

Protocol-based Follow-Up Program for Heart Failure Patients: Impact on Prognosis and Quality of Life

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Abstract

Introduction: Heart failure is associated with high rates of readmission and mortality, and there is a need for measures to improve outcomes. This study aims to assess the impact of the implementation of a protocol-based follow-up program for heart failure patients on readmission and mortality rates and quality of life.

Methods: A quasi-experimental study was performed, with a prospective registry of 50 consecutive patients discharged after hospitalization for acute heart failure. The study group was followed by a cardiologist at days 7-10 and the first, third, sixth and 12th month after discharge, with predefined procedures. The control group consisted of patients hospitalized for heart failure prior to implementation of the program and followed on a routine basis.

Results: No significant differences were observed between the two groups regarding mean age (67.1 ± 11.2 vs. 65.8 ± 13.4 years, $p=0.5$), NYHA functional class ($p=0.37$), or median left ventricular ejection fraction (27% [19.8-35.3] vs. 29% [23.5-40]; $p=0.23$) at discharge. Mean follow-up after discharge was similar (11 ± 5.3 vs. 10.9 ± 5.5 months, $p=0.81$). The protocol-based follow-up program was associated with a significant reduction in all-cause readmission (26% vs. 60%, $p=0.003$), heart failure readmission (16% vs. 36%, $p=0.032$), and mortality (4% vs. 20%, $p=0.044$). In the study group there was a significant improvement in all quality of life measures ($p<0.001$).

Conclusion: A protocol-based follow-up program for patients with heart failure led to a significant reduction in readmission and mortality rates, and was associated with better quality of life.