Depressed Heart Patients Are Less Adherent

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NEW ORLEANS — Depressed patients with heart disease are less likely than their nondepressed peers to follow risk-reduction behaviors after acute coronary syndromes, and they are less likely to adhere to their heart medications, two studies have shown.

The findings may help explain previous findings linking depression to increased mortality in patients with heart disease, according to Ian M. Kronish, M.D., of Mount Sinai Medical School in New York.

The studies enrolled 421 patients at three university hospitals who had experienced an acute coronary syndrome (ACS) in the week prior to their enrollment. Of these, 355 patients completed the study's 3-month follow-up.

The investigators used the Beck Depression Inventory (BDI) to assess depressive symptoms in the hospital and at 3 months. A BDI score of 10 or higher indicated depression of at least mild to moderate severity.

They also assessed risk-factor–modification behavior, as reported by the patient, at 3 months. The risk-reduction behaviors that were considered were smoking cessation, medication compliance, exercise, cardiac rehabilitation, and diet modification, Dr. Kronish reported at the annual meeting of the Society of General Internal Medicine.

The investigators compared differences in risk-reduction behaviors in patients who had BDI scores less than 10 both at hospitalization and at 3 months (never depressed), those who had BDI scores of 10 or more at hospitalization and less than 10 at 3 months (remitted depressed), and those who had BDI scores of 10 or more at both time points (persistently depressed). "We did not include the small number of patients who became newly depressed at 3 months," Dr. Kronish said.

Compared with never-depressed patients, both remitted-depressed and persistently depressed patients reported significantly lower adherence to smoking cessation, medications, exercise, cardiac rehabilitation, and diet modification. In addition, patients with persistent depression were significantly less likely than those with remitted depression to quit smoking, exercise, or participate in cardiac rehabilitation.

The average age of patients in the study was 61 years. Socioeconomic status, severity of cardiac disease, and comorbidities were similar across the comparison groups.

"Adherence to these preventive behaviors reduces the risk of subsequent cardiac events. The fact that depressed patients were significantly less likely to participate in risk-reducing activities may in part explain why depression predicts mortality post ACS," Dr. Kronish said.

Results from another investigation, the Heart and Soul Study (conducted at the University of California, San Francisco) echo the findings of the Mount Sinai study with regard to medication adherence. Mary A. Whooley, M.D., and colleagues performed a cross-sectional study of 940 outpatients with stable coronary heart disease who were taking a cardiac medication (β-blocker, renin-angiotensin system inhibitor, aspirin, or statin).

The investigators assessed current major depression using the Diagnostic Interview Schedule and asked all the participants the question, "Overall, in the past month, how often did you take your medications as the doctor prescribed?" Patients who said they took their medication all the time or nearly all the time were considered adherent. Those who reported taking their medication most of the time, about half the time, or less than half the time were considered nonadherent.

Of the 940 patients, 204 had current depression. Of these, 28 patients (14%) were nonadherent, compared with 40 (5%) of the 736 nondepressed patients. Logistic regression showed that the odds ratio for nonadherence among depressed individuals was 2.8, and this persisted after adjustment for potential confounding variables, including age, ethnicity, education, cognitive function, and measures of cardiac disease severity, Dr. Whooley reported.

"This association was similar in users and nonusers of aspirin, renin-angiotensin system inhibitors, and statins, but differed in users and nonusers of statins," she said. Depression was "strongly associated" with medication nonadherence among the 590 participants taking β-blockers but not among the participants not taking them, she said. ■