

Modern Management of Chronic Heart Failure: From Stage A to Stage D and Beyond

Gregg Fonarow, MD, Division of Cardiology, University of California, agreed. “There are many patients without evidence of structural heart disease who are at increased risk,” he said. “And the data shows that modification of risk factors can have enormous impact in mitigating disease.”

Dr. Fonarow described the 2005 revision of ACC/AHA Heart Failure (HF) guidelines that shifted from the New York Heart Association staging system to the AHA system where class A is defined as patients with risk factors for HF, B – patients with structural heart disease but no overt symptoms, C – patients with mild symptoms of HF and D – patients with severe symptoms of end stage HF.

The ACC/AHA system “is designed to be more clinically useful and descriptive,” he said. Focusing on Stage A, Dr. Fonarow stressed the significance of recognizing and documenting early HF. Using what he called an “iceberg metaphor,” Stage A HF has “virtually no signs or symptoms visible ‘above the waterline,’ but factors like smoking, elevated BMI, lack of exercise, microalbuminuria, and dyslipidemia might all be lurking below the waterline.”

“Heart failure (HF) is an evolving entity,” said Margaret M. Redfield, MD, Director, Heart Failure Clinic, Mayo Clinic. “Epidemiological data now tells us that lowered ejection fractions (EFs) are fairly common in the asymptomatic population.”

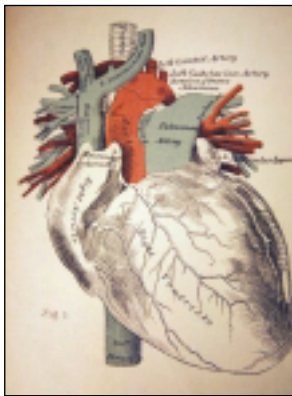
HF, much like atherosclerosis, is a disease process that progresses over many years. Along the way, Dr Redfield said, “lowered EFs may serve as potent early indicators of disease.”

Some 1-2% of the population have EFs <40% and roughly 5% have EFs <50%. Meanwhile, HF with normal EF is emerging as an important disease variant. Referring to work published by Dr. Redfield and colleagues in 2003 (Burden of Systolic and Diastolic Ventricular Dysfunction in the Community: Appreciating the Scope of the Heart Failure Epidemic. *JAMA* 2003; 289(2)), more than 25% of adults >45 years of age have diastolic filling abnormalities. “Our most important overall finding was increased all-cause mortality among people who

have some ventricular dysfunction, be it diastolic or systolic.” Dr. Redfield said.

“HF is, technically, not an epidemic,” Dr. Redfield observed, “but in clinical terms, it is.” And early HF (Stage A-B) is “incredibly common,” she added.

Lee Goldberg, MD, MPH, Director, Heart/Lung Transplant Program, University of Pennsylvania, emphasized that early detection is paramount. “In Stage A and B alike, the onus is on us to recognize, detect, treat early, and motivate our patients to make changes in diet and lifestyle. This is the only way we will reduce costs and improve health.”



Mark Drazner, MD, University of Texas Southwestern Medical Center, reviewed the current treatment recommendations for Stage C HF, reminding clinicians that in-hospital initiation of therapy is the “golden moment.” Data reveals that patients not on

a medication regimen at time of discharge are far less likely to be on medication 90 days later. “The risk of recurrence and worsening of disease is obvious,” said Dr. Drazner.

Management of Stage D HF takes on a different shade, according to Joseph G. Rogers, MD, Duke University. “Stage D requires a determination if your patient wishes to proceed with therapy. If the answer is no, then management moves to palliative care and possibly hospice.” Dr. Rogers reviewed two clinical trials (ESCAPE published in *JAMA* 2005 that showed benefit of filling pressure reduction but no benefit and increased adverse events of pulmonary artery catheter use; REMATCH published in *NEJM* in 2001 that showed survival benefit of left ventricular assist devices in class IV HF) that evaluated techniques for extending life in Stage D HF, but he said “there’s a great deal of work we have yet to do to improve Stage D patients’ survival and quality of life.”

For a complete and detailed listing of the ACC/AHA heart failure guidelines, please visit

<http://www.acc.org/clinical/topic/topic.htm#guidelines>