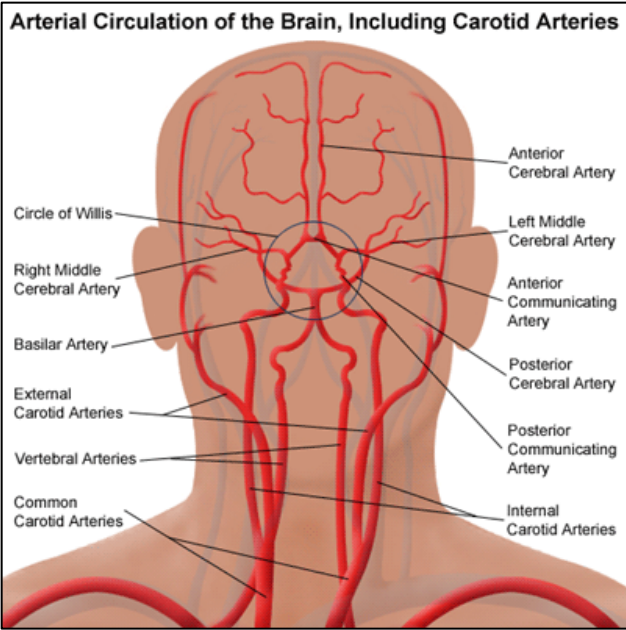


Asymptomatic Carotid Bruit

Anesthetic Pearls: Anesthetic Implications and Management of the Asymptomatic Carotid Bruit

Asymptomatic carotid bruits are a marker of turbulent arterial flow but are not significant for markers of severity of disease or increased stroke risk. Optional management of asymptomatic carotid disease continues to be a matter of debate. Stethoscope screening of asymptomatic subjects for neck bruits may not identify some patients with carotid disease because carotid stenosis is reported to be silent in 5 - 25% of this population. Interestingly, as the stenosis becomes more severe, the quality of the bruit usually becomes more quiet.

Studies done on patients with asymptomatic stenosis having serial ultrasound examinations has demonstrated an increased risk of stroke when carotid disease had progressed to an advanced degree of stenosis or occlusion (> 70% luminal occlusion). Evidence suggests that patients with asymptomatic severe carotid disease have an annual ipsilateral stroke rate of 3% compared with persons with **symptomatic stenosis in which the stroke rate is approximately 17% a year** (> 5 fold increase).



TIA's occur significantly more often than strokes and most lead to non-disabling sequelae. Progression to severe stenosis (> 70% luminal stenosis) or frank occlusion is associated with worse outcomes. Current recommendations are to follow the progression of the stenosis with serial ultrasound examinations. The NASCET (North American Symptomatic Carotid Endarterectomy Trial) study in 1998 determined that patients who had symptoms such as a TIA and more than 70% narrowing of the internal carotid artery, had a three-fold reduction in the risk of stroke if they were surgically treated with a carotid endarterectomy. Persons with borderline stenosis (50-69% carotid stenosis) were found to be better treated with serial surveillance in order to evaluate whether surgery needs to be performed in the future. Treatment interventions include 1) surgical carotid endarterectomy and 2) percutaneous carotid angioplasty or percutaneous carotid stenting.

