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

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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%). 21 resuscitation 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.

DISABILITY AND THE PREDICTION OF DEATH IN THE ELDERLY

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Introduction

Routine health checks in the elderly collect disability data which may predict health outcomes. This study related annual interviews over 3 years to subsequent mortality.

Method

The Gloucestershire Longitudinal Study of Disability was a prospective survey of 1815 persons over 75 who underwent a health check in Primary Care during 1990 using a validated instrument called the Elderly At Risk Rating Scale (EARRS). This includes 20 questions on disability with 5 hierarchical categories of response. Statistics were chi square for linear trend.

Results

Eleven areas of disability were clearly related to death (p<0.001) which included outdoor mobility, dressing, washing, diet, continence, drug use, energy, confusion, and carer involvement and stress. Sight and hearing were poor predictors of mortality, ‘lives alone’ had similar risk to ‘lives with spouse’. Multivariate analysis on the 11 factors above gave outdoor mobility, dressing, diet, drugs and energy as independent predictors, but energy was the most important (annual mortality 4.2% for “boundless energy” and 31% for “almost none”), and consistent in all age/sex subgroups.

Conclusion

Eleven areas of disability are identified as important predictors of mortality.

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