

Abdominal aortic aneurysms: What we don't seek, we won't find

Whether to screen for specific diseases is a complicated matter. Estimates of costs vs benefits may look different to an insurance company than to the physician with a patient sitting on the examination table. However, a population-based analysis that includes a cost-benefit component can help frame the decision by providing information about the pretest likelihood of disease for the individual patient.

On page 9 of this issue of the *Journal*, Drs. Latif, AlMahameed, and Lauer argue for more widespread ultrasonographic screening for abdominal aortic aneurysms (AAAs) in older men with a history of smoking and in other high-risk groups. Ultrasonography is safe and sensitive for detecting AAAs, and most physicians agree it is better to repair an AAA electively than to wait for it to rupture and do the procedure emergently. (Whether to treat large aneurysms with stents rather than with surgery remains controversial.)

We don't find AAAs as often as we should. If we specifically look for them by focused abdominal palpation, we will find them more often than we do by routine examination, but we still miss the small and moderately sized ones, which often enlarge and occasionally rupture. Risk factors for developing a large AAA include smoking, hypertension, and, to a certain degree, diffuse atherosclerosis. (Intriguingly, diabetes is not a strong risk factor). A particularly strong risk factor is a family history of AAA, perhaps reflecting genetic polymorphisms of specific metalloproteases, which play a role in the enlargement of AAAs.

Often, on physical examination we don't find what we don't carefully seek. I think the authors present a reasonable argument for performing a careful, directed physical examination of the abdominal aorta in all of our older patients, and for considering ultrasound examination of the aorta in some patients, even if they have no symptoms.

Since many insurance plans may not yet pay for aortic ultrasonography if done only as a "screening test," we must carefully document any suspected aortic enlargement or elicited tenderness on examination. Before ordering the test, we need to discuss the reasons with the patient and perhaps the insurance carrier.

An additional caveat is that ultrasound testing has some operator dependency and other technical limitations, and additional imaging may sometimes be needed.

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