Heart Failure Readmission at Ramathibodi Hospital: Single Center Experience

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Background: Patients hospitalized for heart failure (HF) are at high risk for heart failure rehospitalization within 1 month, leading to increased mortality.

Objective: We sought to determine the rate and predictors HF readmission at Ramathibodi Hospital.

Methods: We performed a review of medical records in patients admitted with primary and secondary diagnosis of heart failure using ICD10 code I50 from October 2007 to October 2016. Number of readmissions and factors likely to be associated to readmission were collected. The associations were analyzed using Cox regression analysis.

Results: There were 5,367 heart failure admissions (1,464 as primary diagnosis and 3,903 as secondary diagnosis) at Ramathibodi Hospital during the last 9 years. There were 227 patients with >2 admissions (18.5%). A total of 1,223 patients were enrolled into the study. The mean age was 68.7±19.5 years, with 43.6% male. The mean admission was 1.2 time/patients with median length of stay of 7 days (IQR 4, 13 days). The 30-day, six-month and one-year readmission rates due to heart failure were found in 8.5%, 6.8%, and 2.5% respectively. Number of admission (HR 1.38, 95% CI 1.273-1.496; p<0.001) and acute kidney injury (HR 1.50; 95% CI 1.064-2.102; p=0.02) were noted as independent predictors of HF readmission.

Conclusion: The 30-day heart failure readmission rate of heart failure patients at Ramathibodi Hospital are 8.5%. Numbers of admission and acute kidney injury are independent predictors of HF readmission.

Keywords: Ramathibodi, Heart Failure, Readmission