Phone Calls Improve Post-CABG Depression

BY MARY ANN MOON

A collaborative-care intervention delivered by telephone improved mental and physical functioning in patients who developed depression after undergoing coronary artery bypass grafting, according to a study published online in JAMA simultaneously with its presentation at the annual scientific sessions of the American Heart Association.

The treatment's benefits became evident within 2 months of surgery and persisted through 8 months of follow-up. Overall, half of the 150 patients who received the intervention reported a 50% or more reduction in mood symptoms, compared with 30% of patients who received usual post-CABG care, said Dr. Bruce L. Rollman of the University of Pittsburgh and his associates.

At 8 months' follow-up, the intervention group showed significant clinical improvement on the Short Form–36 of 3.2 points, with an effect size of 0.30.

The investigators described their study as the first clinical trial to assess a collaborative-care strategy for treating depression following an acute cardiac event.

"Collaborative care emphasizes a flexible real-world treatment package that involves active follow-up by a nonphysician care manager who adheres to evidence-based treatment protocols, supports patients with timely education about their illness, considers patients' prior treatment experiences and current preferences, teaches self-management techniques, actively involves primary care physicians in their patients' care through regular exchanges of real-time information, proactively monitors treatment responses and suggests adjustments when indicated, and facilitates co-management or transfer of care to local mental health specialists when patients do not respond to treatment or have clinically complicated cases, or upon request by the patient or primary care physician," they explained.

For this intervention, 2,485 post-CABG patients were first screened for depression before hospital discharge, then screened again 2 weeks later to determine whether depression symptoms persisted. A total of 302 were found to have moderate depression and agreed to participate in the study.

The patients had been treated at two university-affiliated and five community hospitals in the Pittsburgh area between 2004 and 2007. They were randomly assigned to the intervention group (150 subjects) or to usual care (152 subjects). A comparison group of 151 post-CABG patients who did not have depression was included in the study.

The intervention was run by a nurse care manager who reported weekly to a study psychiatrist and internist. The care manager contacted patients by phone in 15- to 45-minute sessions, providing "basic psychoeducation" about depression and its effect on cardiac disease, initiating and adjusting antidepressant pharmacotherapy through the patients' primary care physicians, closely monitoring mood symptoms, and coordinating care with a local psychiatrist or psychologist as necessary.

The care manager also performed serial assessments with the 36-item Short Form health survey (SF-36) to measure general mental and physical health, the Duke Activity Status Index to measure disease-specific physical functioning, and the Hamilton Rating Scale for Depression to measure mood symptoms.

After 8 months, the intervention group showed significant clinical improvement on the SF-36 of 3.2 points, with an effect size of 0.30. Improvements of at least 3 points or an effect size of 0.25 on these measures are considered "minimally clinically important," Dr. Rollman and his colleagues said (JAMA 2009;302:2095-103).

Men showed a better treatment response then did women.

For men in the intervention group, there was a nearly 6-point rise on the SF-36. Moreover, 61% of the men who received the intervention reported a 50% or more reduction in depression scores, compared with only 33% of men who received usual care.

In contrast, 38% of women who received the intervention reported that degree of reduction in depression scores, compared with 23% of women who received usual care.

The study subjects who responded well to the intervention showed better outcomes than did those who received usual care, but both groups of patients with post-CABG depression had poorer outcomes than did the comparison group of patients without depression. Overall, 33% of intervention patients and 32% of usual care patients required rehospitalization, compared with only 25% of the control group.

Noting that "a substantial minority of patients," particularly women, did not benefit from the collaborative-care intervention, "it is vital to identify post-CABG patients most likely to become treatment resistant so as to develop more effective treatments for them," the researchers added.

This study was supported by the National Institutes of Health and the University of Pittsburgh.

Dr. Rollman reported no financial conflicts of interest. ■