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Don't Forget About Cardiac Rehab

The ABC's of secondary prevention for coronary heart disease (CHD) are not new. In this *Heartbeat* we want to **emphasize the exercise component and the benefits of cardiac rehabilitation.**

Overall we've been pretty successful at implementing anti-thrombotic agents (aspirin and/or clopidogrel), beta blockers, converting enzyme inhibitors or ARBs and statins, but diet and exercise—not so much.

Cardiac rehabilitation (CR), which uniformly includes monitored aerobic exercise and varying protocols for lipid treatment, diet and weight loss, or stress modification, is recommended for patients after MIs, with stable angina, or after revascularization with coronary artery bypass graft (CABG) surgery or percutaneous coronary intervention (PCI).

Meta-analyses of randomized controlled trials of CR have demonstrated 15% to 28% reductions in all-cause mortality. CR is included in the ACC/AHA guidelines for secondary prevention¹, and is listed as a **Class I indication in the just released 2011 focused update of secondary prevention guidelines.**² Patients should be referred to a comprehensive outpatient cardiovascular rehabilitation program either prior to hospital discharge or during the first follow-up office visit (*Level of Evidence: A*).

More Evidence

Many of these earlier trials did not include very many older people, women, members of racial/ethnic minorities, or high-risk patients (e.g., patients with congestive heart failure [CHF]). Participants were predominantly middle-aged, low- or moderate-risk, white men. It was felt that possibly the results didn't accurately reflect effects in older or more socio-demographically diverse populations.

A more recent complex analysis of over 600,000 Medicare beneficiaries showed similar favorable associations between CR use (vs not) and survival in all race, sex, and age groups and in all clinical subgroups including patients with coexisting CHF.³

So why are fewer than half of PCI recipients being referred?

In a recent large retrospective analysis, CR after PCI cut all-cause mortality nearly in half. Notably, despite a strong evidence base and national guidelines supporting the use of CR after coronary events, only 40% of the patients in this study were referred for rehabilitation.⁴ *These compelling data should remind clinicians of the importance of CR in general and encourage more referrals after PCI in particular.*

Treatment Gap

There are multiple reasons for this treatment gap. Probably the major ones are physicians' time constraints and their major focus on the acute problem. I'm assuming that it's *not* because physicians don't know about best current evidence for preventive care and that they do understand that **it's all about "survival of the fittest"**. CR is the first step. Any and all exercise is good and more is better.⁵

An educational program for patients by ancillary personnel is absolutely necessary for patients to understand the benefits of CR.

Promoting the benefits of CR

We have to let our patients know that influential people (*especially their doctors*) believe that CR is crucial to decreasing recurrent events and helping them live longer.

It may also be time to recommend that physicians themselves engage in healthy lifestyles like quitting smoking, eating healthily and engaging in exercise. The best way to lead is by example! *Physicians who exercise are more likely to recommend CR.*

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¹ Smith S Jr., Allen J, Blair S, et al. AHA/ACC guidelines for secondary prevention for patients with coronary and other atherosclerotic vascular disease: 2006 update. *J Am Coll Cardiol* 2006; 47: 2130–9.

² Smith SC et al. A guideline from the American Heart Association and American College of Cardiology Foundation. AHA/ACCF secondary prevention and risk reduction therapy for patients with coronary and other atherosclerotic vascular disease: 2011 Update. *Circulation* November 29 2011; 124: 1-16.

³ Suaya JA, et al. Cardiac rehabilitation and survival in older coronary patients. *J Am Coll Cardiol* June 30 2009;54: 25–33

⁴ Goel K et al. Impact of cardiac rehabilitation on mortality and cardiovascular events after percutaneous coronary intervention in the community. *Circulation* May 31 2011; 123:2344.

⁵ Maiese ML. Reaffirmation concerning fitness. *Heartbeat* June 2009; # 137: www.sjhg.org.