with CHD, DCM and HHD, respectively. Though there was significant difference among the different aetiologies in the univariate Cox proportional hazards analyses (HR 3.250, 95% CI 2.096 to 5.038; p<0.001, HR 6.882, 95% CI 4.510 to 10.501; p<0.001, HR 3.179, 95% CI 2.030 to 4.979; p<0.001 for CHD, DCM and HHD respectively with RHD as inference), which did not remain significant in CHD (HR 3.345, 95% CI 1.291 to 8.666; p=0.013) and HHD (HR 2.062, 95% CI 0.794 to 5.352; p=0.137), while only DCM (HR 4.764, 95% CI 1.799 to 12.618; p=0.002) remained significant despite multivariate adjustment. (4) In ROC curve analysis, aetiology increase sensitivity and specificity in predicting models for all-cause mortality (AUC 0.839, 95% CI 0.832 to 0.845 vs 0.776, 95% CI 0.768 to 0.784) and HF mortality (AUC 0.814, 95% CI 0.806 to 0.822 vs 0.796, 95% CI 0.788 to 0.804) while not SCD (AUC 0.777, 95% CI 0.749 to 0.809 vs 0.747, 95% CI 0.727 to 0.766), and the best model including aetiology did not discriminate between HF mortality and SCD (AUC 0.814, 95% CI 0.806 to 0.822 vs 0.777, 95% CI 0.749 to 0.809).

Conclusions CSHF due to CHD, DCM and HHD carry a worse prognosis than that of RHD. Aetiology provided significant incremental prognostic information beyond readily available clinical variables for all-cause mortality and HF mortality.

THE PROGNOSTIC VALUE OF AETIOLOGY IN PATIENTS WITH CHRONIC SYSTOLIC HEART FAILURE

Yu Shengbo *Renmin Hospital of Wuhan University*

Objective To determinate the prognostic value of aetiology in patients with chronic systolic heart failure (CSHF).

Methods Data of in-hospital patients with CSHF were investigated between 2000 and 2010 from 12 hospitals in Hubei Province. Univariate and multivariate Cox proportional hazards analyses were used to explore the differences in the all-cause mortality, heart failure (HF) mortality and sudden cardiac death (SCD) among patients caused by different aetiologies. Univariate and multivariate Cox regression analyses were then used on selecting demographic and clinical variables predicting the all-cause mortality, HF mortality and SCD. The ROC curve were then developed to assess the incremental additive information from aetiology.

Results (1) 16681 patients were enrolled of which male was 9887/59.27%. (2) All-cause mortality accounted 34.50%, 54.30%, 41.48% and 15.76%; HF mortality was 30.11%, 44.95%, 36.25% and 13.10% and SCD accounted 8.46%, 8.45%, 9.84% and 1.05% in patients with CHD, DCM, HHD and RHD, respectively. (3) Compared with patients with RHD, adjusted HRs for all-cause mortality were 1.554 (1.240 to 1.947; p<0.001), 1.405 (1.119 to 1.764; p=0.003) and 1.315 (1.147 to 1.467; p=0.005); adjusted HRs and 95% CI for HF mortality were 1.458 (1.213 to 1.751; p<0.001), 1.763 (1.448 to 2.147; p<0.001) and 1.281 (1.067 to 1.537; p=0.008), in patients