



Common Vascular Problems in Primary Care

Diabetes and Foot Problems

General information:

Diabetes is an important risk factor for peripheral artery disease, but many foot problems are due to complications of peripheral neuropathy, with or without concomitant vascular disease.

Diagnostic tests to consider:

Refer to the UC Davis Medical Center Vascular Laboratory for arterial disease screening if the patient has:

- Prior diagnosis of peripheral artery disease (PAD), including previous vascular surgery or endovascular procedure
- Claudication.
- Foot ulcer, wound, infection, tissue loss—current or past history.
- Abnormal or absent pedal pulses.

The Vascular Laboratory PAD/Diabetes screening will include a review of history and PAD risk factors, Doppler ankle/brachial index, pulse volume recordings/Doppler waveforms, and toe pressures (toe/brachial index).

Primary care management:

- Diabetes care and education, including foot self-care instructions
- Evaluate for PAD with complete pulse examination and prescribe therapy to treat atherosclerosis risk factors, including smoking cessation

Indications for referral:

Vascular Surgery referral for any patient with severe ischemia, even without active ulceration. This would include patients with an ankle/brachial index (ABI) ≤ 0.35 or a toe/brachial index (TBI) < 0.3 . Patients with moderately severe PAD (ABI 0.36 to 0.89 and TBI ≥ 0.30) and an ulcer on the foot should be referred for Vascular Surgery evaluation.

Podiatry referral for routine care or for nail or skin problems in patients with diabetes who are at low risk for ischemic complications (those with an ABI ≥ 0.9 and TBI ≥ 0.6).

Foot and Ankle Surgery (Orthopedic Specialty clinic) referral for patients with good arterial perfusion (palpable pulse at the ankle or foot) with abnormal foot anatomy, ulceration, Charcot osteoarthropathy, or other biomechanical problems.

Indications for urgent referral:

Any foot wound, infection, ulceration, or new ischemic changes in the foot of a patient with diabetes who does not have normal pulses at the level of the ankle and foot.

Primary care follow-up and surveillance:

Examine patients' feet on every visit. Vascular lab interval follow-up on an annual basis can help monitor for disease progression.