

Peripheral Arterial Disease – Lower Extremities

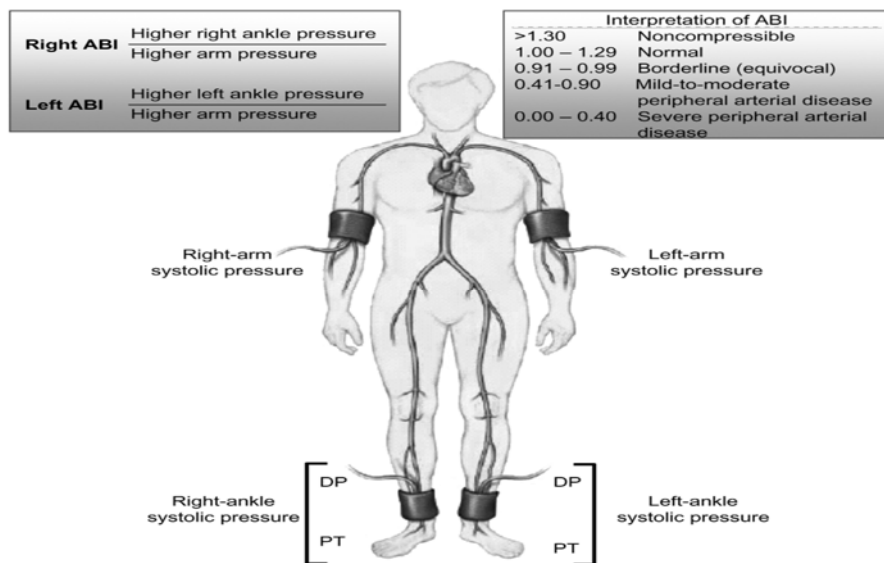
Peripheral arterial disease (PAD) is a disease in which plaque builds up in the arteries that carry blood to the head, organs, and limbs. When plaque builds up in the body's arteries, the condition is called atherosclerosis. Over time, plaque can harden and narrow the arteries which limit the flow of oxygen-rich blood to organs and other parts of the body. PAD usually affects the arteries in the legs, but it also can affect the arteries that carry blood from the heart to the head, arms, kidneys, and stomach.

Twelve to twenty percent of Americans older than 65 suffer from peripheral arterial disease.

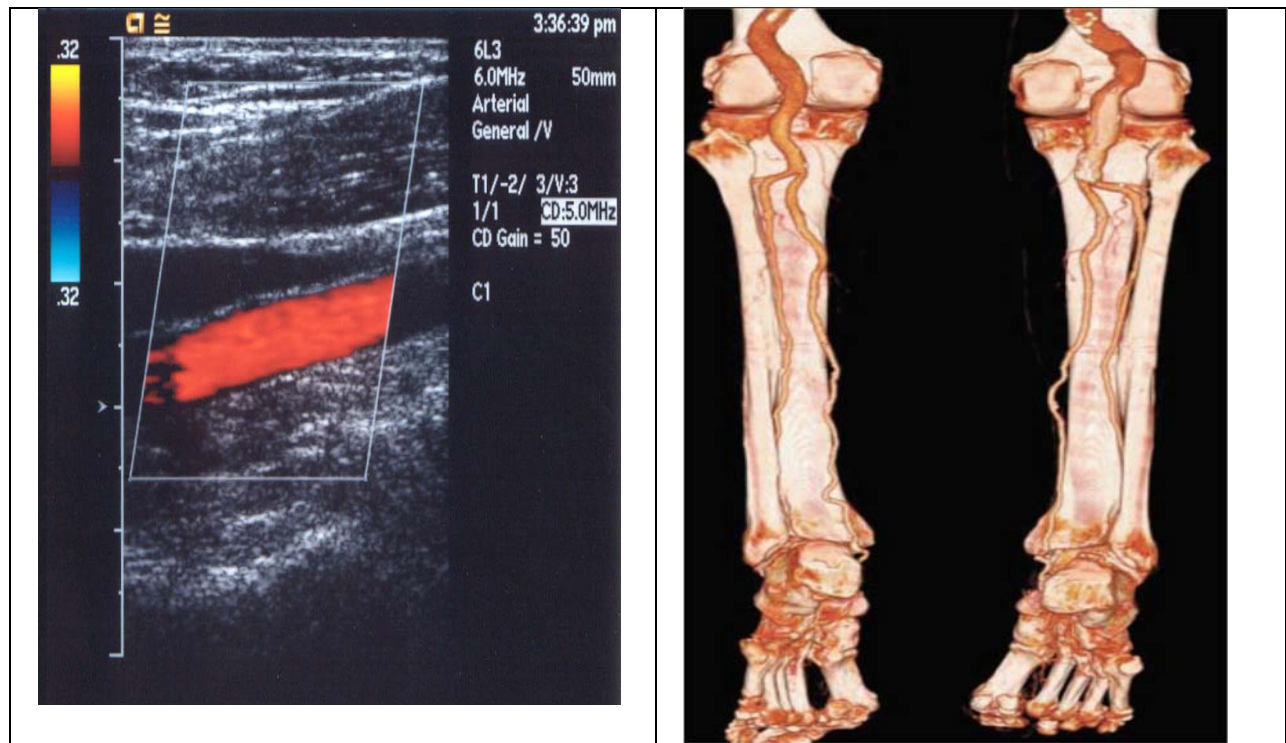
<p><i>Symptoms of LE PAD can include:</i></p> <ul style="list-style-type: none"> • pain when walking that subsides at rest • leg cramps • pain at rest • numbness and skin discoloration • sores • other symptoms of skin breakdown. 	<p><i>Risk Factors include:</i></p> <ul style="list-style-type: none"> • smoking • diabetes • hypertension • hyperlipidemia • obesity • advanced age
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Complications include open sores that don't heal, as well as injury or infection of the feet and legs, especially if one also has diabetes. Critical limb ischemia (CLI) is the extreme of this condition and can cause tissue death (gangrene), sometimes requiring amputation of the affected limb. Smoking is a major risk factor for the development of PAD as are diabetes, hypertension, hyperlipidemia, and obesity. Smoking cessation plays a key role in alleviating PAD.

Prevention and early detection during the asymptomatic period is most effective. The ankle brachial index (ABI), a comparative blood pressure reading in the arm and ankle, is used to screen for peripheral arterial disease. A person with an ABI of 0.3 (high risk) has a 2 to 3 fold increased risk of 5-year cardiovascular death compared to a patient with an ABI of 0.95 (normal or low risk).



If the ABI measurements are abnormal, the next step is often a lower extremity arterial duplex to further assess the blood flow in the lower extremities. After reviewing the arterial ultrasounds – a CTA or MRA of the lower extremities is often utilized to further identify the problem areas.



Depending on the patient's symptoms and results of these non-invasive tests, a peripheral angiogram is often the next step. This is similar to a heart catheterization except the focus is in looking at the arteries in the legs rather than the heart. Complex balloon, stenting, and atherectomy procedures may also be indicated to improve blood flow to the respective areas. There are several devices and new techniques developed over the last few years that assist in the care of patients with blockages in their leg arteries. Together, Drs. Rao and Ryan practice a comprehensive approach to the prevention, detection, and treatment of peripheral arterial disease.



Peripheral angiogram demonstrating a short focal area of almost 100% blockage in the right superficial femoral artery – found in the thigh and a commonly affected artery in PAD.



Diamondback 360° Orbital Atherectomy Device shown is utilized to “spin” through heavily calcified areas of blockage in the leg arteries.