

Patient Name: _____

CAROTID ARTERY DUPLEX

Exam Date: _____

DOB: _____ MRN: _____

Technologist: _____

History : _____

| | | | |
|------------------|--------------|------------------|-----------|
| PSV / EDV | RIGHT | LEFT | PSV / EDV |
| ____/____ Cm/sec | | ____/____ Cm/sec | |
| ____/____ cm/sec | | ____/____ cm/sec | |
| ____/____ Cm/sec | | ____/____ Cm/sec | |
| ____/____ cm/sec | | ____/____ cm/sec | |
| ____/____ cm/sec | | ____/____ cm/sec | |
| ____/____ cm/sec | | ____/____ cm/sec | |

Draw in plaque in proportion to maximum degree of narrowing.
Circle highest PSV and EDV values on each side, and connect with a line to corresponding location on the drawing.

ICA/CCA RATIO: _____:1_

Plaque types (circle): none, intimal thickening, soft, calcified, ulcer

ECA max: _____/_____

VERTEBRAL (circle): Antegrade /

Bidirectional / Retrograde/occluded

Right B/P: _____

Include BP if required under hospital protocol

ICA/CCA RATIO: _____:1_

Plaque types (circle): none, intimal thickening, soft, calcified, ulcer

ECA max: _____/_____

VERTEBRAL (circle) : Antegrade /

Bidirectional / Retrograde/occluded

Left B/P: _____

Include BP if required under hospital protocol

Note: Proximal ICA includes bulb **

ECA stenosis (use same criteria as for ICA and record max velocity if > 50%)

Comments: _____

| RIGHT Tech Impression | Table for Classification of Internal Carotid Artery Stenosis with Duplex Ultrasound | | | | | | LEFT Tech Impress |
|--|---|--|---------------------------------|----------------|---------------|----------------|-------------------------|
| | Class | Criteria parameters for reporting ICA Stenosis | | | | | |
| | % Stenosis | Visible plaque estimate* | Spectral Analysis | ICA PSV (cm/s) | ICA/CCA Ratio | ICA EDV (cm/s) | |
| WNL | Normal | No visible plaque / intimal thickening | WNL | <180 | <2.0 | <40 | WNL |
| <50 (mild) | < 50% | Visible plaque &/or intimal thickening | WNL | <180 | <2.0 | <40 | <50 |
| 50-69 (moderate) | 50 to 69% | Visible plaque with lumen reduction | Spectral broadening (pan-syst.) | 180 - 230 | 2.0 - 4.0 | 40-100 | 50-69 |
| 70-99 (severe) | 70 to 99% | Visible plaque with lumen reduction | Abnormal | >230 | >4.0 | >100 | 70-99 |
| OCCL | Occlusion | Visible plaque, no detectable flow | Absent | NA | NA | NA | OCCL |
| Modified criteria to classify In-stent Restenosis in the Stented Carotid Artery | | | | | | | |
| ≥50 | ≥ 50% | Visible stent within carotid artery | Abnormal | ≥ 220 | >2.7 | | ≥50 |
| ≥80 | ≥ 80% | Visible stent within carotid artery | Abnormal | ≥ 340 | >4.2 | | ≥80 |
| <p>! * At least three criteria should be met to support >50% stenosis classification (visible plaque, Spectral Analysis, PSV or Ratio) At least two criteria must be met to support >70% classification (PSV, Ratio or EDV). Peak velocity alone is non-determinant. *Use modified criteria to classify stented carotid stenosis. *Document visible plaque with gray-scale and color Doppler imaging.</p> | | | | | | | |
| <p><small>**Report Bifurcation stenosis as ICA origin using highest PSV/distal CCA (or appropriate CCA) to calculate ratio and declare in comments. Based on Carotid Artery Stenosis: Gray-Scale and Doppler US Diagnosis- SRU Consensus Conference. Radiology 2003;229:340-346</small></p> | | | | | | | |