

Cat Block 6, Eugene Kang

Heart failure with Preserved Ejection Fraction Margaret M. Redfield, M.D.

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Clinical Question: How do we treat patients with Heart Failure with Preserved Ejection Fraction?

Background: Epidemiologic studies indicate that up to 50% of patients with heart failure have preserved ejection fraction, and this proportion has increased over time. Among patients who have HFpEF, rates of death and hospitalization approach those with HFrEF however death from noncardiovascular causes is more common in those with HFpEF. There is limited direct evidence to support specific drug therapies in the treatment of HFpEF. This article reviews evidence supporting treatment strategies and a review of the formal guidelines that do exist, followed by the author's clinical recommendations.

Summary: The diagnosis of HFpEF is made in patients who have clinical evidence of heart failure with preserved ejection fraction on echo. A CXR, EKG, and BNP can aid in the diagnosis. The echo may show LVH, increased left atrial pressure, diastolic dysfunction, increased pulmonary artery pressure, etc. None of these by itself can make the diagnosis. The more positive features increase the likelihood of HFpEF.

There is no therapy proven to improve outcomes in patients with HFpEF. Treatment revolves around relief of volume overload, treating coexisting conditions, increasing exercise tolerance, and strategies to manage chronic disease and prevent hospitalizations. There is limited evidence on diuretics however the author suggests they should be used for symptom relief in patients with volume overload. There are 3 RCTs done involving ACE/ARBs and one in regards to mineralocorticoid-receptor antagonists. None of these have any mortality benefit; however, one study found that mineralocorticoid-receptor antagonists reduced the rate of hospitalizations for heart failure. They also increased the rate of renal dysfunction and hyperkalemia. Beta blockers have not been evaluated with an adequately powered study. There is no strong data to support that treatment of coexisting conditions improves outcomes in patients with HFpEF.

Conclusion/Discussion: The author concludes that diuretics should be used for relief of symptoms in patients with volume overload. The use of ACE/ARBs and B blockers in the treatment of HFpEF should be limited to those who have alternative indications for their use. Mineralocorticoid-receptor antagonists with HFpEF remain controversial; no specific recommendation is given. The paper proposes treating coexisting conditions to include hypertension, CAD, atrial fibrillation, obesity, kidney disease, lung disease, sleep apnea as well as encourage cardiac rehabilitation, education, case management and hospice/palliative care if applicable.

The author's recommendations are largely in accordance with the ESC Guidelines and the Journal of the American College of Cardiology. However, Uptodate does recommend a mineralocorticoid antagonist provided the patient can be monitored closely. It is important to note that this is not a systematic literature review. It provides expert opinion supported by literature to make recommendations regarding treatment of heart failure with preserved ejection fracture. This is not a consensus statement.

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