Practice Tips

Preventing heart disease with ASA

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The United States Preventive Services Task Force (USPSTF) recently recommended that physicians discuss using acetylsalicylic acid for primary prevention of coronary artery events with patients whose risk over 10 years is estimated to be >6%.[1] A recent Critical Appraisal article in *Canadian Family Physician*[2] found, as well, that ASA is effective for this purpose. Relative risk reduction with ASA is 28%; possible adverse effects include increases in gastrointestinal bleeding and hemorrhagic stroke.

As with many preventive measures, integrating recommendations into practice requires tools and organization. This Practice Tip discusses how I am implementing the USPSTF's recommendations into my practice.

Higher-risk patients can benefit most from ASA. A good way to stratify coronary risk is by using the Framingham equation,[3] which has been endorsed by the authors of the recent Canadian guideline on dyslipidemia[4] as well as the USPSTF.[1]

I have found that the easiest way to calculate a patient's risk with the Framingham equation is with my hand-held computer; I do it with a program called StatCoder (**www.statcoder.com**). To use the Framingham equation, you input a patient's age, sex, blood pressure, total cholesterol and high-density lipoprotein cholesterol levels, and whether he or she smokes. I do this during annual physical examinations. I have patients' previous lipid levels on my chart, and I check their current blood pressure. Calculating their risk then takes no more than a few seconds.

The Framingham risk can also be calculated manually, using a table available at **http://www.cmaj.ca/cgi/content/full/162/10/1441/T216**, and a calculator for personal computers is available at **http://www.nzgg.org.nz/library/gl_complete/bloodpressure/appendix.cfm#app3**. I then enter patients' risk score on the preventive health tables I use. Those tables can be found at **http://members.rogers.com/mgreiver/tables.htm**.[5]

If their risk of coronary artery disease over the next 10 years is >6%, I give my patients a handout I have prepared with their risk and absolute risk reduction written in (**Figure 1**). (A copy is available on-line at **http://members.rogers.com/mgreiver/asachemoprophylaxis.htm**.) I ask patients to let me know at the next visit if they have chosen to take prophylactic ASA, and I note their decisions on their cumulative patient profiles.

This preventive measure is inexpensive and likely to benefit many patients. Currently available software tools make calculating absolute cardiovascular risk easy in the office. Giving patients this information can help them make informed decisions about taking ASA to prevent heart disease.

We encourage readers to share some of their practice experience: the neat little tricks that solve difficult clinical situations. *Canadian Family Physician* pays $50 to authors upon publication of their Practice Tips. Tips can be sent by mail to Dr Tony Reid, Scientific Editor, Canadian Family Physician, 2630 Skymark Ave, Mississauga, ON L4W 5A4; by fax (905) 629-0893; or by e-mail **tony@cfpc.ca**.

Reference

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Figure 1. Patient education handout

ASPIRIN FOR PREVENTING HEART DISEASE

The United States Preventive Services Task Force has recently recommended that family doctors discuss the role of aspirin (acetylsalicylic acid or ASA) for protection against heart disease with patients who might be at risk.

What does ASA do?

It prevents some heart attacks; it reduces the risk of heart attacks by about 28%. The greater your risk, the more you will benefit. You can do other things to protect your heart as well, such as exercising, stopping smoking, and eating a low-fat diet. If your blood pressure is not well controlled (systolic pressure >145), aspirin will benefit you less.

What are the risks of ASA?

It increases the risk of a stroke due to a bleeding vessel in the brain. Taking aspirin for 10 years can cause up to four more strokes for every 1000 people who take it (0.4% increase in risk).

Aspirin also increases the risk of bleeding ulcers in the stomach. Taking aspirin for 10 years can cause an extra four to eight ulcers for every 1000 patients who take it (0.4% to 0.8% increase in risk).

What dose should I take?

A dose of 80 mg daily (one baby aspirin) is enough to protect the heart.

Who should consider this medication?

If your risk of heart disease during the next 10 years is higher than 6%, you could consider this preventive measure. If your risk is 15% or higher, I would recommend it. The higher your risk, the more you will benefit.

Your risk over the next 10 years is:_____

To calculate how much aspirin will reduce your risk, multiply your risk by 0.28.

Your risk reduction with aspirin over the next 10 years is:_____