TEMPORAL ARTERY DOPPLER

Patient Name

Date _____ Tech_____

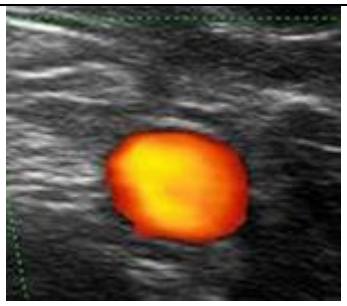
DOB

Indication _____

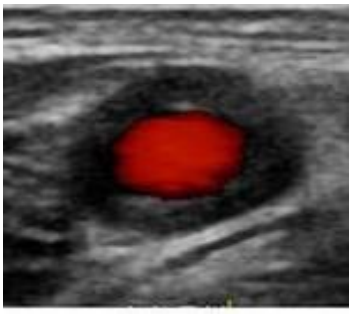
MRN

_____

Vessel		Vessel	
Right Temporal Artery		**Left Temporal Artery**	
Color Doppler Noted	YES or NO	Color Doppler Noted	YES or NO
Spectral Doppler Noted	YES or NO	Spectral Doppler Noted	YES or NO
Halo Present	YES or NO	Halo Present	YES or NO
Measurement if Present	_____mm	Measurement if Present	_____mm
Right Parietal Artery		**Left Parietal Artery**	
Color Doppler Noted	YES or NO	Color doppler Noted	YES or NO
Spectral Doppler Noted	YES or NO	Spectral Doppler Noted	YES or NO
Halo Present	YES or NO	Halo Present	YES or NO
Measurement if Present	_____mm	Measurement if Present	_____mm
Right Frontal Artery		**Left Frontal Artery**	
Color Doppler Noted	YES or NO	Color Doppler Noted	YES or NO
Spectral Doppler Noted	YES or NO	Spectral Doppler Noted	YES or NO
Halo Present	YES or NO	Halo Present	YES or NO
Measurement if Present	_____mm	Measurement if Present	_____mm
Right Axillary Artery		**Left Axillary Artery**	
Color Doppler Noted	YES or NO	Color Doppler Noted	YES or NO
Doppler Velocity	_____cm/s	Doppler Velocity	_____cm/s
Right CCA		**Left CCA**	
Color Doppler Noted	YES or NO	Color doppler Noted	YES or NO
Doppler Velocity	_____cm/s	Doppler Velocity	_____cm/s



Normal



Halo

1. One of the most important signs of the exam is the hypoechoic halo. It is a rim of uniform, ill-defined hypoechogenicy surround a long segment of the artery.
2. The hypoechoic halo is best demonstrated with compression.
3. The hypoechoic halo measurement thickness from intimal to medic of 0.4 mm is sensitive though not specific. A hypoechoic halo thickness of 1.0 mm is highly predictive of arteritis.
4. An area of stenosis is another important finding. Stenosis which can be seen as area of luminal narrowing with associated color Doppler aliasing. Occlusion can also be seen. This may be difficult to distinguish from atherosclerosis.
5. Color Doppler should be utilized to assess for areas of aliasing (turbulent flow)
6. If an area of focal narrowing is noted, Image prior to the stenosis and at the stenosis using spectral waveform.
7. Affected vessels may be significantly tortuous. Please note this in the comment section.
8. Hair can cause shadowing during exam.

Comment:

_____

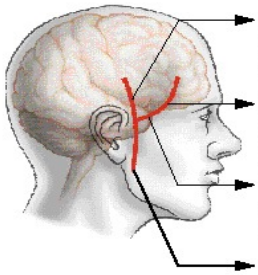
_____

_____

_____

_____

_____



Site	Patients with Temporal Arteritis (N = 30)	Patients with Polymyalgia Rheumatica (N = 37)	Control Subjects (N = 30)	Patients with Negative Histologic Findings and Other Diagnoses (N = 15)
Parietal ramus (15 mm distal to bifurcation)				
Systolic lumen (mm)	0.79±0.29	0.76±0.20	0.89±0.24	0.81±0.30
Wall (mm)	0.94±0.28*	0.70±0.08	0.72±0.13	0.79±0.11
Maximal velocity (cm/sec)	52±18	59±14	54±14	57±18
Frontal ramus (25 mm distal to bifurcation)				
Systolic lumen (mm)	0.67±0.20	0.66±0.22	0.74±0.24	0.68±0.23
Wall (mm)	0.95±0.20*	0.66±0.07	0.65±0.13	0.72±0.09
Maximal velocity (cm/sec)	48±13	53±16	47±15	55±19
Frontal ramus (10 mm distal to bifurcation)				
Systolic lumen (mm)	0.74±0.24	0.71±0.17	0.86±0.26	0.78±0.30
Wall (mm)	0.95±0.22*	0.69±0.09	0.71±0.13	0.76±0.10
Maximal velocity (cm/sec)	50±14	56±15	48±13	59±20
Common superficial temporal artery (8 mm below skin surface)				
Systolic lumen (mm)	1.51±0.44	1.54±0.41	1.70±0.35	1.85±0.54
Maximal velocity (cm/sec)	62±22	61±16	55±13	64±16