

**Harvard Medical School Department of  
Continuing Education and the Cardiovascular  
Division of the Department of Medicine,  
Brigham and Women's Hospital**



***Cardiology Rounds***  
**November 2005**

**Diastolic and Systolic Heart Failure – Similarities and Differences. Part 1.**

Kanu Chatterjee, MB, FRCP, FCCP, FACC, MACP

**Objectives:**

Clinicians have long recognized that in a substantial proportion of patients presenting with the signs and symptoms of heart failure, the left ventricular ejection fraction can be normal or only moderately reduced. In Part 1 of two issues, Dr. Chatterjee provides insightful, clinically grounded characterizations of the clinical subsets of heart failure patients with diastolic and systolic heart failure. The major emphasis is on obtaining a better understanding of the distinguishing features of these subsets. The reader will achieve an improved comprehension of the clinical characteristics, incidence, prevalence, prognosis, and natural history of patients with diastolic and systolic heart failure.

**Questions:**

1. The clinical signs and symptoms of patients with diastolic heart failure are readily distinguishable from those with systolic heart failure.  
True  False
2. A combination of electrocardiogram and laboratory values (eg, creatinine, hemoglobin, and brain natriuretic peptide [BNP] levels) can be used to differentiate systolic from diastolic heart failure.  
True  False
3. In systolic heart failure, for the majority of patients with a clinical diagnosis of heart failure and a normal or near normal left ventricular ejection fraction (LVEF), some abnormalities in LV relaxation, filling, and stiffness would be anticipated with quantitative echocardiographic studies of diastolic function.  
True  False
4. Although there have been various LVEF cutpoints (40%, 45%, 50%), above which diastolic heart failure or preserved systolic function heart failure is defined, the estimated cross-sectional population incidence is between 11% and 21%.  
True  False

5. Although most estimates of mortality rates suggest that the prognosis of patients with systolic heart failure is worse than for those with diastolic heart failure, for both entities, mortality rates escalate with increasing severity of clinical signs and symptoms.
- True       False
6. The therapeutic advances demonstrated for the treatment of systolic heart failure can be readily extrapolated to patients with diastolic heart failure.
- True       False
7. Elevated LV end-diastolic pressure, the principal cause of pulmonary congestion, is common in both systolic and diastolic heart failure; however, in diastolic heart failure, this increase in filling pressure occurs with normal ventricular volume.
- True       False

To receive AMA category 1 credit, you must correctly answer 60% of the test questions.

Harvard Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Harvard Medical School designates this educational activity for a maximum of 1 category 1 credit toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the educational activity.

This program was issued in November 2005. All tests must be returned by March 31, 2006.

Please send the completed test and a check for \$25 US. (Check made payable to: Harvard Medical School) to: Harvard Medical School/Department of Continuing Education, Box 825, Boston, MA 02117-825.

Please keep a copy of your test before submission. A certificate will be sent upon successful completion of the test, along with the answer key, after the deadline date, as indicated.

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

Fax \_\_\_\_\_