



Common Vascular Problems in Primary Care

Cerebrovascular Disease

General information:

Carotid artery disease a common cause of stroke and evaluation for carotid disease should be a routine consideration for any patient with stroke symptoms.

Carotid artery disease may also be suspected in the absence of symptoms. Further evaluation may be indicated for patients with atherosclerotic cardiovascular disease, multiple risk factors (age over 65, male gender, hypertension, smoking, hyperlipidemia), or those with cervical bruits.

Diagnostic tests to consider:

- Cerebrovascular duplex scan (UC Davis Medical Center Vascular Laboratory) — primary screening test
- Also, evaluate for atherosclerosis risk factors (lipid panel, creatinine, glucose, ECG, etc.)

Primary care management:

- Aspirin (81 mg daily or other dosing)

Indications for referral:

Patients may be considered for carotid endarterectomy (or other surgical treatment), if they have hemodynamically-significant carotid artery stenosis ($\geq 50\%$) causing neurologic symptoms and good-risk patients may be considered for surgery, even in the absence of symptoms, if the carotid stenosis is particularly severe (usually $\geq 70\%$).

Carotid artery stenting (endovascular treatment) may be an option for high-risk patients for whom carotid artery disease treatment is indicated.

Other indications for referral may include vertebrobasilar insufficiency, symptomatic subclavian steal, fibromuscular dysplasia of the carotid artery, and other syndromes.

Indications for urgent referral:

Neurologic symptoms ipsilateral to carotid stenosis, particularly those suggestive of embolization.

- Amaurosis fugax—transient monocular visual loss
- Stroke—hemiparesis, unilateral sensory deficit, aphasia, dysarthria
- Transient ischemic attack (TIA)—stroke symptoms that resolve within 24 hours

Primary care follow-up and surveillance:

Asymptomatic patients with carotid artery stenosis $< 50\%$ generally do not need further evaluation or treatment. Consider a repeat duplex scan in the UC Davis Medical Center Vascular Lab on an annual or biennial basis if there is moderate or severe carotid artery plaque or stenosis $\geq 50\%$.