

Peripheral Arterial Disease and You

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Cardiovascular disease, despite the gains by medicine over the last two decades, remains the most prevalent life-threatening disease Americans encounter. Approximately one million Americans a year die of cardiovascular disease. There are three major categories of cardiovascular disease. The first, coronary artery disease, involves narrowing or blockage of the arteries that supply blood to the heart. Most people think of this when they consider vascular disease. Two other categories, involving disease of arteries supplying the rest of the body, are becoming more common as the American population ages. These categories are peripheral arterial disease and cerebrovascular disease.

Peripheral arterial disease (PAD) occurs when atherosclerotic plaque narrows or blocks the arteries to the legs, arms, kidneys, or other internal organs. At least 8-10 million Americans, usually over the age of 60, are affected. Common symptoms include aching, pain, cramping, or fatigue in the calf or thigh. The symptoms usually are brought on by exertion and relieved by rest. These symptoms are sometimes called claudication or intermittent claudication. Poorly controlled high blood pressure or the need for multiple medications for the control of blood pressure can be symptoms of a blocked artery to a kidney. Most patients with PAD will also have some degree of coronary heart disease as well.

The diagnosis of PAD is often confirmed by physical examination that may reveal weakened or diminished pulses in the legs or arms. Noninvasive testing, using ultrasound to image the arteries and Doppler measurements of blood pressure and flow, can also be helpful. Sometimes radiographic studies, utilizing angiography or magnetic resonance imaging are used as well. Treatment of PAD involves exercise, control of high blood pressure and high cholesterol, smoking cessation, and the use of mild blood thinning drugs such as aspirin and clopidogrel. In patients with severe symptoms, treatments to improve blood flow, such as angioplasty, the use of stents, and surgery is often needed.

Cerebrovascular disease involves blockages in the arteries that supply blood to the brain. These blockages cause two thirds of the strokes that occur. The brain receives the majority of its blood via two major arteries, the carotid arteries, on each side of the neck. There is excellent evidence that treatment of these narrowings will help to prevent stroke. Diagnosis is generally made by hearing an abnormal sound over one of the carotid arteries, or more commonly by an ultrasound examination in a person with risk factors for cardiovascular disease. Treatment again involves aggressive risk factor modification with smoking cessation, high blood pressure, diabetes, and high cholesterol along with aspirin or clopidogrel. Surgical removal of significant blockages is a cornerstone of therapy as well. New approaches using angioplasty and stents are being investigated as well.

The treatment of these disorders involves specialists in cardiovascular medicine to provide special expertise in the prevention, diagnosis, and management of these disorders. Cardiovascular specialists usually work closely with vascular surgeons and vascular nurses to provide a “team approach” to the care for our patients.