INTERVENT-Related Research News You Can Use (November 2012)

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Title of Publication: Effect of Exercise-Based Cardiac Rehabilitation on Multiple Atherosclerotic Risk Factors in Patients Taking Antidepressant Medication

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Participants:
A cohort of 26,957 patients who had participated in an exercise-based cardiac rehabilitation programs at 35 outpatient facilities throughout the United States were subjects for the study. Of the 5,172 patients (19.2%) who reported depression, 2,147 (41.5%) were taking antidepressants.

Research Question:
Do patients who take anti-depressants derive the expected benefit from cardiac rehabilitation in terms of improvement in multiple atherosclerotic risk factors?

The Program:
In addition to supervised exercise training, patients in the cardiac rehabilitation program received computer-generated patient goals and action plan reports and written and audio patient education modules as part of the INTERVENT coronary heart disease risk reduction program.

Study Design:
All patients completed a baseline assessment before entering the cardiac rehabilitation programs. Risk factors were assessed at baseline and again as part of an exit assessment after approximately 12 weeks of program participation. Patients who completed the exit assessment were stratified into three cohorts: nondepressed (n = 9,995), depressed/unmedicated (1,345) and depressed/medicated (935) based on self-reported health history.

Findings:
- Patients in all three cohorts who completed the exit assessment showed significant improvements in multiple atherosclerotic risk factors.

- The magnitude of improvement in blood pressure, serum lipids and lipoproteins, fasting blood glucose, weight and body mass index was similar in patients taking antidepressants and those who were not.

How You Can Use These Results:
This study is important because it is the first study to show that antidepressants do not offset the average magnitude of improvement in multiple atherosclerotic risk factors that occurs with completion of a cardiac rehabilitation program. Likewise, this study confirms findings from other studies that unmedicated patients with self-reported depression who participate in cardiac rehabilitation programs can improve multiple atherosclerotic risk factors.

These findings are useful for:
- Patients: If they are taking medications for depression, they can still expect to reduce their risk factors and benefit their health by completing an exercise-based cardiac rehabilitation program.
- Health care practitioners: It's important to encourage patients who are depressed to participate in an exercise-based cardiac rehabilitation program and to know that they are likely to reduce their risk factors regardless of whether they are medicated or unmedicated.
- Health insurance companies: In order to optimize program referral and participation, it's important for payers of healthcare services to provide reimbursement for participation in cardiac rehabilitation and coronary heart disease risk reduction programs.