








Clinical and demographic characteristics of patients in the intensive care unit for acute heart failure

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Heart failure (HF) is a complex clinical syndrome caused by structural and functional disorders, reducing the ability of the heart chambers to fill or empty. It refers to a condition where the heart muscle, as a pump, cannot meet the body's metabolic demands. Exacerbation of HF is a life-threatening condition requiring immediate care in intensive care units, as it severely impairs heart function. The main objective in treating acute HF is to stabilize vital functions and normalize hemodynamics, which demands prompt recognition of symptoms. Treatment requires the involvement of a multidisciplinary team, consisting of specialized cardiac nurses, cardiologists, cardiac surgeons, radiologists, nephrologists, psychologists, psychiatrists, nutritionists, physiotherapists, and other healthcare professionals.¹

Between March 1 and September 1, 2024, 59 patients were treated in the Intensive Care Unit for acute heart failure. Nearly half (40%) were referred from affiliated hospitals, such as General Hospitals in Koprivnica, Bjelovar, Zadar, Pula, Nova Gradiška, Čakovec, as well as University Hospitals in Zagreb, Rijeka, and Dubrovnik. Upon admission, most patients presented with acute decompensation and reduced ejection fraction. The key objectives were to achieve euvolemia, stabilize heart rhythm and vital signs, and perform diagnostic or invasive procedures. In 13 patients, pacemaker or defibrillator implantation was performed. Coronary angiography, with or without percutaneous coronary intervention (PCI), was performed in 13 others. As part of the pre-transplant workup, right heart catheterization was conducted in 13 patients, while pulmonary vein isolation (for atrial fibrillation) was performed in three cases. Four patients received advanced HF treatments; three underwent heart transplantation, and one had a left ventricular assist device (LVAD) implanted. Sadly, one death occurred in a patient awaiting an emergency heart transplant. This healthcare system, focused on managing acute heart failure, significantly enhances patient outcomes.

Continuous professional education, experience-sharing, and a multidisciplinary approach are critical in improving the management of complex cardiac patients and achieving better treatment outcomes.

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LITERATURE |||||

1. WRITING COMMITTEE MEMBERS; Yancy CW, Jessup M, Bozkurt B, Butler J, Casey DE Jr, Colvin MM, et al. 2016 ACC/AHA/HFSA Focused Update on New Pharmacological Therapy for Heart Failure: An Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Failure Society of America. *Circulation.* 2016 Sep 27;134(13):e282-93. <https://doi.org/10.1161/CIR.0000000000000435>