# Depression Tied to 36% Increased Risk of MI

BY BRUCE JANCIN Denver Bureau

NEW ORLEANS — Depression is common among patients with heart failure and is independently associated with poor outcomes, Dr. Aldo P. Maggioni said at the annual meeting of the American College of Cardiology.

He presented a retrospective study involving 18,623 patients with heart failure over age 60 identified in an administrative health care database covering two regions of Italy. At entry, 13% were being treated for depression.

In a multivariate logistic regression analysis, comorbid depression was independently associated with a highly significant 28% increased risk of all-cause mortality at 1 year, compared with the risk in heart failure patients not treated for depression.

Depression also was associated with an adjusted 36% increased risk of a 1-year composite end point consisting of MI, stroke, or transient ischemic attack, along with an 18% increase in all-cause hospitalization. However, the risk of rehospitalization for heart failure was no greater in patients treated for depression than in those who weren't, according to Dr. Maggioni, a cardiologist at the Mario Negri Research Consortium South, Santa Maria Imbaro, Italy.

He noted that while the adverse effect of comorbid depression on outcomes in patients with coronary artery disease is well established, there is much less evidence regarding the mood disorder's effect in patients with heart failure. Most previous studies have been quite small.

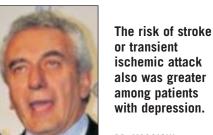
The strength of the new Italian study is its very large numbers. Its weakness is that there was no systematic screening for depression, so it's entirely possible the "nondepressed" comparator group included a fair number of heart failure patients with undiagnosed and untreated depression. Regardless, Dr. Maggioni said, the study conclusion was essentially the same as in the much

smaller studies in which heart failure patients were screened for depression by questionnaire or interview: Depression is associated with poor outcomes in heart failure.

The mean age of participants in this study was 78 years. Patients treated for comorbid depression were significantly older than those who weren't. Sixty-nine percent were women, compared with 58%

of heart failure patients not treated for depression. Patients with depression also were significantly more likely to have a baseline history of stroke, TIA, cancer, and chronic obstructive pulmonary disease.

Dr. Maggioni offered three potential explanations for the worse clinical outcomes in heart failure patients treated for depression. One possibility is that some antidepressant medications might have adverse effects in this population. Another is that depression exacerbates the underlying pathophysiology of heart failure, which is plau-



ischemic attack also was greater among patients with depression.

#### DR. MAGGIONI

sible in light of the fact that both conditions involve increased sympathetic nervous system activity, platelet activation, and systemic inflammation. But the most likely explanation for the association, in Dr. Maggioni's view, is that depressed patients have less social support and are less adherent to their cardiovascular therapy.

The big, unanswered question is whether treatment of depression improves heart failure outcomes, he said.

There are no data, and a definitive randomized clinical trial would need to be very large.

'You need the numbers. If you're testing a new drug, just to see a 15% relative difference in mortality, you need perhaps 7,000 patients," Dr. Maggioni noted in an interview.

Session Chair Douglas P. Zipes called the Italian report linking

depression to worse outcomes in heart failure "a very important observation" regarding an issue that doesn't receive sufficient attention from nonpsychiatrists.

"I think we tend to focus on more tangible issues, such as which coronary artery is occluded [and] the warfarin dose. My impression is that issues such as depression, sexual activity, and support groups aren't discussed at length-and they should be," said Dr. Zipes, Distinguished Professor of Medicine, Pharmacology, and Toxicology at Indiana University, Indianapolis.

## Treating 'Invisible' Symptoms May Be Beneficial in Parkinson's

#### BY AMY ROTHMAN SCHONFELD Contributing Writer

BOSTON — Depression, anxiety, and sleep problems rather than disease explain why some patients with Parkinson's disease call their physicians more frequently than others, according to results of a study presented by Dr. Melissa J. Nirenberg in a poster presentation at the annual meeting of the American Academy of Neurology.

Treating these "invisible" symptoms may both help the patients' quality of life and decrease their health care use, she reported.

In the study, frequent callers-who made an average of 2.4 calls in 100 days-had significantly higher anxiety scores on the Beck Anxiety Inventory and higher depression scores on the Beck Depression Inventory than did those who called infrequently-or a mean of 0.6 calls in 100 days. They also had lower quality of life scores on the Parkinson's Disease Quality of Life scale, reported Dr. Nirenberg. Sleep problems were a universal complaint among frequent callers, but these issues were reported by only 36% of the infrequent callers, a significant difference.

While patients in both groups had moderate motor disability, no differences between groups were found as measured by the motor Unified Parkinson's Disease Rating Scale, Hoehn and Yahr scale, or Schwab and England Disability scale.

The study comprised 44 nondemented Parkinson's disease outpatients who were treated over 4 months in a movement disorders clinic. They all underwent neuropsychiatric and disability testing. Patients who called more than the mean rate of 1.9

calls in 100 days were assigned to the frequent callers group, and those who called less than the mean rate were assigned to the infrequent callers group. Calling history was determined by retrospective chart review.

These [frequent callers] look good but feel bad," says Dr. Nirenberg, who is the associate director of the Parkinson's Disease and Movement Disorders Institute at Cornell University, New York. She believes that because anxiety, depression, and sleep disorders are not readily apparent, it might make sense to focus instead on treating the motor symptoms. Even physicians who recognize the importance of the nonmotor symptoms of Parkinson's disease may not have time to ask about them during a routine office visit, and as a result, may be undertreating these symptoms.

Increased telephone health care use has a significant impact on physicians, said Dr. Nirenberg. These calls take up a tremendous amount of the time. While not assessed in this study, it is likely that these patients also make increased demands on other health care services.

You need to have a high index of suspicion for anxiety and depression, particularly in patients who call frequently," Dr. Nirenberg said. She says that while the ideal treatments for these nonmotor symptoms of Parkinson's disease have not been established, cognitive-behavioral therapy, anxiolytics, antidepressants, and Parkinson's medications may help. It is also important to be aware that treatment of one of these nonmotor problems might exacerbate another-for example, an SSRI prescribed for depression has the potential to worsen anxiety, she said.

### **Depression Rates May Reach** 30% in Transformed Migraine

#### BY ALICIA AULT Associate Editor, Practice Trends

CHICAGO — Depression prevalence may be as high as 30% in transformed migraine, according to a preliminary analysis of the American Migraine Prevalence and Prevention study presented on June 8 at the American Headache Society meeting.

By contrast, only 6%-7% of the U.S. general population has depression, said Dawn C. Buse, Ph.D., director of psychology at the Montefiore Headache Center at the Montefiore Medical Center in the Bronx.

Dr. Buse presented the analysis on behalf of colleagues at the Albert Einstein College of Medicine, New York; the Vedanta Research in Chapel Hill, N.C.; and the Diamond Headache Clinic in Chicago.

The American Migraine Prevalence and Prevention (AMPP) study is an ongoing multisite survey that began in 2004 when a random sample of 120,000 households was mailed self-administered headache questionnaires. Of the 162,576 individuals who responded, 30,721 self-reported severe headaches. A follow-up survey was sent in 2005 to a random subsample of 24,000 of the headache sufferers.

The data presented by Dr. Buse came from the follow-up survey. Respondents were asked for body mass index, and to respond to the Migraine Disability Assessment (MIDAS) questionnaire and the Patient Health Questionnaire-Nine Item Depressive Scale (PHQ-9).

The goal was to determine the relationship among depression, headache type, BMI, and disability.

Data were analyzed from 3,840 (16%) respondents whose scores placed them in the moderately-severe or severe major depression category.

Depression rates were highest in patients with transformed migraine, at 30% (1,152 patients), followed by chronic daily headache at about 20% (768 patients). Eighteen percent (691) of migraine patients had depression, followed by 15% (576) of other types of headache, 13% (500) of tension headache and 12% (461) of probable migraine.

Among patients with depression, 25% were morbidly obese, while 19% were underweight, Dr. Buse said.

Depression increased with rising disability. Only 11% of depressed patients had MIDAS Grade 1 disability, compared with 33% of those with MIDAS grade 4 disability, Dr. Buse said.

Because AMPP is a cross-sectional study, it cannot get at the mechanisms for these interrelationships, she said, adding that she and her colleagues currently are collecting data on medications used, and psychiatric and other comorbidities, and will be following this population for at least another survey, so there may be opportunities for cause-effect analyses in the future.

The AMPP study was supported by the National Headache Foundation through a grant from Ortho-McNeil. Dr. Buse reported that that she consults for Ortho-McNeil and Allergan Pharmaceuticals.

