



JACC

Heart Failure

*A Journal of the American
College of Cardiology*

AUGUST 2014
VOLUME 2
NUMBER 4

INSIDE THIS ISSUE

MINI-FOCUS ISSUE: SURGICAL INTERVENTION

Body Position and Activity, But Not Heart Rate, Affect Pump Flows in Patients With Continuous-Flow Left Ventricular Assist Devices

323

Kavitha Muthiah, Sunil Gupta, James Otton, Desiree Robson, Robyn Walker, Andre Tay, Peter Macdonald, Anne Keogh, Eugene Kotlyar, Emily Granger, Kumud Dhital, Phillip Spratt, Paul Jansz, Christopher S. Hayward

Pump outputs in patients with continuous-flow left ventricular assist devices increase with exercise. This has been attributed to increases in heart rate; however, exercise is also associated with significant changes in venous return. This study examined the effects of heart rate and pre-load on pump flow through adjustments in ventricular pacing and passive tilting separately. Flows were not affected by alterations in pacing heart rate but did change significantly with changes in passive filling. This study suggested that previously demonstrated exercise-induced changes in pump flows may be related to altered loading conditions, rather than changes in heart rate.

■ EDITORIAL COMMENT

Factors Influencing the Rate of Flow Through Continuous-Flow Left Ventricular Assist Devices at Rest and With Exercise

331

Benjamin D. Levine, William K. Cornwell III, Mark H. Drazner

Exercise Capacity and Mortality in Patients With Ischemic Left Ventricular Dysfunction Randomized to Coronary Artery Bypass Graft Surgery or Medical Therapy: An Analysis From the STICH Trial (Surgical Treatment for Ischemic Heart Failure)

335

Ralph A.H. Stewart, Dominika Szalewska, Lilin She, Kerry L. Lee, Mark H. Drazner, Barbara Lubiszewska, Dragana Kosevic, Permyos Ruengsakulrach, José C. Nicolau, Benoit Coutu, Shiv K. Choudhary, Daniel B. Mark, John G.F. Cleland, Ileana L. Piña, Eric J. Velazquez, Andrzej Rynkiewicz, Harvey White

In an analysis from the Surgical Treatment for Ischemic Heart Failure Trial, exercise capacity was assessed by a 6-min walk test and by questionnaire in 1,212 patients with ischemic left ventricular dysfunction before randomization to coronary artery bypass graft surgery (CABG) or medical management. Participants able to walk ≥ 300 m in 6 min and those less limited by symptoms during exercise had lower mortality during 5 years of follow-up if randomized to CABG rather than to medical therapy. In contrast, participants with poorer exercise capacity had an increased early risk and no mortality benefit with CABG compared with medical therapy.

 [SEE ADDITIONAL CONTENT ONLINE](#)

■ EDITORIAL COMMENT

Functional Status and Outcome After Coronary Artery Bypass Grafting

344

Vera Bittner

CME

JACC: Heart Failure CME is available online. Go to <http://heartfailure.onlinejacc.org> to participate.

**Does the UNOS Heart Transplant Allocation System Favor Men Over Women?****347**

Eileen M. Hsich, Randall C. Starling, Eugene H. Blackstone, Tajinder P. Singh, James B. Young, Eiran Z. Gorodeski, David O. Taylor, Jesse D. Schold

We aimed to identify sex differences in survival among patients awaiting orthotopic heart transplantation (OHT). We included all adult patients on the United Network for Organ Sharing (UNOS) OHT waitlist from 2000 to 2010. The primary endpoint was all-cause mortality before receiving OHT. Among 28,852 patients (24% women) followed for 3.7 years, 1,290 women and 4,286 men died. Female sex was associated with higher risk of death among UNOS status 1A (adjusted HR: 1.20; 95% confidence interval [CI]: 1.05 to 1.37, $p = 0.01$) and protective for time to death among UNOS status 2 patients (adjusted HR: 0.75; 95% CI: 0.67 to 0.84, $p < 0.001$). There were significant sex differences in survival among patients awaiting OHT.

■ **EDITORIAL COMMENT****U.S. Donor Heart Allocation Bias for Men Over Women? A Closer Look****356**

Jon A. Kobashigawa

CLINICAL RESEARCH**Coronary Microvascular Dysfunction Is Related to Abnormalities in Myocardial Structure and Function in Cardiac Amyloidosis****358**

Sharmila Dorbala, Divya Vangala, John Bruyere Jr, Christina Quarta, Jenna Kruger, Robert Padera, Courtney Foster, Michael Hanley, Marcelo F. Di Carli, Rodney Falk

Effort angina is common in subjects with cardiac amyloidosis. The authors tested the hypothesis that coronary microvascular function is impaired in subjects with cardiac amyloidosis, even in the absence of epicardial coronary artery disease. On quantitative rest and vasodilator stress N-13 ammonia positron emission tomography, coronary microvascular dysfunction was prevalent in subjects with cardiac amyloidosis compared with subjects with hypertensive left ventricular hypertrophy; rest myocardial blood flow, stress myocardial blood flow, and coronary flow reserve were reduced and minimal coronary vascular resistance was increased in subjects with cardiac amyloidosis. Coronary microvascular dysfunction may explain some of the anginal symptoms in patients with amyloidosis.

 [SEE ADDITIONAL CONTENT ONLINE](#)

Download English Version:

<https://daneshyari.com/en/article/2942552>

Download Persian Version:

<https://daneshyari.com/article/2942552>

[Daneshyari.com](https://daneshyari.com)