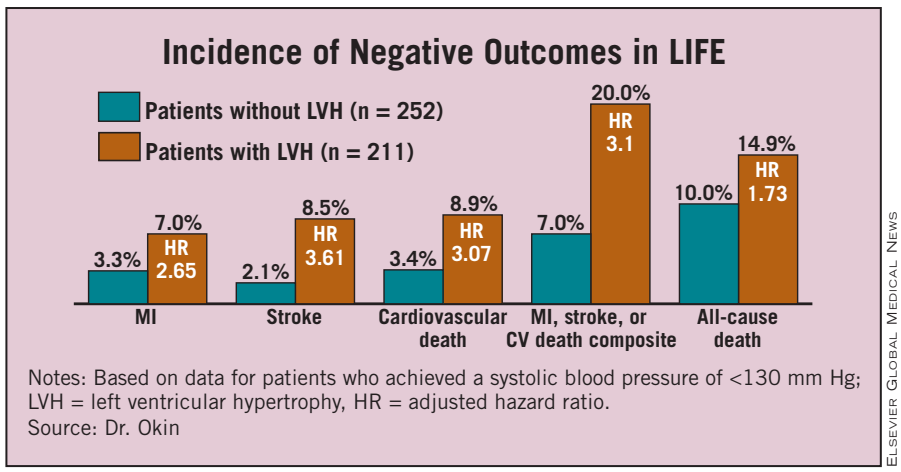

Notes: Based on data for patients who achieved a systolic blood pressure of <130 mm Hg; LVH = left ventricular hypertrophy, HR = adjusted hazard ratio.
Source: Dr. Okin

ELSEVIER GLOBAL MEDICAL NEWS

Persistent LVH Worsens Outcomes in Hypertensives

BY MITCHEL L. ZOLER

FROM THE ANNUAL MEETING OF THE AMERICAN COLLEGE OF CARDIOLOGY

NEW ORLEANS – Hypertensive patients with persistent left ventricular hypertrophy despite normalized BP faced a substantially higher risk for death and cardiovascular events, compared with patients without hypertrophy on antihypertensive treatment, according to a study involving 463 patients.

"These results suggest that persistence of left ventricular hypertrophy [LVH] in a subset of patients with lower achieved blood pressure during treatment may in part explain the lack of benefit seen in hypertensive patients, despite treatment to lower systolic blood pressure," Dr. Peter M. Okin said at the meeting.

Based on these results, it may be necessary to track end-organ damage in addition to BP to fully assess response to treatment in hypertensive patients, said Dr. Okin, professor of medicine at Cornell University in New York.

The analysis Dr. Okin reported came from a subset of participants in the LIFE (Losartan Intervention for End Point Reduction in Hypertension) study, which enrolled 9,193 patients aged 55-80 years with a BP of 160/95 mm Hg to 200/115 mm Hg. The study randomized patients to two different antihypertensive treatment arms, one based primarily on losartan and the control based primarily on atenolol, with a target BP of 140/90 mm Hg or less (Lancet 2002;359:995-1003).

Persistence of LVH in certain patients with lower achieved BP may explain the lack of benefit of treatment.

DR. OKIN

The subgroup used for the new analysis included the 463 patients in the study who achieved a systolic BP of 130 mm Hg or less. During an average follow-up of more than 4 years, the combined rate of cardiovascular death, MI, or stroke was 15%.

The researchers used data from the 12-lead ECG recordings of these patients, as analyzed to calculate left ventricular size. They considered any patient with a Cornell product greater than 2440 mm x msec to have residual LVH. This identified 211 patients (46%) with persistent hypertrophy despite their low achieved systolic BP, and 252 patients without LVH.

Patients with persistent LVH were significantly older (66 years) than were those without LVH (64 years), and were significantly more likely to be women (53%) compared with the 40% rate of women in the group without LVH.

During the average 4.4 years of follow-up, patients with residual hypertrophy had significantly higher rates of MI, strokes, cardiovascular death, and all-cause mortality, as well as a significantly higher rate of the combined end point of MI, stroke, or cardiovascular death, compared with the patients without hypertrophy. (See box.)

Dr. Okin said that he receives a financial benefit from GE Medical Systems. The LIFE trial was sponsored by Merck, which markets losartan (Cozaar). ■