Elderly HF Patients Get Same Benefits From CRT

BY BRUCE JANCIN

SNOWMASS, COLO. — Advanced age is not a valid reason to exclude otherwise qualified patients from cardiac resynchronization therapy, a study indicates.

Dr. Jamie B. Conti often hears colleagues say, "I think that patient is too old for CRT." But the 2008 American College of Cardiology/American Heart Association/Heart Rhythm Society CRT guidelines make no mention of an age cutoff. And Dr. Conti and coworkers recently conducted a study that concluded CRT is as effective—and safe—in heart failure patients above age 75 as in those who are younger, she noted at a conference sponsored by the ACC.

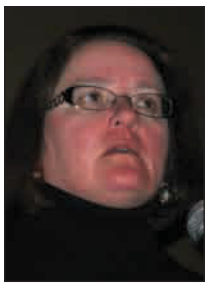
There has never been a randomized trial looking at the effects of CRT specifically in the elderly. So the researchers performed a subanalysis of 839 participants in two major randomized trials of CRT: the Multicenter InSync Randomized Clinical Evaluation (MIRACLE) and Multicenter InSync-ICD Randomized Clinical Evaluation (MIRACLE-ICD).

The over-75 cohort in the subanalysis comprised 174 patients. Another 297 patients were aged 65-75, and 368 were aged under 65 years. All received a CRT device, then were randomized to 6 months with the device activated or turned off.

All three age groups had significant improvements in New York Heart Association functional class and left ventricular ejection fraction (LVEF) with CRT activated compared with patients in whom the device was turned off, said Dr. Conti, professor of medicine and chief of the division of cardiovascular medicine at the University of Florida, Gainesville.

The improvement in NYHA class after 6 months with the CRT device turned on compared with CRT off amounted to a net 1.32 class units in the under-65 cohort, 1.27 units in the 65-75 age group, and 1.22 units in the oldest group. LVEF improved by 3.45% more with CRT on than off in the under-65 group, by 2.23% more in the 65- to 75-year-olds, and by 3.45% more in the over-75 group (J. Interv. Card. Electrophysiol. 2009;25:91-6).

In addition, there was a strong albeit nonsignificant trend for improvement in left ventricular end systolic volume with CRT turned on in patients over age 75. The LV end systolic volume fell by a mean of 17.68 mL from baseline with CRT on in the oldest cohort, compared with a 0.86-mL decrease with CRT off. LV end systolic volume fell by a mean of 35.1 mL more with CRT on than off in the under-65 group. The difference between CRT on and off in the 65-75 age group was a net 26.51-mL decrease.



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DR. CONTI

Complication rates were no different in the three age groups, Dr. Conti said.

The ACC/AHA/HRS guidelines recommend CRT for patients with an LVEF of 35% or less, a QRS duration of at least 120 msec, and NYHA functional class III or ambulatory class IV despite optimal medical therapy. However, it seems likely that the indications will broaden to include patients in class I/II on the strength of the positive results of the Resynchronization Reverses Remodeling in Systolic Left Ventricular Dysfunction (REVERSE) trial, predicted Dr. Conti, who had no relevant financial interests. ■