Asymptomatic PAD Linked With High Mortality

BY BRUCE JANCIN
Denver Bureau

VIENNA — Asymptomatic peripheral arterial disease diagnosed through routine screening in the offices of primary care physicians carries a high, 5-year mortality similar to that of symptomatic peripheral arterial disease, Dr. Curt Diehm reported at the annual congress of the European Society of Cardiology.

This finding from the large national German Epidemiological Trial on Ankle-Brachial Index (getABI) contains a key message for primary care medicine: The only way most such asymptomatic high-risk individuals are likely to be identified and placed on preventive therapy in a timely way is through systematic screening for peripheral arterial disease (PAD) carried out when they visit their primary care physician for some other reason, said Dr. Diehm, who is a professor of internal medicine at the University of Heidelberg, Mannheim, Germany.

"PAD is too important to leave to specialists only," he declared.

The getABI study involved 6,880 unselected patients who were at least 65 years old and who were screened for PAD in 344 German primary care practices.

Participating primary care physicians and nurses had been taught by getABI vascular medicine specialists to accurately measure the ABI, which Dr. Diehm called "the most effective, accurate, and practical method" for PAD detection. The test takes about 8 minutes and has 95% sensitivity.

The baseline prevalence of PAD by the ABI criteria advocated in American Heart Association/American College of Cardiology guidelines was 20.8%. Nearly 600 patients had symptomatic PAD. Another 835 had asymptomatic PAD with an ABI of less than 0.9, a condition for which the prognosis had not been well defined in prior studies.

All-cause mortality at 1, 3, and 5 years was significantly greater in patients with PAD than in those without it, while no significant mortality difference was seen between those whose PAD was symptomatic or asymptomatic. (See box.)

Thus, one in five patients who visited their primary care physician was found to have PAD.

And after 5 years, roughly one in five of these patients diagnosed with PAD—whether silent or symptomatic—was dead.

Asymptomatic PAD has often been taken lightly because of a mistaken belief that it is more benign than symptomatic PAD.

But the high mortality documented in getABI dictates that once patients receive the diagnosis of PAD, even if asymptomatic, they need to be placed on the same aggressive pharmacologic regimen recommended for secondary prevention in coronary disease—a statin, β-blocker, and antiplatelet therapy, Dr. Diehm said.

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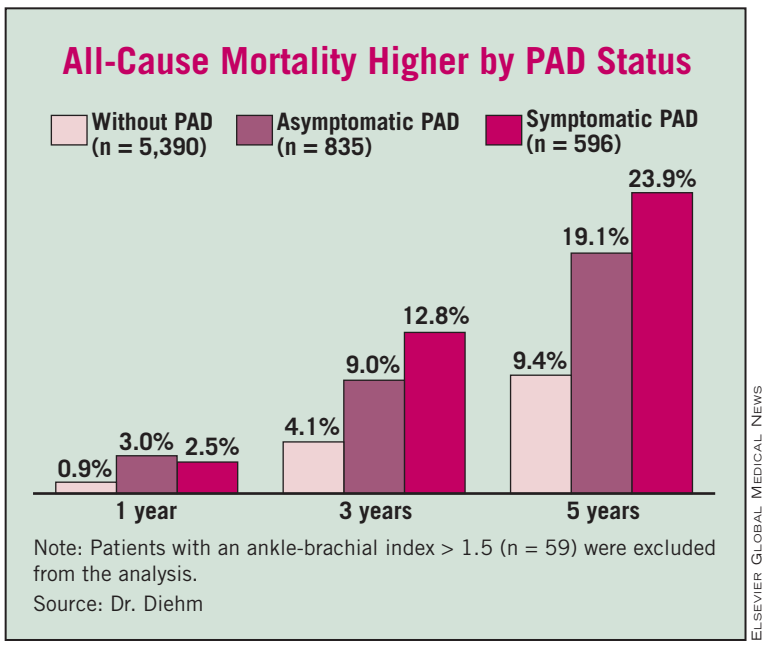
DR. DIEHM

The German primary care physicians' performance in this regard was lackluster, as has historically been true worldwide for PAD.

Indeed, only 56% of getABI participants with PAD were placed on antiplatelet therapy, 23% received a statin, and 25% got a β-blocker.

"PAD patients are underdiagnosed, they are underestimated, and they are undertreated," Dr. Diehm said.

He took strong issue with the AHA/ACC guidelines on PAD (Circulation 2006;113:e463-654) regarding one point. The guidelines state that ABI is to be calculated for each leg based on the ratio of the higher of the two systolic ankle pressures—that is, the posterior tibial and dorsalis pedis—over the average of the right and left brachial artery systolic blood pressures.



"In my opinion that is absolutely wrong, because if you take the higher value of the two ankle arteries you miss distal occlusions. For this study we took the higher value and got a PAD prevalence of 20.8%. If we'd used the lower of the two ankle pressure values, the disease prevalence comes to 34%. I am certain that recommendation will be changed before long," he said in an interview.

Discussant Dr. Don Poldermans stressed that PAD is a marker for global atherosclerotic disease, so when a patient is diagnosed with PAD it's worthwhile to screen for asymptomatic disease in other vascular beds.

In a Dutch study of 352 patients who presented with PAD only, additional screening revealed that three-quarters had polyvascular disease also involving the coronary arteries, aorta, and/or carotid arteries, said Dr. Poldermans, professor of cardiology at Erasmus University, Rotterdam, Netherlands.

The ongoing getABI study is funded by Sanofi-Aventis and the German Ministry of Health. ■

Thrombolysis for DVT Tied to Sevenfold Rise in Mortality

BY MITCHEL L. ZOLER
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BALTIMORE — Patients increasingly undergo thrombolysis for deep vein thrombosis, but this treatment significantly boosted the risk of major bleeding and death, according to representative data collected in 1998-2003 from across the United States.

On the basis of these findings, thrombolysis should not be used as an adjunctive treatment for deep vein thrombosis (DVT) in patients who are at high risk for a bleeding complication, Dr. Carlos H. Timaran reported at the Vascular Annual Meeting.

Thrombolysis has been advocated as an adjunct to anticoagulant treatment for iliofemoral DVT by certain medical societies because the procedure is very effective at reducing postthrombotic syndrome.

And until now, thrombolysis has been widely viewed as safe, said Dr. Timaran, who is chief of endovascular surgery at the Dallas Veterans Affairs Medical Center.

High-risk patients who should not get thrombolytic treatment for DVT include those with a history of peptic ulcer disease, stroke, intracranial hemorrhage, or brain surgery.

Patients with DVT treated with thrombolysis had a 54% increased risk of a major bleed and a 4.9-fold increased risk of an intracranial hemorrhage.

Patients with these comorbidities are especially vulnerable to developing a new gastric or intracranial bleed following thrombolytic therapy, Dr. Timaran said in an interview.

Dr. Timaran and his associates used data collected in the National Inpatient Sample, a representative, 20% sample of patients treated at academic and community hospitals in 35 states.

The sample was sponsored by the Agency for Healthcare Quality and Research.

They researchers analyzed data on thrombolysis for DVT in 1998-2003.

In 1998, about 485,000 hospitalized patients in the United States were diagnosed with DVT, which increased to about 800,000 patients by 2003. Overall, in-hospital mortality rates in these patients rose from 1.07% in 1998 to 1.22% in 2003. Among these patients, the percentage treated with thrombolysis jumped from 0.4% in 1998 to 2.1% in 2003, a fivefold increase.

In a multivariate analysis that controlled for differences in the incidence of pulmonary embolism and in the prevalence of comorbidities, patients with DVT who were treated with thrombolysis had a 54% increased risk of developing a major bleed and a 4.9-fold increased risk of having an intracranial hemorrhage, compared with patients who weren't treated with thrombolysis.

Thrombolytic therapy also increased the risk of in-hospital death by 75% in treated patients, compared with the risk in DVT patients who did not undergo thrombolysis.

During the period studied, the in-hospital mortality rate of DVT patients who weren't treated with thrombolysis and had no major bleeding was 1.1%, but in those who received thrombolysis and had major bleeding the mortality rate was 8.2%, about seven times higher, Dr. Timaran reported.

"The increased risk of death with thrombolysis is primarily associated with an increased risk of major bleeding," he explained in an interview.

The study was unable to evaluate the type of thrombolytic treatment that patients received, but Dr. Timaran speculated that most patients received the drug locally through a catheter rather than systemically.

The drugs commonly used for DVT thrombolysis are tissue plasminogen activator, urokinase, tenecteplase, and reteplase, he added. ■

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'In the United States, we order lots of tests and images even when the answer is obvious.'

Dr. Boyd Shook, on the differences in medical practice between the United States and other countries, p. 52