THE PROGNOSTIC VALUE OF ATRIAL FIBRILLATION IN PATIENTS WITH CHRONIC SYSTOLIC HEART FAILURE OR HEART FAILURE WITH PRESERVED SYSTOLIC FUNCTION

Yu Shengbo, Renmin Hospital of Wuhan University
10.1136/heartjnl-2011-300867.654

Objective To investigate the prognostic value of atrial fibrillation (AF) in patients with chronic systolic heart failure (CSHF) or heart failure with preserved systolic function (HFPSV).

Methods Data of in-hospital patients with CSHF or HFPSV, according to the ACC/AHA guideline, were investigated between 2008 and 2009 from 4 hospitals in Hubei Province. We excluded from this series patients with a history of myocardial infarction in the prior 12 months, congenital heart disease, pericardial disease and the history of cancer. We used χ² tests and t tests for descriptive analyses. Univariate Kaplan–Meier curve was performed to evaluate the difference in prognosis between AF and non-AF group for patients with CSHF or HFPSV, respectively. Multivariate Cox proportional hazard analysis was performed to determine the risk of all-cause mortality, heart failure (HF) mortality, sudden cardiac death (SCD) and thrombosis-related mortality, respectively, in AF group compared with patients in non-AF group. Statistical tests were evaluated with the use of 2-tailed 95% CI, and tests with p<0.01 were considered significant. Data analyses were performed with the use of SPSS 13.0 for Windows, release 15, 2006 (SPSS, Chicago, Illinois, USA).

Results (1) 848 patients were enrolled in the present study of which CSHF and HFPSV accounted 560 (66.04%) and 288 (33.96%), respectively. (2) Over 14.79±10.90 months follow-up, 214 (25.24%) died. The result of univariate Kaplan–Meier curve shows there was no significant difference in all-cause mortality between AF and non-AF group in both CSHF and HFPSV. AF increase HF mortality and thrombosis-related mortality while decrease SCD. (3) The result of multivariate Cox proportional hazard analysis showed AF only increased thrombosis-related mortality in patients with CSHF (HR 2.106, 95% CI 1.436 to 2.719, p<0.01) while not any other end point in CSHF or HFPSV.

Conclusions The prognostic value of AF for patients with CSHF or HFPSV is not consistent. AF only increase thrombosis-related mortality in patients with CSHF.