OBJECTIVE: To study the potential usefulness of the 6-minute walk test, a self-paced submaximal exercise test, as a prognostic indicator in patients with left ventricular dysfunction.

DESIGN: Data were collected during a prospective cohort study, the Studies of Left Ventricular Dysfunction (SOLVD) Registry Substudy.

SETTING: Twenty tertiary care hospitals in the United States, Canada, and Belgium.

PARTICIPANTS: A stratified random sample of 898 patients from the SOLVD Registry who had either radiological evidence of congestive heart failure and/or an ejection fraction of 0.45 or less were enrolled in the substudy and underwent a detailed clinical evaluation including a 6-minute walk test. Patients were followed up for a mean of 242 days.

OUTCOME MEASURES: Mortality and hospitalization.

RESULTS: During follow-up, 52 walk-test participants (6.2%) died and 252 (30.3%) were hospitalized. Hospitalization for congestive heart failure occurred in 78 participants (9.4%), and the combined endpoint of death or hospitalization for congestive heart failure occurred in 114 walk-test participants (13.7%). Compared with the highest performance level, patients in the lowest performance level had a significantly greater chance of dying (10.23% vs 2.99%; \( P = .01 \)), of being hospitalized (40.91% vs 19.90%; \( P = .002 \)), and of being hospitalized for heart failure (22.16% vs 1.99%; \( P < .0001 \)). In a logistic regression model, ejection fraction and distance walked were equally strong and independent predictors of mortality and heart failure hospitalization rates during follow-up.

CONCLUSION: The 6-minute walk test is a safe and simple clinical tool that strongly and independently predicts morbidity and mortality in patients with left ventricular dysfunction.