Ethics

Eligibility for CPR: Is every death a cardiac arrest?

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Cardiopulmonary resuscitation (CPR) was originally introduced as an emergency treatment for cardiac or respiratory arrest due to "drowning, electrical shock, untoward effect of drugs, anesthetic accident, heart block, acute myocardial infarction or surgery".[1] However, current regulations[2] and the availability of CPR in all acute-care hospitals mean that if the heart stops a patient will automatically receive CPR unless he has rejected this treatment in a prior conversation.

While CPR has rescued many patients in emergency situations, the distinction between emergency "cardiac arrest" in patients expected to live and cessation of cardiorespiratory function in patients expected to die[3] has become blurred. Indeed, under present guidelines no "death" can occur without CPR being administered unless the patient has consented to a "no-CPR" order — all patients dying of all diseases, however advanced, prolonged or irreversible, will receive CPR unless they have made a request to the contrary. We believe this "CPR-by-default" practice is inappropriate for some patients and think it is time for the profession to discuss the issue and arrive at a consensus view.

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In an attempt to stimulate discussion, we are presenting the outcome of a small series of "CPR" conversations with patients known to be dying of cancer, and some of the ethical considerations involved. The conversations were held in an oncology unit and in each case the patient was aware of both the diagnosis and prognosis and knew that no further effective treatment was possible. Discussion had already been held with all the patients concerning their eventual death and whether they wished to be admitted to a palliative care unit.

Thirty-six conversations were held. Eleven (30%) ended with the patient specifically requesting CPR in the event of cardiac arrest, and this was recorded in the medical orders. In the remaining 25 (70%) the patient requested "no CPR" and this was appropriately recorded and updated weekly. The detailed case history that follows involves a patient who requested CPR.

The patient was a 27-year-old man with advanced metastatic alveolar rhabdomyosarcoma. The primary tumour had been excised 4 years previously and he had been treated with adjuvant chemotherapy. There had been local recurrence, which was treated with radiotherapy. He subsequently developed pulmonary metastases, which had been treated with two different multiple-drug regimens. There had been a response to the first regimen, but during the second the disease had progressed.

He was married with a young child, and both his wife and daughter were aware of the disease and prognosis. He was admitted in marked respiratory distress. On supplementary oxygen, he was coherent and comfortable but dyspneic at the end of long spoken sentences. When the discussion turned to CPR he clearly understood the nature of his disease and its progress, but requested that CPR be used. He indicated clearly that this was his decision; he was aware that his wife was against its use.

Such requests place physicians in potentially difficult situations. Reported series of CPR treatments suggest that the short-term success — restoration of cardiac output — is of the order of 30%, with 10% of patients surviving long enough to leave hospital.[1] Overall these figures are relatively encouraging, but it has been found that the success rate in patients with metastatic cancer and other advanced states of disease is much lower, and in many series, 0.[4-9] However, under current regulations, the doctor is legally obliged to ensure that CPR is administered when the patient dies, unless the patient has stated otherwise.

Discussing the dismal chance of success of CPR with such a patient, or describing the indignities of any possible resuscitation in an intensive care unit in an attempt to dissuade him, is both inhumane and unconscionable. Therefore, the physician is obliged to initiate treatment at

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the request of the patient, whether or not it is medically indicated, and the physician's order will often generate resentment from family and staff, including the CPR team.

Informed consent for treatment is a cornerstone of medical practice, bioethical decision-making and medicolegal jurisprudence. The appropriate use of informed consent requires the application of both beneficence and autonomy. The physician is obliged to select the best therapy and to explain the alternatives and make recommendations to the patient — this is medical beneficence. The patient will then consider what he has been told and decide to accept or reject the proposed therapy — this is patient autonomy. The physician is not required to provide therapy contraindicated on medical grounds[10] and the patient is not bound to accept the medical opinion offered.

If no benefit is to be expected from a specific therapy, such as CPR, in a specific group of patients, such as those with terminal, irreversible illness, then the treatment should not be provided or offered. In the circumstance of terminal metastatic cancer, the false hope of benefit from available ineffective therapy is in itself harmful to the patient. The combination of no benefit and likely harm contraindicates the offer or act of therapy on ethical grounds.[11]

No physician would willingly deny useful treatment to a patient, but at the same time it may be possible to define a group of patients for whom a particular treatment is of no avail. It will require considerable thought and many safeguards, but it may be possible to identify a group of patients for whom CPR should not be considered medically indicated and should not be offered. For any patients not meeting these criteria, conversations about CPR should be held in the normal manner.

A provisional list of such criteria might include the following (all of which would have to be met in order to define a patient as "dying"):

- the patient suffers from a diagnosed pathologic condition known to be irreversible and fatal;
- the intention of treatment is palliative and no curative intervention is being carried out or planned;
- the patient is expected to die within a short time;
- the preceding criteria have been confirmed by an independent physician not directly involved in the patient's care.

We would like to see wide discussion of this subject in an attempt to define a consensus view. It may be that, as a profession, we are so concerned that a patient should not be denied the chance of a slight benefit, even if that chance is infinitesimally small, that we have our CPR teams rush to any dying patient who has requested resuscitation. On the other hand, we may be prepared to attempt a definition of patients who are "dying", as opposed to "suffering cardiac arrest".

Either choice is possible, and both are feasible and workable, but we feel doctors must reach a clear and conscious decision on this point instead of accepting the current uncomfortable situation, which has arisen by default. We welcome all comments.

References

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