Communications to the Editor

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Cardiac Arrest in the Elderly

CPR or No CPR, That Is the Question!

To the Editor:

We read with interest the article by Gazmuri and Becker (March 1997) regarding cardiac resuscitation. This paper presents a review of current and controversial techniques, and outcomes of cardiopulmonary resuscitation (CPR). We are concerned, however, about the clinical implications that this paper presents for CPR in elderly individuals. The authors state that “in the hospital setting, however, elderly individuals have lower survival rates after CPR.” Although the authors also state that this may be related to comorbidity, they seem to imply a grim prognosis for in-hospital CPR administered to this group of patients.

The fastest-growing segment of the United States population over the past few decades has been the elderly. We and others have shown that the likelihood of resuscitation from a cardiac arrest in elderly patients is better than what has previously been published. In a study of 214 patients suffering a cardiac arrest, Wacksman et al found no statistical difference in survival to hospital discharge between patients <70 years of age and those ≥70 years of age. In our study of 213 consecutive cardiac arrests, 44% of those elderly patients who had return of spontaneous circulation after an in-hospital cardiac arrest survived to hospital discharge.

It is clear that survival for in-hospital cardiac arrest in the elderly is better than suggested by the report of Gazmuri and Becker. Therefore, decisions to withhold resuscitation should not be based on age alone, and resuscitation efforts should not be withheld from the elderly because of concerns of ineffectiveness.

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REFERENCES


To the Editor:

We thank Drs. Varon and Marik for their interest in our review article. We fully agree that decisions to attempt resuscitation should not be based on age alone. More specifically, we oppose prejudicial views in which patients are not deemed “eligible” for cardiopulmonary resuscitation (CPR) because of their advanced age. At the same time, we acknowledge that a myriad of studies have demonstrated that elderly individuals (defined usually as ≥70 years old) have lower resuscitation and survival rates than younger individuals after in-hospital cardiac arrest. Indeed, in the very same report cited by Varon and Marik, the resuscitation rate in elderly individuals was lower (20% vs 36%, p<0.03).

How do we reconcile these facts with the views expressed by us and Varon and Marik? Evidence suggests that elderly individuals present to the hospital with increased number of comorbid conditions. We believe that these conditions, along with the efficiency with which CPR is delivered (but not age), are the determinants of outcome after in-hospital cardiac arrest.

More than a decade ago, Bedell and coworkers prospectively investigated 294 cases of cardiac arrest in hospitalized patients ranging in age between 18 and 101 years (mean, 70 years). Using a multivariate analysis, they found that hypotension, pneumonia, renal failure, cancer, and homebound lifestyle, present before cardiac arrest, were strong predictors of low survival. Age, nonetheless, had no independent predictive value. Moreover, the cerebral prognosis of those who are discharged home, young or old, is good, since more than 75% return to their communities with intact or minimally impaired neurologic function.

Accordingly, the current scientific evidence suggests that date of birth is not a determinant of outcome and that age should not be taken into account when making decisions on whether or not a patient should be resuscitated.

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REFERENCES