IS THERE A DIFFERENCE BETWEEN INDIVIDUAL MORBIDITY SCORES' ABILITY TO PREDICT FUTILE CARDIOPULMONARY RESUSCITATION (CPR)?

L. BOWKER AND K. STEWART

Royal Hampshire County Hospital, Winchester

Introduction

Morbidity scores, derived from clinical and laboratory predictors of poor outcome, accurately predict failure to survive CPR. We have compared the ability of three such instruments to predict futile CPR.

Method

Our study population has been described previously (Bowker L. Age/Ageing Supplement 1997, in press) and consisted of 264 patients having CPR at our hospital, 28 (11%) of whom survived. We compared the sensitivity for predicting futile CPR of Pre Arrest Morbidity (PAM) score, Prognosis After Resuscitation (PAR) score, and a previously unvalidated modification to PAM (Dautzenberg et al. Age/Ageing 1993;22:464-75) for each patient.

Results

No patient with a PAM greater than 6/25, a PAR greater than 7/28 or a modified PAM greater than 7/24 survived. Futile CPR was predicted by PAM in 47 cases (sensitivity 20%), by PAR in 68 (sensitivity 29%) and by modified PAM in 53 (sensitivity 22%). Twenty resuscitations were predicted to be futile by all 3 scores (sensitivity 9%), and 110 by any of the 3 scores (sensitivity 47%).

Conclusions

Each of the scores predicted about a quarter of futile CPR attempts, although PAR is somewhat more sensitive than the others. However, because they predict futility in different subsets, using a combination of scores can double their sensitivity. Despite this, over half of all deaths were not predicted by any of the scores so doctors will still have to use considerable clinical judgement in deciding about futile CPR.