Challenges for the Basis of Practice

Heart Failure Patients With Low Blood Pressure
How Should We Manage Neurohormonal Blocking Drugs?

Purvi Parwani, MBBS; Jason Ryan MD, MPH

Among patients with heart failure, neurohormonal blockade with angiotensin-converting enzyme inhibitors, β-adrenergic receptor blockers (BB), and aldosterone antagonists has been shown to improve mortality and hospitalization rates.1–4 Combination therapy with these drugs can reduce mortality more than monotherapy alone.5 Dosing is also important. Improvement in left ventricular function and survival are dose-dependent effects for BB.6 Most heart failure trials used relatively high doses of BB7 and angiotensin-converting enzyme inhibitors.8 Studies have found that many patients with heart failure are treated with dosages of BB and angiotensin-converting enzyme inhibitors below those used in clinical trials.9

Unfortunately, all of these drug classes can cause hypotension. In our clinic, we regularly encounter patients with heart failure who have low normal blood pressure. We try to administer ≥2 classes of drugs, usually BB and angiotensin-converting enzyme inhibitors. Some patients, however, can only tolerate a single drug.

Among patients with heart failure who have low blood pressure, which agent should we initiate first? Should we increase 1 agent to target dose before beginning the other? Also, which drug should we decrease if a patient develops hypotension on a multidrug regimen?

Disclosures

None.

References


Key Words: heart failure ■ hypotension ■ β blocker ■ ACE inhibitor

From the Pat and Jim Calhoun Cardiology Center, University of Connecticut Health Center, Farmington, CT.
Correspondence to Jason Ryan, MD, MPH, University of Connecticut Health Center, 263 Farmington Ave, Farmington, CT 06032-2202. E-mail:jaryan@uchc.edu

(Circ Heart Fail. 2012;5;819.)
© 2012 American Heart Association, Inc.
Circ Heart Fail is available at http://circheartfailure.ahajournals.org

DOI: 10.1161/CIRCHEARTFAILURE.112.970889

819
Heart Failure Patients With Low Blood Pressure: How Should We Manage Neurohormonal Blocking Drugs?

Purvi Parwani and Jason Ryan

Circ Heart Fail. 2012;5:819
doi: 10.1161/CIRCHEARTFAILURE.112.970889
Circulation: Heart Failure is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2012 American Heart Association, Inc. All rights reserved.
Print ISSN: 1941-3289. Online ISSN: 1941-3297

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circheartfailure.ahajournals.org/content/5/6/819

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation: Heart Failure can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at: http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation: Heart Failure is online at: http://circheartfailure.ahajournals.org//subscriptions/