Smoking Cessation Intervention For Cardiac Inpatients Pays Off Big

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CHICAGO — An intensive smoking cessation intervention that starts while patients are hospitalized for an acute cardiac event is not merely highly cost effective, it is actually cost saving, Robyn Kondrack, Pharm.D., reported at the annual meeting of the American College of Cardiology.

Indeed, the mean cost-effectiveness ratio of providing a 3-month intensive smoking cessation intervention (SCI) to hospitalized smokers in a 209-patient randomized controlled trial was $1,443 per year of life gained, according to Dr. Kondrack of Creighton University, Omaha, Neb.

The total direct cost of medical care during 5 years of prospective follow-up in the SCI arm of the study was $872,376, including nearly $250,000 for the smoking cessation program itself, compared with $1,025,000 in patients randomized to usual care. The major driver of the more than $150,000 in cost savings in the SCI group was their reduced hospital costs over the 5-year period.

Dr. Kondrack's cost analysis was a follow-up to last year's initial report on the Creighton University randomized trial, which showed a 2-year all-cause mortality of 2.8% in the intensive SCI group compared with 12.0% in the usual care controls, a 77% relative risk reduction. Twenty-five patients in the SCI group were hospitalized during the first 2 years of follow-up, as were 41 controls, for a 44% relative risk reduction (Chest 2007;131:446-52).

The investigators said although the 16 prior randomized controlled trials of SCIs in hospitalized smokers published since 1985 had clearly established that such programs result in higher smoking abstinence rates than usual care, theirs was the first to demonstrate reduced morbidity and mortality in response to an SCI.

All participants in the Nebraska study were smokers hospitalized in a coronary care unit for an acute cardiac syndrome or acute decompensated heart failure. All received a 30-minute inpatient smoking cessation counseling session; the usual-care group also received printed educational materials before discharge.

The structured SCI consisted of a minimum of 12 weekly behavior modification sessions with a counselor who has expertise in nicotine addiction, along with individualized pharmacotherapy—bupropion (Wellbutrin) and/or nicotine replacement therapy—provided at no cost to the patient. Seventy-five percent of patients in the SCI utilized the adjuvant pharmacotherapy, as did just 17% in the usual care group.

The biochemically confirmed continuous smoking abstinence rate at 2 years was 33% in the SCI group, compared with 9% with usual care.

The number-needed-to-treat using the intensive SCI to prevent one additional death during 2 years was 11. The results suggest smoking cessation may be the most effective secondary prevention measure available to smokers with cardiovascular disease—more effective than statins, antiplatelet agents, or other drugs considered standard therapy.

In an ACP Journal Club commentary on the Creighton trial, Dr. Charles J. Bentz of Providence St. Vincent Medical Center, in Portland, Ore., called it a landmark study (ACP J Club 2007;147:3).

Only 14 states cover outpatient smoking cessation counseling for all Medicaid recipients, and only Oregon covers all forms of counseling and medication, he noted, adding that the study "should serve as a call to all payers, public and private, to reevaluate their coverage for intensive tobacco cessation interventions."

Dr. Kondrack noted that roughly three-quarters of the cost of the intensive SCI program was for personnel, with another 18% going for office and pharmaceutical supplies. ■

Light Drinking Post MI Trumps Quitting

CHICAGO — Moderate drinkers who quit after an MI have worse long-term outcomes than do those who continue light to moderate drinking.

"This finding is especially important since many who drink may quit drinking after an MI, believing it is a behavior in their best interest for health," Dr. John H. Lee reported at the annual meeting of the American College of Cardiology. "Since continued moderate drinkers had better outcomes, it may be prudent to recommend continued moderate drinking rather than cessation."

Dr. Lee, of the Mid-America Heart Institute, Kansas City, Mo., presented a secondary analysis of data from the multicenter, double-blind, prospective Prevention of MI Early Remodeling (PREMIER) study, a placebo-controlled trial that failed to show benefit for a matrix metalloproteinase inhibitor. Of 2,498 participants, 362 were categorized as moderate, nonbinge drinkers before their MI. Afterward, 18% of the moderate drinkers quit drinking.

In a multivariate regression analysis adjusted for baseline health status and demographic variables, continued moderate drinkers were 24% less likely to experience all-cause mortality, rehospitalization, and/or angina during the first year post MI than moderate drinkers who quit. They were also 36% less likely to have angina 1 year post MI and scored significantly better on the physical component summary scale of the Short Form-12 quality of life measure.

A possible study confounder is the potential for the "sick quitter" syndrome, in which patients might have quit drinking post MI because their health was deteriorating to a greater extent. But this is unlikely, said Dr. Lee, because the association with worse outcomes stood up even when adjusting the multivariate analysis for chronic diseases such as renal failure, heart failure, and diabetes. ■

In STEMI, Swift Postlytic Transfer for PCI Therapy Is Ideal

CHICAGO — Transfer of patients with ST-elevation MI to a center where they can routinely undergo percutaneous coronary intervention within 6 hours after getting thrombolytic therapy at a non-PCI hospital is superior to the conventional wait-and-see strategy, according to the findings of a landmark Canadian trial.

"Transfer to PCI centers should be initiated immediately after thrombolysis without waiting to determine whether reperfusion will be successful or not. Regional systems should be developed to ensure timely transfer of STEMI patients to PCI centers," Dr. Warren J. Cantor said at the annual meeting of the American College of Cardiology.

Transfer to PCI centers should be immediate, without waiting to determine whether or not reperfusion will be successful.

DR. CANTOR

He presented the results of TRANSFER-AMI (Trial of Routine Angioplasty and Stenting After Fibrinolysis to Enhance Reperfusion in Acute Myocardial Infarction).

The study involved 1,059 patients with STEMI with high-risk features who presented to hospitals lacking a cardiac catheterization facility, where, in accordance with current guidelines, they received thrombolytic therapy along with aspirin, clopidogrel, and unfractionated heparin or enoxaparin.

They were then randomized to transfer for PCI and stenting within 6 hours of thrombolytic therapy—the so-called pharmacoinvasive strategy—or to the widely utilized strategy of transfer only for rescue PCI in the event of failed reperfusion, with elective PCI encouraged after 24 hours in successfully reperfused patients, which has been the standard approach in MI patients who cannot undergo timely primary PCI.

The median time from symptom onset to administration of the thrombolytic tenecteplase was 2 hours. The median time from thrombolysis to PCI was 4 hours in the early transfer group, compared with 27 hours in the roughly 60% of patients in the wait-and-see group who eventually underwent PCI, explained Dr. Cantor of Southlake Regional Health Centre, in Newmarket, Ont.

The primary end point in TRANSFER-AMI was a composite of 30-day death, reinfarction, heart failure, cardiogenic shock, or recurrent ischemia. It occurred in 10.6% of patients who received the pharmacoinvasive strategy, compared with 16.6% who were managed using the standard approach, for a highly significant 46% relative risk reduction.

Rates for 30-day moderate and major bleeding were similarly low in both groups. The intracranial hemorrhage rate was 0.2% in the pharmacoinvasive group, and 1.2% with the standard approach.

In an interview, Dr. William W. O'Neill predicted that TRANSFER-AMI will result in a major change in management for the roughly 50% of U.S. patients with MI who come to hospitals without catheterization laboratories.

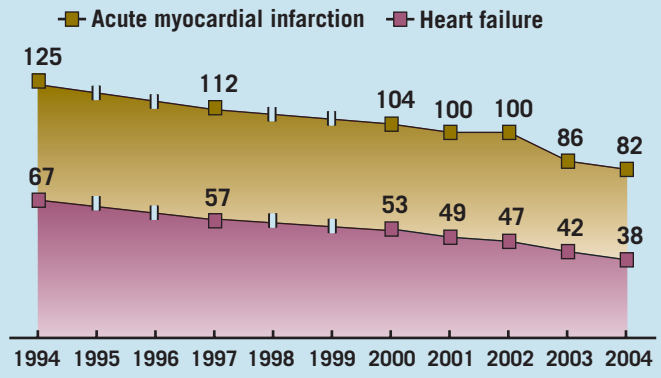
"TRANSFER-AMI is going to make a big difference because there's been a lot of reluctance at small hospitals to routinely transfer patients after lytic therapy. Now we're saying, give lytics and then routinely send everybody. I think this is really going to change the way that small community hospitals practice," said Dr. O'Neill, who is a vocal advocate for regionalization of MI care who is professor of medicine and executive dean of clinical affairs at the University of Miami.

Dr. Cantor said he has served as a consultant to Roche, which, together with the Canadian Institutes of Health Research, funded TRANSFER-AMI. ■

DATA WATCH

Inpatient Mortality From Heart Attack And Heart Failure Declining

(per 1,000 admissions)



Source: Healthcare Cost and Utilization Project