



Common Vascular Problems in Primary Care

Intermittent Claudication: *Peripheral Artery Disease*

General information:

Claudication is the most common symptom of peripheral artery disease (PAD). Patients will report pain, aching, or fatigue affecting the large muscle groups of the lower extremities (calf, thigh, or buttock) that occurs after exercise, not at rest and not affected by position. Some patients with PAD may have impaired mobility, without classic symptoms.

Diagnostic tests to consider:

- The ankle brachial index (ABI) is the simplest objective measurement for diagnosis.
- Segmental pressures and pulse-volume recordings and post-exercise pressure measurement can be done in the UC Davis Medical Center Vascular Laboratory.
- Laboratory evaluation of atherosclerosis risk factors, including lipid panel and glucose (or hemoglobin A_{1C} for patients with diabetes).

Primary care management:

- Avoiding tobacco use is extremely important. Behavioral or pharmacological therapy to help with smoking cessation may be useful.
- A program of regular exercise is almost always appropriate. Walking is the best form of exercise. Thirty minutes a day, three or more days a week, is needed to see improvement.
- Antiplatelet drugs [aspirin and/or clopidogrel (Plavix®)] decrease risk of cardiovascular complications.
- Beta-blockers and ACE-I may decrease the risk of cardiac morbidity and mortality in this population
- Control hypertension, diabetes, and cholesterol, targeting LDL-cholesterol = 100 mg/dL
- Cilostazol (Pletal®) can be used to treat claudication symptoms

Indications for referral:

- Lifestyle-limiting claudication, despite exercise and medical management
- Proximal occlusive disease (aortoiliac disease) may be more amenable to endovascular therapy and these patients might be considered for earlier evaluation.

Indications for urgent referral:

Claudication is not an emergency, but new onset of claudication symptoms or acute worsening may indicate sudden vascular occlusion due to embolization or thrombosis. These patients should be evaluated promptly.

Primary care follow-up and surveillance:

Regular re-evaluation is needed to monitor symptomatic response to therapy, lipid levels, blood pressure control, and glucose levels.

Use of a Walking Impairment Questionnaire (WIQ) or carefully recorded history of patient symptoms may help to evaluate symptom severity and response to therapy.