Psychosomatic Medicine

Psychosomatic Interventions May Benefit Heart Failure Patients

BY BRUCE JANCIN
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NEW ORLEANS — A brief checklist of social and health factors predicts onset of depressive symptoms in heart failure patients, Edward P. Havranek, M.D., said at the annual scientific sessions of the American Heart Association.

Given those findings, routine screening of high-risk patients with heart failure followed by psychosocial interventions aimed at reducing the incidence of depression deserves study, said Dr. Havranek of Denver Health Medical Center.

"This would be consistent with the Institute of Medicine position that one of the changes necessary for American health care is for the way physicians interact with patients, rather than simply to react to events," he said.

The four-item checklist consists of living alone, alcohol abuse, poor health status as measured by the Kansas City Cardiomyopathy Questionnaire (KCCQ), and the patient’s perception that his or her medical care poses a substantial economic burden. A heart failure patient’s risk of developing depression within one year rises in stepwise fashion as the number of applicable risk factors increases (see chart), Dr. Havranek said.

The checklist was developed as part of a multicenter prospective cohort study involving 454 outpatients with heart failure (HF) and a left ventricular ejection fraction less than 40% who were hypertensive and treated with diuretics. During one year of follow-up, 21.9% of patients developed clinically significant symptoms of depression. Multivariate analysis identified four independent predictors of onset of depression in this HF population. Alcohol abuse was associated with a 3-fold elevated risk, living alone conferred a 2.8-fold risk, and medical care being seen by the patient as a substantial economic burden carried a 2.9-fold increased risk.

In addition, the risk of patients developing depression rose by 22% for each 10-point decrement on the KCCQ. The study results were published in December (J. Am. Coll. Cardiol. 2004;44:2333-8).

The KCCQ is a self-administered 23-item multiple-choice instrument that inquires about the patient’s quality of life. For example, the KCCQ asks patients how much swelling in their feet, ankles, or legs has bothered them. The results were rewarding not only in terms of lower BP. The patients also thought they took some personal control of their hypertensive problem and benefited from this intervention. In many cases, as long as the patients continued to practice, their BP fell slightly—beyond a decline seen with medications.

This work taught me something about personality types. For most of the patients referred to me, a tendency to excessive worry was the dominant feature of their personality, rather than the traditional type A factors that many have come to associate with some forms of hypertension and cardiac illness. In fact, a few of the patients opted to remain in psychotherapy so they could further explore their personality styles—especially the endless worrying.

As psychiatrists, we should get more involved in basic health care by helping to stem the national epidemic of hypertension. Treating stress and anxiety, and teaching our colleagues in primary care and some specialties how to integrate stress management into their practices, would allow us to have a powerful impact on medicine. What better way to serve our patients? E-mail me at cpnew@elsevier.com and let me know of techniques you have used to help patients address medical problems. I’ll try to share your ideas with my readers.

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Dr. Havranek of Denver Health Medical Center.

The range of possible scores on the KCCQ is 0-100. Higher scores indicate less disease impact. Study participants with a baseline score greater than 75 had a 13% incidence of depression onset within 1 year.

The incidence of depression among the patients rose to 20% among those with a baseline score of 51-75, 43% in those who scored 26-50, and 44% with a score of 25 or less, Dr. Havranek said.

The Psychologist’s Toolbox

The Mind and Medicine

Many primary care physicians offer good psychological advice to their patients to relax more, take a vacation, stop worrying so much, get a hobby, or just go see a good movie. Their goal is to get patients to make a lifestyle change that could lead to improved physical health.

Patients who suffer from hypertension are prime candidates for such advice. After all, some forms of hypertension have been linked to emotional stress. For a time, it was associated with hard-driving, hurried, aggressive, competitive people who were referred to as type A personalities for two decades. Recently, however, that concept has lost some of its potency, and we now think in terms of a generalized stress that works internally in a variety of personality types. As clinicians, we know that certain types of stressors, such as too much internalized rage, have a negative impact on health.

Over the years, transcendental meditation (TM), relaxation, hypnosis, and biofeedback have been used to control stress and reduce elevated blood pressure. Do these procedures really work? One TM study, included in a 2002 literature review in Medical Clinics of North America, showed a BP reduction of 10 mm Hg systolic and 6 mm Hg diastolic in a randomized group of subjects. That study, although good, had many limitations. Dietary sodium and aerobic exercise, for example, were not figured into the protocol.

Another study conducted at the Medical College of Georgia demonstrated that, in African American adolescents who were hypertensive and taught TM, blood pressure was lowered on average 3.5 mm Hg systolic and 3.4 mm Hg diastolic. With continued practice for 15 minutes twice a day, the subjects had lowered blood pressure after 4 months. Their heart rates also fell. No changes were seen among the control group (Am. J. Hypertens. 2004;17:366-9).

I am not suggesting that the success of alternative techniques in lowering BP should preclude the use of calcium channel blockers such as amiodipine (Norvasc), angiotensin II receptor blockers such as candesartan cilexetil (Atacand), or ACE inhibitors such as enalapril (Vasotec) in hypertensive patients. These drug clearly save lives, but I am suggesting that the alternative techniques allow us to lower medication doses—or, in some cases, eliminate medications altogether—why shouldn’t we do it?

TM, relaxation, hypnosis, and the myriad of techniques that help induce altered states of mind appear to be different techniques aimed at inducing the same result: relaxation and a lowering of stress.

In my own practice, I have used a hypnotic/imagery approach to blood pressure reduction. The patients I saw were referred by internists, cardiologists, and nephrologists who were concerned about the catastrophic illnesses that can develop from uncontrolled BP. In each case, the physicians were prescribing multiple medications for high BP that was poorly controlled.

Although I always considered my work as ancillary, in that the medications were the primary treatment, the value of helping patients without prescribing medications cannot be overemphasized. According to Randi Rose, M.D., a cardiologist at New York University Medical Center, New York, a 3 mm Hg systolic or diastolic pressure is a significant amount of lowering in a hypertensive patient. If this can be achieved through stress reduction, meditation, or other relaxation techniques, I would encourage my patients to use these techniques.

The technique I used was a hypnotic/imagery strategy. After a brief history of the patient’s medications, exercise, diet, and lifestyle, I checked the blood pressure. Then I taught the patient how to do self-hypnosis. This takes about 10-15 minutes for those who are hypnotizable. If the patient was comfortable using self-hypnosis, I would use one of my favorite strategies: the large movie screen. On that screen, I had the patient imagine, drift, or float into any pleasant experience he or she wished.

I then introduced a second technique that enabled patients to imagine a sphygmomanometer, and then imagine a high value or the value we had assessed earlier. Then, as they took slow deep breaths, they began to imagine the mercury column slowly going down as they became more and more relaxed.

I used both these strategies for about a half hour. Then we took the BP again. The results were consistent with the studies cited earlier. That is, in my experience there was a 2-3 mm Hg drop in systolic and diastolic BP.

All of the patients I saw had their own sphygmomanometer. They also made frequent visits to their primary care physicians. If the patient was educated, he or she would encourage my patients to use these techniques in lowering BP that was poorly controlled. Although I always considered my work as ancillary, in that the medications were the primary treatment, the value of helping patients without prescribing medications cannot be overemphasized. According to Randi Rose, M.D., a cardiologist at New York University Medical Center, New York, a 3 mm Hg systolic or diastolic pressure is a significant amount of lowering in a hypertensive patient. If this can be achieved through stress reduction, meditation, or other relaxation techniques, I would encourage my patients to use these techniques.

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All of the patients I saw had their own sphygmomanometer. They also made frequent visits to their primary care physician, cardiologist, or nephrologist, so their BP was regularly monitored. I taught the patients to practice this hypnotic strategy at least six times a day, and I told them how to do it privately so no one would notice. That way, they could use the strategies at work or while out socializing.

The results were rewarding not only in terms of lower BP. The patients also thought they took some personal control of their hypertensive problem and benefited from this intervention. In many cases, as long as the patients continued to practice, their BP fell slightly—beyond a decline seen with medications.

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