Lack of Advance Care Planning before Terminal Oncology Intensive Care Unit Admissions

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Dear Editor:

Background

TERMINAL ONCOLOGY INTENSIVE CARE UNIT (ICU) admissions are associated with high health care costs and decreased quality of life.^{1–3} Chemotherapy can be given in noncurative settings to optimize symptom control, but use of it at the end of life does not improve longevity.⁴ Compounding this issue is the fact that many patients may not have been aware of the dismal prognosis of their cancer, due to lack of understanding or omission of information by their providers. In addition, goals of care are too often not addressed for patients at high risk of death.⁵

Methods

We carried out a retrospective review identifying patients of a large academic cancer center with metastatic solid tumors and hematologic malignancies, who were admitted to an ICU and expired inpatient between January 1, 2017 and December 31, 2018.

Results

A total of 120 patients met inclusion criteria. Median age was 58 years. Patients' genders were evenly split. Only 15.0% ($n=18$) of all patients had advance directives. The majority of patients (94.1%, $n=113$) were FULL CODE on admission. Median duration of admission was 10 days. Median time to death from ICU admission was 7.5 days. 65.0% ($n=78$) of all patients were intubated, whereas 14.2% ($n=17$) received cardiopulmonary resuscitation (CPR). All intubated patients were eventually terminally extubated or expired on the ventilator. CPR was retrospectively deemed to be potentially medically ineffective (defined as without treatment options and at the end of life)* in 82.4% ($n=14$) of patients who received CPR. 58.3% ($n=70$) of the study population had solid malignancies; of note, 97.1% ($n=68$) of

these patients were metastatic at presentation and had a median Eastern Cooperative Oncology Group (ECOG) performance status of 2. Patients with metastatic solid tumors typically have a more indolent course of progression compared with patients with hematologic malignancies. However, only 23.5% ($n=16$) had discussed goals of care or code status with their outpatient oncologists, despite many seeing them within the last month before admission (83.8%, $n=57$). Similarly, only 4.0% ($n=2$) of patients with hematologic malignancies had advance care planning discussions with their oncologists before their terminal ICU admission. 27.5% ($n=33$) of all patients had an inpatient palliative care consult. The inpatient pulmonary/critical care team had a high rate of inpatient code status transitions, with 85.8% ($n=97$) of FULL CODE admissions transitioning to do not resuscitate/do not intubate (DNR/DNI).

Conclusions

In this study of patients with advanced cancer, we observed that many patients did not engage in advance care planning discussions with their outpatient providers before their terminal ICU hospitalization, despite having regular contact with their outpatient oncologists. As a result, more than one-half of admitted patients were intubated, and 14.2% received CPR. The inpatient pulmonary/critical care team was able to conduct effective code status transition discussions for many patients, but frequently only after stabilizing them with vasopressors and endotracheal intubation. The intensity of health care utilization noted and eventual futility of critical care interventions highlight a need to optimize recognition of patients at high risk of death and to engage patients in advance care planning discussions to avoid terminal ICU admissions.

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*Medically ineffective treatment is defined as treatment that, as certified by the attending and a consulting physician to a reasonable degree of medical certainty, will neither prevent or reduce the deterioration of the health of an individual nor prevent the impending death of an individual. Health Care Decisions Act summary—Maryland Attorney General, www.marylandattorneygeneral.gov/.../HCDASummary.pdf (accessed June 6, 2019).

delivery for patients with cancer. No other disclosures were reported.

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