

Uncovering a Different Type of Heart Failure

Traditionally, one of the clinical hallmarks characterizing heart failure has been a low ejection fraction (EF) of the left ventricle. EF is the percent of blood pushed out by the heart with each heartbeat. But there is a growing awareness of a significant portion of the heart failure population who do not display low EF—a condition known as heart failure with preserved ejection fraction (HFpEF).

“These patients have a normal squeezing function of their heart, but their heart is unable to relax or take blood in from the veins and lungs, so fluid backs up causing all the same symptoms of heart failure with reduced ejection fraction,” explains Susan Joseph, MD, medical director, Mechanical Circulatory Support Program, Baylor University Medical Center, part of Baylor Scott & White Health.

These symptoms include shortness of breath, tiredness, fatigue, chest tightness, feeling of fullness, chest pressure, racing heartbeats and fluid buildup/swelling.

Even though HFpEF patients display these symptoms, their echocardiograms are sometimes normal, so they may go undiagnosed since echo is widely considered the gold standard for measuring EF and diagnosing heart failure. Instead of considering HFpEF, providers often mistakenly assume these patients are simply not taking their hypertension medications, not adhering to a low sodium diet or are simply overweight or deconditioned.

“Heart failure with preserved ejection fracture is a very real condition,” says Dr. Joseph. “Many of these patients are adhering to their plan of care but are still filling up with fluid because their heart doesn’t work properly.”

Prevalence and Population

“Heart failure in general is the single most common reason for hospitalization in Medicare beneficiaries, and about half of these patients have preserved ejection fraction,” says Dr. Joseph.

While the symptoms of HFpEF are the same as those in heart failure patients with reduced EF, the typical patient profile is different. HFpEF patients are usually older than heart failure patients with reduced EF (with prevalence drastically increasing with each decade of life). The condition also is much more prevalent in females.

The mortality rate for HFpEF is 5% to 8% per year versus 15% to 25% for low EF patients, but the symptom burden and quality of life is equally poor.

Identifying Patients and Treatment Options

Dr. Joseph says patients over 60 without any known blockages or arrhythmias who have not responded to hypertension medications or fluid pills and are experiencing certain cardiovascular symptoms should be referred to a cardiovascular care program with an interest in HFpEF.

These symptoms include:

- Swelling or bloating
- Unexplained fatigue
- Shortness of breath
- Exercise intolerance
- Fluid on the lungs
- Respiratory failure
- Repeated hospitalizations for congestive heart failure or bronchitis/pneumonia without fever

While there is no proven medication or cure for these patients yet, a specialized program can test for whether the symptoms are due to HFpEF, or if the cause may be patient lifestyle or another factor. Equally as important, these programs may have access to the studies that will be instrumental in creating future treatment protocols.

“Heart failure with preserved ejection fraction accounts for half of all heart failure in the United States,” says Dr. Joseph. “We have studies, and we will find a solution for this problem.”

But it starts with referring providers considering this form of heart failure and helping identify potential patients.