

DNR: Does it Mean "Do Not Treat?"

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Case Study

A 67-year-old male presented to the emergency department with coffee ground emesis for two days. Just prior to arrival, he experienced two episodes of large hematemesis. He was diagnosed with metastatic prostate cancer two weeks ago and has been taking oxycodone and ibuprofen for back pain.

The patient's heart rate was 135 and blood pressure was 86/52. Labs were normal except for a hematocrit of 27. The heart rate decreased to 108 and his blood pressure normalized after three liters of 0.9 NS IV. A NG tube was placed which drained continuous bright red blood.

An intensive care unit (ICU) bed was requested. A short time later, the nursing supervisor called to ask the patient's "Do Not Resuscitate"(DNR) status (given his history of cancer). The patient was tearful and explained he had really not thought about his wishes regarding resuscitation nor had he had a chance to discuss this with his wife. Emergency department staff members were informed the patient's DNR status was needed to assign an appropriate bed. "Per hospital policy, if the patient has a DNR order, he should not be admitted to the ICU." Staff members were instructed to hold the patient until the family arrived and a decision was made about the patient's DNR status.

Introduction

The current economic crisis in health care is a very real and highly publicized problem. The United States spends a vast majority of its health care dollars near the end of life. Detsky et al found that patients with a low chance of survival incurred twice the costs of those patients with a better chance of survival¹. ICU costs have continued to climb and now total 20% of all hospital charges in the United States. In addition, the number of ICU beds has increased disproportionately. The growth rate of

hospital beds has been 1.4% per year versus 6.2% for ICU beds¹. These dramatic shifts mandate that health care providers seriously address their duty to consider costs and resource utilization.

This issue is particularly relevant in patients with terminal illnesses where medical goals of care and human suffering are increasingly important issues. Many patients often have DNR orders to withhold CPR. In addition, goals of care may be palliative only, as many patients choose to forego aggressive medical interventions. However, many cases near the end of life involve difficult decisions if DNR status and other health care goals have not been clearly designated. Should a DNR order influence other aggressive interventions?

Discussion

"Do not resuscitate" is defined as withholding CPR after cardiac or respiratory arrest. DNR orders are often instituted when the outcome of CPR is unlikely to be beneficial or effective². Because DNR orders are often seen with patients who have terminal illnesses or are in hospice programs, the distinction between DNR orders and other limitations of medical treatment can become blurred. As a result, many health care providers often erroneously understand DNR status to imply that a patient is dying and should not undergo other life-saving interventions.

There have been several studies that demonstrate many physicians believe that DNR patients should receive less aggressive treatment. Beach and Morrison found that patients with DNR orders were less likely to be transferred to the ICU, have blood cultures drawn, undergo central lines placement and receive blood transfusions³. Another study by Keenan and Kish found a decrease in the number of physician orders written, overall chart entries, and laboratory and radiology studies performed after DNR orders were written. In addition, there were also fewer physician visits¹. Bedell et al found that some medical care was withdrawn or withheld in 28% of patients who were designated DNR⁴.

Nurses may also advocate less aggressive care for DNR patients. A survey of critical care nurses found that 72% thought that DNR orders should limit aggressive interventions and 65% thought admission to an ICU was inappropriate with a DNR order². Sherman and Branum found that nurses thought that less physical care should be given to DNR patients, including weighing them against their

wishes, performing complete physical assessments, drawing blood cultures and whether the patient should be in an ICU⁵. Henneman et al found that nurses would be less likely to perform monitoring of DNR patients, including measuring blood pressure, cardiac output, and arterial blood gases. They also responded that they would be less likely to notify physicians of changes in urine output, hypotension, pupil size and reactivity⁶.

Despite the confusion between DNR orders and palliative care, there is a clear distinction. "Do not resuscitate" orders mean only that CPR should be withheld should the patient sustain cardiac or respiratory arrest. The President's Commission on Deciding to Forgo Life-Sustaining Treatment issued a statement in 1983 that said, **"Any DNR policy should ensure that the order not to resuscitate has no implications for any other treatment decisions. Patients with DNR orders on their charts may still be appropriate candidates for all other vigorous care including ICUs."**

The AMA's Council on Ethical and Judicial Affairs echoed this concern by stating, "DNR orders only preclude resuscitative efforts and should not influence other therapeutic interventions."³

These issues are of great importance to patients and their families. DNR orders may be difficult for patients and families to understand -- there may be a fear of giving up on the patient and that the patient may be abandoned and receive substandard health care. DNR orders are very explicit and do not specify details regarding other aspects of medical treatment. The presence of a DNR order should provoke further discussion with the patient and their family regarding goals of care and what treatments the patient would or would not want to undertake. As physicians, we should renew our efforts regarding education and communication with patients and families about their disease state, diagnosis, prognosis and their goals of treatment.

In this particular case, the patient is competent to make health care decisions. He should be approached and educated about options for health care. Education should include information about DNR orders and their significance, and other potential limitations on health care, if chosen. The discussion should include the patient's goals of medical treatment. The patient should not be pressured to make a hasty decision about

important life-altering medical decisions. An appropriate course of action might be to briefly discuss options with the patient, and to suggest a plan -- such as admission, transfusion, and endoscopy -- and to honor the patient's wishes regarding such interventions.

Conclusion

Physicians and nurses often misinterpret DNR orders to preclude aggressive medical interventions. Patients with DNR orders may decide to forgo other aggressive interventions, but this cannot be assumed merely by the presence of a DNR order. DNR status indicates that CPR should be withheld in the event of cardiac arrest and nothing more. Discussion must be initiated with the patient and family to determine if further limitations of treatment are desired.

Aggressive medical care of patients with DNR orders is appropriate in many cases, and may correctly include such interventions as ICU admission, blood transfusion, surgery and other interventions.

References

1. Keenan CH, Kish SK. The influence of do-not-resuscitate orders on care provided for patients in the surgical intensive care unit of a cancer center. *Hematology and Oncology in Critical Care*. 12(3): 385-90, 2000.
2. Thibault-Prevost J, Jensen LA, Hodgins M. Critical care nurses' perception of DNR status. *Journal of Nursing Scholarship* 32(3): 259-65, 2000.
3. Beach MC, Morrison RS. The effect of do-not-resuscitate orders on physician decision-making. *Journal of American Geriatrics Society*. 50(2):2057-61, 2002.
4. Bedell SE, Pelle D, Maher PI et al. Do-not-resuscitate orders for critically ill patients in the hospital. How are they used and what is their impact. *JAMA*. 256(2):233-7, 1986.
5. Sherman DA, Branum K. Critical care nurses' perception of appropriate care of the patient with orders not to resuscitate. *Heart and Lung*. 24:321-9, 1995.
6. Henneman EA, Baird B, Bellamy PE et al. Effect of do-not-resuscitate orders on the nursing care of critically ill patients. *American Journal of Critical Care*. 3:467-72, 1994.
7. Beach MC. Are patient's DNR orders overinterpreted? They may be a marker for less-aggressive care. *HealthCare Benchmarks and Quality Improvement*. 10(2):22-3, 2003.
8. Ebell MH, Doukas DJ and Smith MA. The do-not-resuscitate order: a comparison of physician and patient preferences and decision-making. *The American Journal of Medicine*. 91:255-60, 1991.