AHA/ACC issue broad-based guidelines for PAD management

Dallas, TX and Bethesda, MD - Newly formulated guidelines for the management of most forms of peripheral arterial disease (PAD), released today jointly by the **American Heart Association (AHA)** and **American College of Cardiology (ACC)**, are aimed at the wide range of health professionals who see patients with the disorder and emphasize the importance of prevention and early detection, the two societies announced [**1**].

"We're saying to physicians for the first time, 'Don't wait for the patient to complain to you about symptoms that they may not appreciate as hallmark signs of poor health. Ask specific questions to define high-risk groups, and initiate early therapy to maintain functional independence and decrease the risk of heart attack, stroke, and death,'" Dr Alan T Hirsch (University of Minnesota, Minneapolis), chair of the guidelines' writing committee, was quoted as saying in press release issued by the two societies.

An exercise ABI measurement can be useful to diagnose lower extremity PAD in individuals who are at risk for lower extremity PAD (Table 1) who have a normal ABI, are without classic claudication symptoms, and have no other clinical evidence of atherosclerosis.

The responsibility for the detection of lower extremity PAD should be with the primary care provider.

DO ABI TESTS ON EVERYONE WHO MEET THE CRITERIA DEFINED IN TABLE 1.

Table 1. Individuals at Risk for Lower Extremity Peripheral Arterial Disease

- Age less than 50 years, with diabetes and one other atherosclerosis risk factor (smoking, dyslipidemia, hypertension, or hyperhomocysteinemia)
- Age 50 to 69 years and history of smoking or diabetes
- Age 65 years and older
- Leg symptoms with exertion (suggestive of claudication) or ischemic rest pain
- Abnormal lower extremity pulse examination
- Known atherosclerotic coronary, carotid, or renal artery disease

Source 1. Hirsch AT, Haskal ZJ, Hertzer NR. ACC/AHA Guidelines for the management of patients with peripheral arterial disease (lower extremity, renal, mesenteric, and abdominal aortic). *J Am Coll Cardiol*; DOI:10.1016/j.jacc.2005.10.009. Available at: http://www.acc.org/clinical/guidelines/pad/index.pdf

American Diabetes Association®

Because of the high cardiovascular risk associated with PAD and the potential for functional impairment and limb loss, a Consensus Panel brought together by the American Diabetes Association (ADA) recommends that anyone over the age of 50 who has diabetes get screened for PAD. People with diabetes who are younger than 50 should be considered for screening if they have other risk factors for this condition, including smoking, high blood pressure, high cholesterol or having diabetes for more than 10 years. In addition to a history and physical examination, the recommended test for PAD is the ankle brachial index (ABI). If the blood pressure in the ankle is lower than the pressure in the arm, that person may have PAD.

American College of Physicians (ACP) recommendation: Use segmental pressures and pulse volume recordings of the lower extremities in patients with signs or symptoms of arterial insufficiency. **Signs or Symptoms of Arterial Insufficiency**: Claudication, Ischemic ulceration or gangrene, Rest pain, Decreased pulses, Leg discomfort, Cold feet, Distal hair loss.

Chronic Venous Insufficiency

What is chronic venous insufficiency?

When your leg veins cannot pump enough blood back to your heart, you have chronic venous insufficiency (CVI). CVI is also sometimes called chronic venous disease, or CVD. You have three kinds of veins: superficial veins, deep veins, and perforating veins, which connect the superficial to the deep veins. Deep veins lead to the vena cava, which runs directly to your heart.

When you are in the upright position, the blood in your leg veins must go against gravity to return to your heart. To accomplish this, your leg muscles squeeze the deep veins of your legs and feet to help move blood back to your heart. One-way flaps, called valves, in your veins keep blood flowing in the right direction. When your leg muscles relax, the valves inside your veins close. This prevents blood from flowing in reverse, back down the legs. The entire process of sending blood back to the heart is called the venous pump.

When you walk and your leg muscles squeeze, the venous pump works well. But when you sit or stand, especially for a long time, the blood in your leg veins can pool and increase the venous blood pressure. Deep veins and perforating veins are usually able to withstand short periods of increased pressures. However, sitting or standing for a long time can stretch vein walls because they are flexible. Over time, in susceptible individuals, this can weaken the walls of the veins and damage the vein valves, causing CVI.

Duplex ultrasound uses painless sound waves higher than human hearing can detect. Duplex ultrasound allows your physician to measure the speed of blood flow and to see the structure of your leg veins.