

Diagnosis and Evaluation of Patients with Chronic Stable Angina: Recommendations from the American College of Physicians

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The full report is titled "Evaluation of Primary Care Patients with Chronic Stable Angina: Guidelines from the American College of Physicians." It is in the 6 July 2004 issue of *Annals of Internal Medicine* (volume 141, pages 57-64). The authors are V. Snow, P. Barry, S.D. Fihn, R.J. Gibbons, D.K. Owens, S.V. Williams, K.B. Weiss, and C. Mottur-Pilson (the ACP/ACC Chronic Stable Angina Panel).

Who developed these guidelines?

The American College of Physicians (ACP), a professional organization of internists (specialists in the care of adults), developed these recommendations with the help of the American College of Cardiology (ACC).

What is the problem and what is known about it so far?

Chronic stable angina is discomfort in the chest (or sometimes the jaw, shoulder, back, or arm) with exertion that goes away with rest. Angina is the result of blockages in the heart's blood vessels, a condition known as coronary artery disease (CAD). People with symptoms that might be chronic stable angina need evaluation for CAD.

Considering a patient's age, sex, risk factors, and symptoms helps doctors to judge the likelihood of significant CAD. Several tests can help in the evaluation. An electrocardiogram uses electrodes to examine the heart's electrical activity. An exercise stress test examines the heart's electrical activity while the patient is exercising on a treadmill or exercise bike. Other stress tests, called imaging stress tests, use special dyes or ultrasonography to take pictures of the heart before, during, and after exercise. Pharmacologic stress tests use drugs to simulate the effects of exercise on the heart and are options for patients who cannot exercise. Cardiac catheterization is the most definitive, but most risky, test for CAD. Cardiac catheterization involves the injection of dye into the bloodstream, so that doctors can take pictures of the arteries.

How did the ACP develop these recommendations?

The authors based these recommendations on a review of the literature that the ACC and the American Heart Association (AHA) conducted in 1999 and updated in 2002.

What did the authors find?

Published studies support a strategy in which doctors first evaluate a person's risk for significant CAD on the basis of age, sex, and risk factors and the characteristics of symptoms. The authors found that testing strategies should depend on patients' risk for CAD, exercise ability, electrocardiography results, and presence of medications or pacemakers.

What does the ACP recommend that patients and doctors do?

When patients present with symptoms of chronic stable angina, doctors should estimate the risk for heart disease on the basis of age, sex, risk factors, nature of symptoms, and a resting electrocardiogram. If doctors estimate that patients are at low risk for CAD, they should discuss the options for testing and the harms and benefits of further testing. They should also discuss strategies for preventing CAD with the patients. Patients should have an exercise stress test if they are not low risk, are able to exercise, are not taking digoxin, and have a normal electrocardiogram. Patients who cannot exercise should have a pharmacologic stress test. Patients who have an abnormal electrocardiogram or who are taking digoxin should get a stress imaging test. If patients have an abnormality called left bundle-branch block on electrocardiography or have a ventricular pacemaker, they should get a pharmacologic stress test rather than an exercise stress test even if they can exercise.

What are the cautions related to these recommendations?

Recommendations may change as new studies become available. These recommendations do not apply to patients with unstable angina (symptoms occurring at rest or with increasing frequency or severity).

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