

Statin Use Linked to Better Heart Failure Survival

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VIENNA — Treatment with a statin was linked with better survival among patients with heart failure or left ventricular dysfunction in results from three independent studies reported at the annual congress of the European Society of Cardiology.

Serum cholesterol is not the only factor to consider when prescribing a statin in heart failure patients because the drug's

pleiotropic effects also play a major beneficial role, Dr. Bojan Vrtovec said in an interview. And the drug may help patients with either ischemic or nonischemic heart failure because the pleiotropic effects of statins are not mediated ischemia relief.

"As long as a patient does not have advanced heart failure with cachexia, I'd prescribe a statin," said Dr. Vrtovec, a cardiologist at the University of Ljubljana, Slovenia. He ran a prospective, randomized study that involved 110 patients with

New York Heart Association class III heart failure. Because the enrolled patients could not be on any cholesterol-lowering drug at entry, their serum cholesterol levels were moderate, with an average total cholesterol level of 161 mg/dL. Their average age was 63 years. Patients were randomized to receive either 10 mg atorvastatin (Lipitor) daily or placebo.

After 1 year, the rate of all-cause death was 16% in patients on the statin, compared with 36% in those on placebo, a sta-

tistically significant difference. The rate of sudden cardiac death was 5% in the statin group and 22% in the placebo group, also a significant difference. Pump-failure death was not significantly different between the two groups.

In a multivariate analysis that controlled for baseline differences among the patients, lack of statin treatment was linked with a significant, 45% relative increase in sudden cardiac death. The only other significant determinant of sudden cardiac death in the analysis was QT variability, which boosted mortality by 7%.

The study used a modest dosage of atorvastatin, 10 mg daily. The benefit of statin treatment in heart failure patients might be greater if the dosage were increased, Dr. Vrtovec said in an interview.

The second study reviewed 500 consecutive patients who were admitted to the coronary care unit at Taunton (England) Hospital with a diagnosis of acute myocardial infarction during March 2000–March 2002. The analysis focused on 339 patients who had a left ventricular ejection fraction of less than 40% during hospitalization. In this group, 249 patients were treated with a statin throughout follow-up and 90 patients were not. Average follow-up of the patients was 5.5 years. Patients who began follow-up without statin therapy but were later prescribed a statin were excluded from the analysis.

The death rate during follow-up of the patients treated with a statin was 28%, compared with a 52% mortality rate in those not on a statin, a statistically significant difference, reported Dr. Raju Sankaranarayanan, a cardiologist at Taunton Hospital. The rate of death as a result of heart failure was 4% in the statin group and 12% in the no-statin group, also a significant difference.

In a multivariate analysis that controlled for baseline differences in the two groups, including age, gender, and other medications, treatment with a statin was linked with a significantly reduced rate of heart failure death, Dr. Sankaranarayanan said.

The third study involved data collected in a nationwide German registry of nearly 19,000 patients who were discharged following hospitalization for acute coronary syndrome during 1992–2004. This included about 15,000 patients with left ventricular ejection fractions greater than 40%, and about 4,000 with ejection fractions of 40% or less. About 60% of patients in both subgroups were treated with a statin, most commonly atorvastatin or simvastatin. Median follow-up was 399 days.

In a propensity score analysis, total mortality was cut by statin treatment by a relative 26% in patients with a higher ejection fraction, and by a relative 33% in patients with an ejection fraction of 40% or less, reported Dr. Anselm K. Gitt of the Heart Center in Ludwigshafen, Germany.

The analysis also uncovered a treatment paradox: the lower a patient's ejection fraction, the lower the likelihood of statin treatment. Patients with ejection fractions of more than 55% had a 67% prevalence of statin treatment. Patients with ejection fractions of 30% or less had a 54% chance of being on a statin. ■

Cardiac Risk Factors

Serving Size: 1 Adult Male
Servings Per Container: 1

Amount Per Serving	
Age	48
Weight	243
Total Cholesterol	259
LDL	169
HDL	47
Coronary Calcium Score	397
Body Mass Index	37
Waist Circumference	48
Blood Pressure	
Systolic	150
Diastolic	90
Fasting Blood Glucose	146

Ingredients for Coronary Artery Disease Risk:
Family History, Diabetes, Hypertension, Smoker, Occasional Chest Discomfort

Refer

Nuclear stress testing for reliable diagnostic and prognostic results^{1,2}

1. Klocke FJ, et al. *Circulation*. 2003;108:1404-1418.
2. Hachamovitch R, et al. *Circulation*. 1998;97:535-543.