Lower Extremity Peripheral Artery Disease Without Chronic Limb-Threatening Ischemia: A Review


**Level of Evidence**: 3

**Reviewer**: Zaria Woods, MS-III  
*Barry University School of Podiatric Medicine*

This article conducted three separate literature searches of PubMed from 2010 to 2020 to find the epidemiology, diagnosis, and treatment of peripheral arterial disease. Treatment inclusion criteria were that the study had to be a randomized trial, systemic review, or meta-analysis. To be included for diagnosis and epidemiology, the articles in question had to be a randomized control trial, cross-sectional study, systemic review, or meta-analysis. The first literature search occurred in February 2020 and was updated in October 2020 and March 2021.

This study focused on patients with peripheral arterial disease (PAD) without chronic limb-threatening ischemia. Some of the observations found include:

- Peripheral arterial disease is found in approximately 20% of people over the age of 80
- Ankle-Brachial index (ABI) has a sensitivity of 57-79% when the ABI is 0.9; however, it increases to 83%-99% specificity when the patient has arterial stenosis of at least 50%
- 70-90% of patients with an ABI of 0.9 or less are asymptomatic or have leg symptoms not consistent with claudication
- As PAD progresses, patients will restrict activity and begin slow walking to avoid the onset of symptoms
- Around 11% of patients that have PAD will develop chronic limb threatening ischemia

The study reestablished that a patient with peripheral arterial disease has a high chance of cardiovascular events, lower extremity incidents such as amputation and a decline in function. The search of treatments for PAD yielded that patients should be given the highest dosage of statins tolerated, antithrombotic medication and antiplatelet medication as primary pharmacological interventions.