

Lifestyle Intervention Targets Families of CVD Patients

BY MITCHEL L. ZOLER
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NEW ORLEANS — Hospitalization for a cardiovascular event may create a unique educational opportunity to induce members of the patient's immediate family to adopt heart-healthy lifestyle changes.

This notion was tested in a study of about 500 family members who were randomized to either a special, educational intervention or to more conventional primary-prevention care, and while the study failed to produce a sig-



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DR. MOSCA

nificantly better outcome for its primary end point, the results showed some signs that the strategy has a future.

The special intervention, lifestyle-change program "was associated with significantly greater dietary improvement and a beneficial effect on change in high-density lipoprotein cholesterol compared with the control intervention," Dr. Lori Mosca said at the annual scientific sessions of the American Heart Association.

The results also showed that many close relatives of patients hospitalized for cardiovascular disease (CVD) were unaware of their own risk for a similar event. "We need to build into our guidelines recommendations to screen and educate relatives," said Dr. Mosca, professor of medicine at Columbia University and director of preventive cardiology at New York-Presbyterian Hospital in New York.

"We showed systematically that there was a 'teachable moment' when a family member was hospitalized. We should take advantage of that," as well as similar moments that may come up when a patient with CVD is seen in a physician's office, she said in an interview. A lifestyle intervention program for families members similar to the one tested in this study has been in place at New York-Presbyterian for nearly 8 years. The educational materials used in the program are available for free in both English and Spanish at the Web site for Dr. Mosca's program, www.hearthealth-times.com.

"These data support the use of teachable moments," similar to successful programs already in place to get myocardial infarction patients to stop smoking and improve other risk factors, commented Dr. C. Noel Bairey Merz, who is director of the women's heart center and the preventive and rehabilitative cardiac center at Cedars-Sinai

Medical Center in Los Angeles.

The Family-Intervention Trial to Improve Heart Health (FIT-Heart) study recruited family members of patients hospitalized for CVD at New York-Presbyterian. Recruitment was done among family members visiting patients' rooms, in family waiting rooms, and by invitations included in the admission packets given to patients during January 2005-June 2006. Among 3,649 adult family members approached, 501 agreed to participate and gave informed consent. Only one person per family was included in the study group, but other family members were welcome to also attend the intervention visits.

Randomization assigned 250 people to the special intervention group; they underwent a diet and laboratory assessment and received personalized risk-factor education and lifestyle-change counseling from a master's-level health educator. Reinforcement phone calls were made to these people at 2 and 6 weeks after the intervention started, and they were seen at clinic visits at 3, 6, and 9 months. The other 251 people were assigned to a control intervention group and underwent a similar baseline assessment but received only a general heart-healthy message. A letter was also sent to the health care providers of people in this group if they had a critical risk-factor level. The study's primary end point was the average change in serum level of LDL cholesterol 1 year after the intervention started; 1-year follow-up data were available for 232 people in each study arm.

The average LDL cholesterol level fell by virtually the same amount in both study arms: 4.4% in the special intervention group and 4.5% in the control group. The two groups also had similar improvements in their amount of exercise each week. However, both groups also showed significant and similar increases in the average levels of blood pressure and waist size. The results were published simultaneously with Dr. Mosca's report at the meeting (Circ. Cardiovasc. Qual. Outcomes 2008;1:98-106).

But the special intervention group had significantly more improvement than did the control subjects in their diet, and serum levels of HDL cholesterol were unchanged in the special intervention group but significantly fell in the control group with an average reduction of about 3%.

Dr. Mosca said she was hopeful that the "improvements in lifestyle associated with the special intervention may have beneficial effects that go far beyond what we measure in practice."

In addition, "as we go forward, lifestyle interventions need to address a more comprehensive approach to controlling blood pressure and, most importantly, adiposity and weight," Dr. Mosca said. "We need to move to a more Mediterranean-style diet." ■

High Thromboembolism Rate Seen Among Inpatients

BY MITCHEL L. ZOLER
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PHILADELPHIA — The "real-world" incidence of venous thromboembolism in a mixed group of U.S. patients who were hospitalized for medical illness was 5.6% during a median follow-up of about 15 months following their index hospitalization, in a review of more than 150,000 discharged patients aged 40 years or older.

This rate is two- to threefold higher than previously reported incidence rates for venous thromboembolism (VTE) in ill patients, Dr. Alex C. Spyropoulos and his associates reported in a poster at the annual meeting of the American College of Chest Physicians.

The high rate seen in this study may have been because the patients were followed for a relatively long period, the study included unselected patients and in some cases patients with comorbidities, and prophylaxis for VTE was underused, said Dr. Spyropoulos, medical director of the Clinical Thrombosis Center at the Lovelace Medical Center in Albuquerque, and his associates.

They used claim records from the PharMetrics database for 158,325 patients aged 40 years or older who were hospitalized and then discharged during 2001-2005. This database includes claims from more than 90 U.S. health insurance plans that together include more than 50 million beneficiaries.

Included in the review were patients hospitalized for a severe infectious disease (48%), cancer (25%), lung disease

(17%), or heart failure (10%). Their average age was about 58 years, more than half the patients were women, and less than 1% of the patients had VTE during their index hospitalization. VTE prophylaxis with an anticoagulant was used by about 5% of the patients during the first 30 days following their hospital discharge. "The use of VTE prophylaxis in accordance with guideline recommendations remains low in medical patients," the researchers noted.

During follow-up, deep vein thrombosis occurred in almost 4% of all patients, pulmonary embolism occurred in almost 1.5%, and both forms of VTE occurred in 0.2%. The total rate of all symptomatic VTE episodes was about 5.6%. The median time to VTE was 74 days.

The VTE rate was highest among the cancer patients, at almost 7.6%. The rate was lowest among patients with severe infectious disease, about 4.9%.

The strongest predictor of VTE during follow-up was VTE during the index hospitalization, which boosted the risk about ninefold, compared with patients without VTE during hospitalization. Other factors that increased VTE risk were having cancer, which raised the risk by about 34%, compared with the other morbidities studied, a longer index hospitalization, and a higher Charlson comorbidity score prior to the index hospitalization.

The study was funded by Sanofi-Aventis. Dr. Spyropoulos had received research grants from and is a consultant to Sanofi-Aventis and other drug companies. ■

National CV Hospitalization Rates Declined in 2000-2005

BY BRUCE JANCIN
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NEW ORLEANS — The total number of hospitalizations for cardiovascular events and procedures in the United States declined by 17% during the first 6 years of this decade, according to data from the Healthcare Cost and Utilization Project's Nationwide Inpatient Sample.

Hospitalizations for coronary heart disease fell by an age- and sex-adjusted 24% from 2000 to 2005, while stroke-related hospitalizations declined by 18%. Meanwhile, heart failure admissions remained essentially constant, Craig S. Roberts, Pharm.D., reported at the annual scientific sessions of the American Heart Association.

The rate of elective coronary artery bypass graft (CABG) surgery plummeted by 46%. The total number of CABG procedures decreased by 40% from more than 385,500 performed in 2000.

In contrast, primary angioplasties increased by over 13%, from 2.2 per 1,000 persons in 2000 to 2.5 in 2005, while the elective angioplasty rate remained flat over that period, according to Dr. Roberts of Pfizer Inc. in New York.

The total cardiovascular hospitalization rate was 13.8 per 1,000 in 2000, dropping to 11.5 in 2005. The nearly 3.4 million total cardiovascular hospitalizations in 2005 were more than 704,000 fewer than in 2000.

Coronary heart disease hospitalizations declined from 3.3 to 2.5 per 1,000 during 2000-2005. Stroke-related hospitalizations dropped from 2.0 to 1.7 per 1,000. The heart failure hospitalization rate, which was 3.8 per 1,000 at the beginning of the decade, was 3.7 in 2005.

The cardiovascular hospitalization decreases were consistent from year to year and were similar in men and women across all age groups. ■