criteria. Workflow impacts for both emergency medicine and palliative care clinicians were carefully considered to minimize added work or disruption in patient flow, with a goal to identify patients who would likely later receive palliative care consultation and initiate that process earlier. Subjects were matched for financial analysis by gender, age (within 5 years), and case mix index within 0.25.
How did the Authors Interpret the Results?
Over 18 months, total palliative care consult volume increased 2.9%, consistent with prior annualized growth. The percentage of consults initiated in the ED increased from 7% to 19% of total, and floor decreased from 76% to 57%. ICU-initiated consults remained unchanged. For patients discharged alive, median hospital LOS was 3 days for ED-initiated consults vs 7 days for floor -initiated ($p < 0.001$) and 7 days for ICU ($P < 0.001$). For inpatient deaths, median LOS was 1.5 days for ED consults vs 8 for floor ($p < 0.001$) and 7 for ICU ($p < 0.001$). Median direct hospital costs were \$5,578 for ED consults vs \$14,660 for floor ($p < 0.001$) and \$20,716 for ICU ($p < 0.001$). Mean direct costs were \$9,725 for ED vs \$21,779 for floor ($p < 0.001$) and \$28,577 for ICU ($p < 0.001$).
Discussion/How Might this Study Affect your Clinical Practice in the Emergency Department?
The authors concluded that over the 18-month study period palliative care consult volume grew sustainably at the previous annualized rate, indicating that ED-initiated consult shifted timing earlier for appropriate consults, without adding overall volume. ED-initiated consult decreased LOS, and direct costs, by 50-75%. All stakeholder goals were met, without reported grievances. Limitations included the lack of inclusion of a third matched arm who received no palliative care consultation, that direct costs represent hospital savings in a value-based care model but not necessarily in a fee for service model, and that there was a fairly high rate of data loss for financial analysis due to inadequate matching (9% of ED patients, 26% of floor patients, 45% of ICU patients), that the sensitivity and specificity of the ED consult trigger criteria could not be determined, and that generalizability of results to centers with less integration of palliative care services is unclear. Overall, this was a thoughtful and pragmatic study that prioritized ED and palliative care end-user considerations and showed a convincing reduction in hospital LOS and cost, while adding little burden to end-users.

CASE CONCLUSION

This 79-year-old patient with a history of small cell lung cancer is presenting again to the ED for shortness of breath associated with his underlying malignancy. He is dealing with a lack of home resources (home oxygen). As noted above in the study by Woods et al, it is suggested that nearly half of the patients in that study presented at least once to the ED due to a lack of resources at home. In addition, this patient does not have an outpatient palliative care provider. Even though, a “goals of care” discussion was initiated with this patient, further ED provider training could address provider’s self-identified lack of comfort regarding palliative care discussions. This patient would certainly benefit from an ED-initiated consult to palliative care during his stay in either the ED or hospital, which would reduce his length-of-stay and meet the overall needs and goals of the patient as suggested by Wang et al. Finally, a discussion about the risks of benefits of intubation should be initiated with this patient as his disease progresses. This discussion should include the higher age-associated risk of prolonged mechanical intubation, ventilator-associated pneumonia, and the high probability of lack of independent living as studied by Ouchi et al.

The ED staff consulted palliative care and the patient decided to change his status to Do Not Intubate/Do Not Resuscitate. He was referred to home hospice and able to return home with oxygen. He passed away peacefully 3 weeks later surrounded by his family.

KEY WORDS

Palliative Care, COVID-19, Care Transitions

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AUTHOR CONFLICT OF INTEREST

No conflicts of interest to report.

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