# **OHIOHEALTH VASCULAR INSTITUTE**

# **OHVI RECOMMENDATIONS**

Atherosclerotic Carotid Stenosis

# SYMPTOMATIC: AMAUROSIS FUGAX, HEMISPHERIC SYMPTOMS, TIA OR STROKE

History and Physical, Screening carotid duplex and/or CTA of head and neck (consider renal function); consider TTE with bubbles

other: Dizziness, seizure, syncope, non-hemispheric neurologic deficits not likely related to CAS consider other evaluation or neurology consultation

Consider consult to Neurology

>50 % stenosis confirmed by CTA, MRA or catheter angiogram

< 50 % by catheter angiogram OR < 70 % by duplex

Consideration of the need and optimal modality for revascularization after thorough consideration of the patient's medical history and their carotid anatomy. This will involve a shared decision approach with the patient and family, considering and discussing each of the treatment options in a documented multi-disciplinary thought process. Documentation of shared decision making and pre & post NIHSS is needed when intervention is chosen. A shared decision making dotphrase can be leveraged.

## **High Risk Features for CEA**

- + History of neck irradiation
- + History of ipsilateral CEA
- + History of tracheostomy or radical neck dissection
- + Anatomically high bifurcation
- + High cardiopulmonary risk Class III CHF or need for CABG valve
- + Severe COPD
- + LVEF < 35%
- + Significant angina or >70% in two coronary territories

## **High Risk Features for CAS fem or TCAR**

- + Carotid Tortuosity
  - Proximal = fem
  - Distal = fem TCAR
- + Difficult Arch = fem
- + Common carotid disease = TCAR
- + Circumferential dense calcium = fem TCAR
- + Unable to tolerate antiplatelet med = fem TCAR
- + Dementia should be an exclusion for all treatments
- + Recent CEA = fem TCAR
- + Contrast anaphylaxis = fem TCAR
- + Large adipose neck = TCAR
- + Dye anaphylaxis

# All treatment arms include optimal medical therapy defined by:

- + BP < 140/90 ACEi ARB first line
- + LDL < 100 without high risk features or > 50% LDL reduction (goal <70) with associated high risk features
- + Counseling for tobacco cessation
- Antiplatelet therapy with ASA,
   Clopidogrel or DAPT
- + Diabetic management
- + Consider referral to Stroke Prevention Clinic

# ABCD 2 Stroke Risk Score

- + Age >60 = 1
- + BP 140 90 = 1
- + Unilateral weakness = 2
- + Speech disturbance without weakness = 1

Consider EP and/or Neurology consultation(s)

- + >60 min symptom duration = 2
- + 10 59 min symptom duration = 1
- + <10 min symptom duration = 0
- + Presence of Diabetes = 1

Score 0 - 3: Low risk of stroke

Score 4 – 5: Moderate risk of stroke

Score 6 – 7: High risk of stroke

\*\* Consider correction of stenosis in 3-7 days after presentation with TIA if score >4, with amaurosis as presenting symptom, or if neurologic exam normalizes and there is a low risk MRI after amaurosis fugax, correction can occur sooner.

Repair within 14 days if "Minor Ischemic Stroke" with consideration of Neurology consult.

Consider repair within 6 weeks if moderate to severely disabling stroke, pending patient's clinical course and carotid anatomy after reevaluation.



# **OHVI RECOMMENDATIONS** | ATHEROSCLEROTIC CAROTID STENOSIS

### **ASYMPTOMATIC CAROTID STENOSIS**

### Found on screening exam

Found during evaluation of non ischemic symptoms dizziness, seizure, syncope, non hemispheric symptoms

<50% by Duplex criteria

Optimal medical therapy and intermittent surveillance for change in symptoms and progression of disease see surveillance guidelines. >50-69 % Duplex by criteria

Consider Optimal Medical therapy with every 6-12 month surveillance.

>70% (or 80%) by Duplex criteria (EDV >100)

Complete consultation to review:

- A. Degree of stenosis
- B. Carotid anatomy
- C. Life expectancy/age, medical history, etc.
- D. Patient & family preference

Consider catheter-based angiography, CTA or MRA. CTA or MRA are considered front-line evaluation, unless contraindicated.

>70% stenosis confirmed with advanced imaging. Consider optimal medical therapy with duplex surveillance every 6 months OR consider for elective repair.

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