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REVIEW

Current issues in implementing do-not-resuscitate orders for cardiac patients☆

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Abstract Cardiovascular diseases are still the most common cause of death, and heart failure is the most common reason for hospitalization of patients older than 65 years. However, Cardiology attributes low importance to end-of-life care. Cardiac patients' perception of their disease's prognosis and the results of cardiopulmonary resuscitation differ greatly from reality. The ''do-not-resuscitate'' order allows patients to pre-emptively express their rejection for cardiopulmonary resuscitation, thereby avoiding its potentially negative consequences. However, these orders are still underused and misinterpreted in cardiac patients. Most of these patients usually have no opportunity to have the necessary conversations with their attending physician on their resuscitation preferences. In this review, we performed an analysis of the causes that could explain this situation.

PALABRAS CLAVE
Cardiología;
Reanimación cardiopulmonar;
Parada cardiorrespiratoria;

Problemática actual en la implementación de la orden de no reanimar en el paciente cardiológico

Resumen Las enfermedades cardiovasculares continúan siendo la causa más frecuente de muerte, y la insuficiencia cardíaca la causa más frecuente de ingreso hospitalario en pacientes mayores de 65 años. Pese a ello, la importancia otorgada por la cardiología a los cuidados al

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Cuidados al final de la vida;
Ética clínica

final de la vida es escasa. Además, la percepción que tienen los pacientes cardiológicos del pronóstico de su enfermedad y del resultado de una reanimación cardiopulmonar dista mucho de la realidad. La orden de no reanimar permite al paciente expresar anticipadamente su rechazo a una reanimación cardiopulmonar, evitando así sus posibles consecuencias negativas. Sin embargo, estas órdenes continúan siendo infrautilizadas y malinterpretadas en los pacientes cardiológicos. La mayoría no suele tener la oportunidad de mantener las necesarias conversaciones con su médico responsable sobre sus preferencias de reanimación. En la presente revisión hemos realizado un análisis de las causas que podrían justificar esta situación.

Introduction

Cardiology is directly involved in the diagnosis and treatment of the main causes of mortality.[1] Heart failure (HF), the common final pathway of a considerable number of heart diseases and the most common cause of hospitalization in patients older than 65 years,[2] results in numerous readmissions, which are more frequent the closer the patient is to death (Fig. 1).[3] However, the attention by cardiologists to end-of-life care and reflected in the clinical practice guidelines (CPGs) is scarce and can clearly be improved.[4,5] Most clinicians are open to acquiring skills on this issue.[6]

The ''do-not-resuscitate'' (DNR) order offers properly informed patients the possibility of rejecting cardiopulmonary resuscitation (CPR) in the event of a cardiopulmonary arrest (CPA).[7] In Cardiology, the use of the DNR order is less widespread than in other specialties. This order is registered later, in a smaller percentage of patients[8] and is recommended with lesser conviction.[9] This fact can have unfortunate consequences: (1) It deprives cardiac patients of the opportunity of making informed decisions on their resuscitation, and (2) CPR is performed on patients who would not have wanted it or on those for whom it would only extend their suffering.[7]

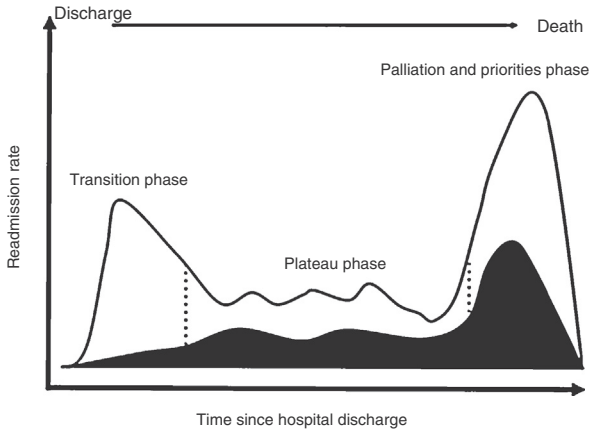

Figure 1 Risk of readmission after a hospitalization for heart failure. The areas in white at both ends represent periods of greater risk for immediate readmission after discharge and just before death. The area in white in the center reflects the plateau phase of lower risk. The shaded area in black reflects the supposed baseline of inevitable readmissions.
Source: Adapted from Desai et al.[3]

End-of-life care should respect the patient's wishes and preferences. Open and repeated communication concerning their needs and expectations, as well as on the prognosis and treatment of heart disease, is therefore essential.[5,10] Cardiac patients' perception of their disease prognosis[11–13] and the CPR maneuvers[14] is far from realistic. There is a tendency toward optimism that can overestimate their expectations of survival, modifying their wishes and preferences regarding the treatment plan.[15]

It is very likely that increasing the training and participation of physicians in the end-of-life care could contribute to improving the correlation between the wishes and the final experiences of a considerable number of patients. With this in mind, we performed a literature analysis of the most recently published studies in the Medline database that approached the problems of implementing DNR orders for cardiac patients, enabling us to suggest a number of solutions for improving their implementation.

Problems in the implementation of do-not-resuscitate orders for cardiac patients

Infrequent conversations with patients and disregarded patient preferences

The immense majority of patients with HF acknowledge not having had a conversation with their physicians about the end of life,[11,13] or about their preferences for resuscitation.[7,16] Patients also manifest highly diverse attitudes toward these preferences. Some patients want to choose and are eager to obtain information on the progress and prognosis of their disease, while others directly reject making such a choice or are reluctant to receive information that could cause them uncertainty or worry.[13]

Only 12% of physicians involved in treating patients with HF acknowledge having periodic discussions about the end of life as recommended in the CPGs.[6] The reasons for avoiding conversations with patients include a lack of experience and training in conducting the conversation, a lack of communication skills in this field that impedes finding the appropriate vocabulary to explain the condition and prognosis in an understandable manner, the uncertainty concerning the outcome (variable) of HF compared with other diseases, a fear of causing unnecessary worry or hopelessness in early stages