Prevention

COMPARING SF-36 SCORE VERSUS BIOMARKERS TO PREDICT MORTALITY IN PRIMARY CARDIAC PREVENTION PATIENTS

Poster Contributions
Hall C
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Background: Risk stratification plays an important role in evaluating patients with no known cardiovascular disease (CVD). Few studies have investigated health-related quality of life questionnaires such as SF-36 as predictive tools for mortality. Our study aims to measure the relative effectiveness of SF-36 scores in predicting mortality when compared to traditional and novel biomarkers in a primary prevention population.

Methods: 8123 consecutive primary prevention patients evaluated at the Cleveland Clinic Preventive Cardiology Clinic between January 1996 and September 2012 were included in the analysis. The primary outcome was all-cause mortality.

Results: A low SF-36 physical score provided independent prediction of a 6.1-fold increase in death at 8 years (Hazard Ratio [95% confidence interval] 6.09 [3.92-9.43], $p<0.001$). The best predictor of mortality was the SF-36 physical score with a C-index of 0.752, when compared to traditional and novel biomarkers such as hsCRP, urine albumin:creatinine ratio and lipids. The SF-36 physical score also improved the predictive ability of the Framingham risk score components, with an increase in C-index from 0.767 to 0.836, and a Net Reclassification Index (NRI) of 59.6%.

Conclusions: The SF-36 physical score is a reliable predictor of mortality in patients without CVD. In an era of rising medical costs, the SF-36 questionnaire could be used as a simple and non-costly predictor of mortality in this population.