

Pharmacotherapy in patients with heart failure and association with rehospitalizations – results from clinical practice

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The goal: To investigate treatment options for patients with heart failure and their impact on rehospitalization.

Patients and Methods: This cross-sectional study included 200 patients hospitalized for heart failure at the Department of Cardiovascular Diseases, University Hospital Center Osijek, during 2020 and 2021. Patients were assigned to two groups based on whether it was their first hospitalization for heart failure or rehospitalization. There were 119 (59.5%) patients with reduced ejection fraction (EF), 44 (22%) patients with mid-range EF and 35 (17.5%) with preserved EF. Data on therapy at discharge were available for 177 patients (23 patients died during hospitalization).

Results: There were 111 (55.5%) patients for whom it was their first hospitalization for heart failure, while 89 (44.5%) patients were rehospitalized. At admission, 140 (70%) patients had a beta blocker, 119 (59.5%) angiotensin-converting enzyme (ACE) inhibitor, 62 (31%) mineralocorticoid receptor antagonist (MRA), 24 (12%) angiotensin receptor–neprilysin inhibitor (ARNI) and 4 (2%) sodium-glucose cotransporter-2 inhibitor (SGLT2i). Majority of patients who were rehospitalized at admission had beta blocker (78, 87.6%) and ACE inhibitor (59, 66.3%) compared to those for whom it was their first hospitalization ($P < 0.001$ and $P = 0.08$, respectively), while MRA (46, 51.7%), ARNI (19, 21.3%) and SGLT2i (2, 2.2%) were used to a lesser degree. During hospitalization beta blocker was initiated in 37 patients, ACE inhibitor in 9 patients, MRA in 71 patients, ARNI in 24 patients and SGLT2i in 3 patients.

Conclusion: Drug therapy for heart failure including a beta blocker, ACE inhibitor/ARNI, MRA and SGLT2i has been proven to prevent rehospitalization and decrease mortality in heart failure patients. However, in other studies it has been shown that a considerably large number of patients do not have guideline-directed medical therapy¹. Our study has shown that, in relation to other research, more patients are adequately treated, but there is still room for improvement. Even if rehospitalization for heart failure occurs it presents a great opportunity for treatment optimization which has a main goal of stabilizing the patient and preventing future hospitalizations for heart failure.

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LITERATURE

1. Wirtz HS, Sheer R, Honarpour N, Casebeer AW, Simmons JD, Kurtz CE, et al. Real-World Analysis of Guideline-Based Therapy After Hospitalization for Heart Failure. J Am Heart Assoc. 2020 Aug 18;9(16):e015042. <https://doi.org/10.1161/JAHA.119.015042>