

## Treatment Can Be Tricky

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past month, have you often been bothered by feeling down, depressed, or hopeless? During the past month, have you been bothered by little interest or pleasure in doing things?

A “yes” to either of these two questions suggests that depression may be present, and as a screening tool the questionnaire is 96% sensitive for not missing a possible case, said Dr. Wulsin, a professor of psychiatry and family medicine at the University of Cincinnati.

Step 2 in confirming a diagnosis is to use the PHQ-9, a nine-question tool that also is scored based on the frequency of several depression symptoms, such as poor appetite, trouble falling asleep, and trouble concentrating. This follow-up questionnaire takes about 2 minutes for a patient to complete, said Dr. Mary A. Whooley, a physician and epidemiologist at the University of California, San Francisco.

It can miss diagnosing about half of the patients who actually have depression, so a negative result on the PHQ-9 should be followed by a clinical interview. But if a patient has positive findings on the PHQ-9, with a score of 10 or higher, then the

specificity is 90%, and the patient can be considered to be depressed without need for further confirmation.

Treat depression “not to prevent coronary artery disease events but to improve patient[s] quality of life,” Dr. Whooley added in an interview. A randomized trial is needed to prove that treating depression improves cardiovascular outcomes. But this type of proof is not needed to treat depression in patients right now because patients get other benefits.

A major issue is how to treat, especially in patients with coronary disease that might become exacerbated by certain antidepressant drugs. The top options are sertraline (Zoloft), citalopram (Celexa), and bupropion (Wellbutrin) for patients who are intolerant of a selective serotonin reuptake inhibitor (SSRI), said Dr. Whooley. Citalopram and sertraline are the SSRIs that are least likely to inhibit cytochrome P450 enzymes, and hence they minimize interactions with other drugs that patients with coronary disease might take. Bupropion can be associated with minor increases in blood pressure, but it’s a good first-line choice if the patient is trying to quit smoking. ■

## Depression Speeds Atherosclerosis After Coronary Bypass Surgery

BY MITCHEL L. ZOLER  
Philadelphia Bureau

ORLANDO — Patients who were depressed after coronary artery bypass surgery were significantly more likely to have atherosclerotic disease progression within their grafted vessels during follow-up, in a post hoc analysis of data from over 1,300 patients.

This finding should prompt a prospective study to assess whether depression plays a causal role in atherosclerosis, Dr. Ambar Kulshreshtha said while presenting a poster at a conference on cardiovascular disease epidemiology and prevention sponsored by the American Heart Association.

The analysis used data collected in the Post Coronary Artery Bypass Graft trial designed to test whether treatment with an aggressive lipid-lowering regimen and low-dose warfarin could slow atherosclerosis progression

within saphenous-vein bypass grafts. The study used patients who’d undergone coronary bypass surgery 1-11 years prior to enrollment. The primary findings of the trial were that aggressive lowering of LDL cholesterol significantly reduced the progression of atherosclerosis within grafted veins, but low-dose warfarin had no benefit (*N. Engl. J. Med.* 1997;336:153-63).

Almost 98% of enrolled patients—1,319—were evaluated for depression at the time they entered the study using the Centers for Epidemiologic Studies depression (CES-D) scale. Patients were considered depressed if their score was at least 16. According to the CES-D, a score of 16-27 represents mild depression, and a score greater than 27 indicates moderate to severe depression.

Upon evaluation, 127 of the postbypass patients scored 16 or greater on the CES-D, and the remaining 1,192 patients

had scores of 15 or less.

All patients also had a baseline coronary angiogram when they entered the study, and a follow-up examination at an average of 4.2 years later.

In an analysis that adjusted for several baseline differences, patients who were diagnosed with depression at entry had a 40% increased risk of having substantial atherosclerosis progression in their saphenous vein grafts, versus patients who were not depressed at baseline, said Dr. Kulshreshtha, a cardiovascular research physician at Beth Israel Deaconess Medical Center in Boston.

This difference was statistically significant.

Among the potential confounders used for adjustment in the analysis were gender, race, years since bypass surgery, systolic blood pressure, kidney function, diabetes, body mass index, and physical activity. ■

## Citalopram, but Not Psychotherapy, Lifts Depression in Cardiac Patients

BY MARY ANN MOON  
Contributing Writer

The addition of citalopram to the clinical management of depression in people with established coronary artery disease decreases the symptoms, reported Dr. François Lespérance and his associates in the Canadian Cardiac Randomized Evaluation of Antidepressant and Psychotherapy Efficacy trial.

In contrast, attending interpersonal psychotherapy—a semistructured, short-term psychotherapy program that focuses on the social context of depression and is considered especially relevant to coronary artery disease (CAD) patients—does not improve depressive symptoms beyond the benefit provided by clinical management alone, the researchers said.

This does not imply that other forms of psychotherapy, particularly cognitive-behavioral therapy, would not be helpful in CAD patients, they noted.

The CREATE trial is the first randomized controlled trial designed to assess the short-term efficacy of citalopram and interpersonal psychotherapy in CAD. It involved 284 patients with stable CAD who were treated for an episode of major depression at any of nine academic centers across

Canada between 2002 and 2006.

All of the study subjects participated in clinical management, which encompassed weekly 20-minute sessions with a psychotherapist who discussed depression and medication use, provided reassurance, and encouraged the patients to adhere to treatment.

For half of the subjects, this clinical management was the only psychotherapeutic intervention offered. The other half participated in additional interpersonal psychotherapy of 50-minute weekly sessions with a therapist who addressed problems common in CAD patients and known to exacerbate CAD morbidity and mortality, such as interpersonal conflicts, life transitions, grief, loss, and social isolation.

Similarly, half of the study subjects were randomly assigned to receive daily citalopram and half to receive a placebo pill, said Dr. Lespérance, of the University of Montreal, and his associates.

After 12 weeks of treatment, citalopram was found to be superior to placebo in reducing depressive symptoms, as assessed by independent clinical ratings and by patient self-report, the investigators said (*JAMA* 2007;297:367-79).

Citalopram (Celexa), a selective serotonin reuptake inhibitor, was most effective for recurrent

episodes of major depression and less so for first episodes.

In contrast, interpersonal psychotherapy was no more effective at reducing depressive symptoms than was clinical management, its control condition, either by independent clinical ratings or by patient self-report. “Although interpersonal psychotherapy was designed to address interpersonal issues and improve interpersonal functioning, CAD patients with low levels of support or poor daily functioning may have difficulty dealing directly with the combination of cardiac and interpersonal issues that sessions entail, and may do better with the lower demands of regular medical management,” the researchers noted.

Taken together, the study findings indicate that citalopram plus clinical management “should be considered for the initial acute-phase treatment for major depression in patients with CAD,” Dr. Lespérance and his associates said.

In an editorial comment accompanying the report, Dr. Alexander H. Glassman of the New York State Psychiatric Institute and Dr. J. Thomas Bigger Jr. of Columbia University, New York, said the CREATE study’s results provide further evidence for the antidepressant efficacy of SSRIs for patients with heart disease. ■

## Nicotine Patches Seem to Be Safe in Cardiac Patients

NEW ORLEANS — Nicotine patches are safe for smokers with coronary artery disease and stress-induced myocardial ischemia, according to results of the first randomized, placebo-controlled, multicenter clinical trial to examine this issue.

Nicotine therapy doubles the successful smoking quit

myocardial defect by single-photon emission computerized tomography (SPECT) to receive either 21-mg nicotine patches or placebo while continuing to smoke. The primary end point was change in total perfusion defect size upon repeat stress SPECT imaging at 1 week.

There was no change in the total or ischemic perfusion defect size versus baseline in the active- or placebo-patch groups, but plasma nicotine levels in the active-treatment arm rose



**Perfusion defect size in the patch group was static despite a rise in plasma nicotine levels at week 1.**

DR. LEJA

rate, but physicians have been reluctant to recommend it to CAD patients because nicotine raises heart rate and blood pressure and can induce vasoconstriction, Dr. Monika J. Leja said at the annual scientific session of the American College of Cardiology.

She and her colleagues at the Methodist DeBakey Heart Center, Houston, randomized 55 smokers with CAD and a quantified 10% or greater stress-induced

from 10.9 to 25.2 ng/mL.

At 1 week, patients were told to quit while still using the patches. SPECT imaging at week 4, showed perfusion defect size in the patch group was unchanged despite plasma nicotine levels staying as high as at week 1, supporting nicotine therapy safety in CAD patients. The trial was supported by GlaxoSmithKline Consumer Health-care. Dr. Leja has no financial ties to disclose.

—Bruce Jancin