Carotid Artery Angioplasty and Stenting

- 1. For patients with carotid stenosis <50%, there is no indication for carotid endarterectomy (CEA) or carotid angioplasty and stenting (CAS) (AHA/ASA Class III; Level of Evidence B, CEBM Level 1b; Grade B).
- 2. For patients with symptomatic carotid disease and 50–69% stenosis, CEA is recommended. CAS is considered an alternative to CEA for patients at average or low risk for CAS or for those who are at high risk (>6% morbidity and mortality) for CEA. (AHA/ASA Class I; Level of Evidence B, CEBM Level 1b; Grade B) While age >80 years was considered high risk for CEA in the SAPPHIRE trial, the CREST trial showed a benefit for age <70 years with CAS, perhaps due to anatomic factors such as more favorable aortic arch anatomy in the younger cohort. We suggest that age alone should not be considered in determining CEA versus CAS and that other patient-specific factors should be considered.
- 3. CAS may be considered for patients with symptomatic severe stenosis (>70%) who are at high risk for CEA. (AHA/ASA Class IIb; Level of Evidence B, CEBM Level 2b, Grade B)
- 4. The benefit of CAS in asymptomatic patients is less clear and there is uncertainty regarding CAS over CEA. (AHA/ASA Class IIb; Level of Evidence B, CEBM Level 2b, Grade B)

REFERENCE LINK:

Powers CJ et al. "Standards of practice and reporting standards for carotid artery angioplasty and stenting" Journal of NeuroInterventional Surgery. 2014 Mar; 6(2):87-90. Epub 2013 Nov 6.

Last updated by Justin F. Fraser, MD 11-15-2017