

Young Investigator Research Award Winner

Abstract 5

Low Levels of Depressive Symptoms Predict the Combined Outcome of Good Health-Related Quality of Life and No Cardiac Events in Patients with Heart Failure

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**Background:** Depressive symptoms predict health-related quality of life (HRQOL) and cardiac event-free survival (free from hospitalization or emergency department visits due to cardiac reasons) in patients with heart failure (HF). However, researchers have examined these two outcomes separately. It is unknown whether depressive symptoms are associated with a combined end point of good HRQOL and without cardiac events.

**Purpose:** To determine whether depressive symptoms independently predicted a combined end point of good HRQOL and no cardiac events among patients with HF who were alive at a 1-year follow up.

**Methods:** A total of 209 community-dwelling patients with HF (aged 62 years, 32% female, 29% minority, 46% New York Heart Association (NYHA) class III/IV) were followed for 1 year to determine cardiac events. Depressive symptoms were mea-

sured at baseline with the Beck Depression Inventory-II (BDI-II). HRQOL was defined as the scores of the Minnesota Living with HF Questionnaire (LHFQ) at 1 year and categorized into good or poor HRQOL based on the median split of LHFQ scores (cutoff point, 37). Patients who survived at 1 year were placed in one of two groups based on 1-year LHFQ scores and cardiac events: (1) good HRQOL without cardiac events and (2) all other outcomes. Logistic regression was used to test whether depressive symptoms were an independent predictor of good HRQOL without cardiac events after controlling for age, gender, ethnicity, body mass index, total comorbidity scores (Charlson Comorbidity Index), HF etiology, NYHA class, and perceived social support (Perceived Social Support Scale).

**Results:** Of the 209 patients, 90 (43%) had good HRQOL without cardiac events. In the regression, only depressive symptoms at baseline predicted the combined outcome. For each point increase in the BDI-II score, patients were 14% less likely to have good HRQOL without cardiac events (odds ratio 0.86, 95% confidence interval 0.80–0.91).

**Conclusion:** This was the first study to show that low levels of depressive symptoms independently predicted the combined outcome of good HRQOL and no cardiac events. The result suggests that the management of depressive symptoms may be essential to achieving the ideal outcome of good HRQOL without cardiac events.

The *Young Investigator Research Award* is a competition open to graduate students, postdoctoral fellows, residents, fellows, and junior faculty (within 2 years of their first appointment). It is made possible by the continued support of **Thomas F. Peterson, Jr.**, who also supports the Thomas F. Peterson, Jr. Center for Heart-Brain Research within the Earl and Doris Bakken Heart-Brain Institute at Cleveland Clinic. The 2010 recipient is **Kyoung Suk Lee, PhD**.