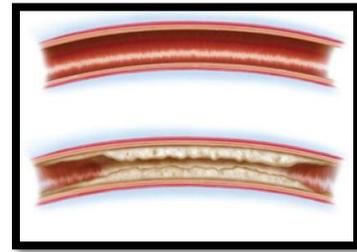


Peripheral Arterial Disease in the Upper Leg

A form of atherosclerosis (ATH-er-o-skler-O-sis), or hardening of the arteries, peripheral artery disease (PAD) occurs when the vessels that carry oxygenated blood from the heart to the rest of the body become narrowed or blocked from a build-up of fatty deposits called plaque inside the artery wall. The plaque typically includes a combination of cholesterol, calcium, and other components of blood, and can restrict blood flow to organs and tissue throughout the body. As with coronary artery disease, which is atherosclerosis in the heart, peripheral artery disease can lead to life-threatening complications.



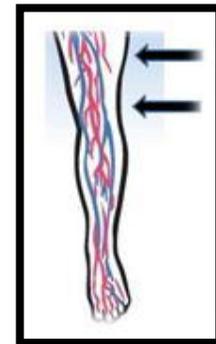
Comparison of a healthy artery (top) with an artery with plaque build-up (bottom).
Photo credit: Medtronic.

PAD affects an estimated eight to 12 million people in the United States, mostly older adults; approximately one in five Americans aged 65 and older have the condition.^{1,2} With the elderly population expected to increase to 22 percent by the year 2040, the prevalence of PAD is expected to grow.³

Understanding PAD in the Upper Legs:

PAD most commonly affects arteries in the legs – more specifically, in the thigh (superficial femoral arteries) and behind the knee (popliteal arteries). PAD in the upper leg increases the risk of a sudden heart attack or stroke.⁴

Blocked blood supply to the muscles and tissues in the legs can cause recurrent and painful muscle cramping in the thigh and/or upper calf while walking or climbing stairs that can be restrictive and impair quality of life. The pain can be described as dull, causing a heaviness or tightness in the muscles, but it often will stop when the person is at rest. Experiencing pain, even while at rest or while sleeping, is a sign of a more severe disease. Patients experiencing symptoms related to PAD in the upper leg are known to hang their legs or feet down over the side of a bed to relieve the pain. Additional symptoms related to upper leg PAD may include loss of hair on the legs or impotence.



Two commonly blocked arteries in the upper legs: superficial femoral artery (top) and popliteal artery (bottom).
Photo credit: Medtronic.

Diagnosis:

PAD can be diagnosed by several different types of physicians such as general practitioners, cardiologists, and podiatrists after symptoms are reported. Diagnosis is made based on medical and family history, a physical exam, and ultrasound test results to determine blood flow. Early diagnosis is critical due to the higher risk for heart disease, heart attack, stroke, and complications related to diabetes (e.g., sores or infections on feet or legs that heal slowly) that are associated with PAD.⁵

PAD & Cardiovascular Risk

- 63% of people with PAD also have coronary artery disease, a leading cause of death in the U.S.⁶
- People with PAD are four to five times more likely to have a heart attack or stroke⁷
- Without proper treatment, 30% of people with PAD are likely to die within five years from a PAD-related heart attack or stroke⁸

PAD & Diabetes

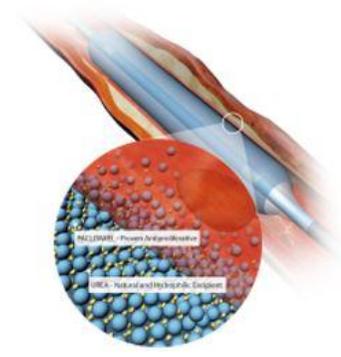
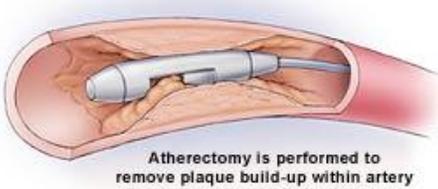
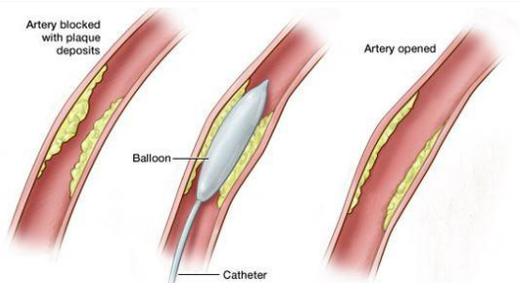
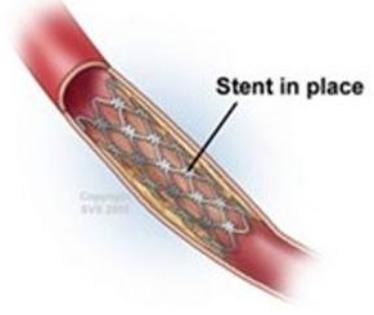
- One in three people with diabetes over the age of 50 have PAD⁹
- Diabetic patients are seven to 15 times more likely than non-diabetic patients to undergo a major amputation from PAD in the legs¹⁰
- For people with diabetes, PAD is underdiagnosed and undertreated, leading to an increased risk of mortality and morbidity¹¹

Treatment:

Treatment for PAD is dependent upon when the disease is detected. If caught early enough, lifestyle changes, exercise, and the use of medications can correct the condition. If the disease has progressed, minimally invasive, catheter-based interventional treatment options, including balloon angioplasty, are available to treat the obstructive plaque by opening the artery to restore blood flow. However, these types of treatments may be associated with the need for repeat procedures within six to 12 months if the artery blockage returns (restenosis).

Recently introduced in the U.S., drug-coated balloons offer a new minimally-invasive treatment for patients with PAD in the upper legs and are poised to become a primary interventional therapy for this patient population.

Types of Interventional Treatment to Restore Blood Flow:

<p>IN.PACT Admiral Drug-Coated Balloon</p> <ul style="list-style-type: none">• Balloon creates a channel for blood flow by pushing the plaque against the artery walls, and delivers medication to the wall of the artery to prevent the re-narrowing of the artery due to plaque build-up• Minimizes the need for future procedures and permanent implants	 <p>Photo credit: Diagnostic and Interventional Cardiology</p>
<p>Atherectomy</p> <ul style="list-style-type: none">• Removes plaque from the artery• Has been proven effective in the treatment of heavily calcified plaque build-up	 <p>Photo credit: Yale University, Section of Vascular & Interventional Radiology</p>
<p>Balloon Angioplasty (PTA)</p> <ul style="list-style-type: none">• Balloon creates a channel for blood flow by pushing the plaque against the artery walls; the balloon is then removed from the vessel• Highest rate of repeat procedures	 <p>Photo credit: University of California, San Francisco, Division of Vascular & Endovascular Surgery</p>
<p>Stents</p> <ul style="list-style-type: none">• Mesh-like tube permanently implanted in the artery• Carries risk of injury to the vessel, stent occlusion, or fracture within the vessel	 <p>Photo credit: University of California, San Francisco, Division of Vascular & Endovascular Surgery</p>

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