

Quality Control Worksheet

Today's date: 3/23/2023

Practice/Physician: Ariana Feldberg

Patient name: William White

Scan date: 2/14/2023

Response is made: _____

Scan/reading information:

Scan Date	2/24/23
Sonographer	Ariana
Reader	Diane Morgan

Concerns:

Ariana would like some feedback regarding this technically difficult scan. Here are her notes from that day:

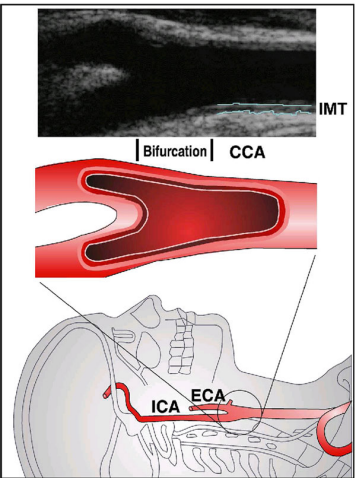
"Patient is 93 yrs old and has had voice box cancer with 40+ radiation treatments in 2017 that resulted in massive carotid artery damage. Pt ended up having episodes of amaurosis fugax incidences that lead to carotid artery surgery where surgeon had to modify procedure due to damage found intraoperatively. He has a large stent that I can see on scan. I spent over 30 minutes trying to find any sort of blood flow on the right side and was unable to find any flow even with power doppler. He is currently asymptomatic, but his daughter wanted CIMT scan to have more info for his surgeon. Pt is a "young spry" 93 yr old and she wants to try to keep it that way. His left side is starting to look occluded especially in LCCA. I sent extra images and videos to try to help, for some reason the videos won't come off the machine. I can see them full time on the machine, but not on the exported files- eek help! This was a tough scan on the right! I almost couldn't visualize the vessel at all from all the blockages!"

CardioRisk™ Scan Patient Results

Patient Name: WHITE, WILLIAM
Gender: M
Date of Exam: 2/14/2023
Date of Birth: 5/30/1932
Referring Provider: CAROTID CARE

Patient Age	90	Patient IMT	1.91 mm
Arterial Age	>80	Normal IMT	<.50 mm

Test Criteria:	CV Event Risk			All measurements in mm	
	Normal	Moderate	High	Last Visit ⁺	Alert Value [*]
Early Event Risk ⁺⁺			4.3		3
Average CCA Mean IMT			1.91		0.73
Average CCA Max Region			2.46		0.75
Plaque Burden ^{**}			19.7		



Comments: The following values are the largest intima-media thickness (IMT) measurements found in each carotid artery segment. Any measurement equal to or 1.3mm is defined as 'plaque' and is characterized as being: **S = Soft; H = Heterogeneous; or E = Echogenic** (includes mineral deposits like calcium). All measurements are in millimeters.

Right CCA 2.7 H; Bulb 4.3 H; Internal Carotid 3.2 H
Left CCA 3.8 H; Bulb 3.3 H; Internal Carotid 2.4 H
Doppler was used bilaterally. Bilateral Carotid Stenosis > 50% possible.
Complete Doppler Flow study may be considered if clinically indicated.

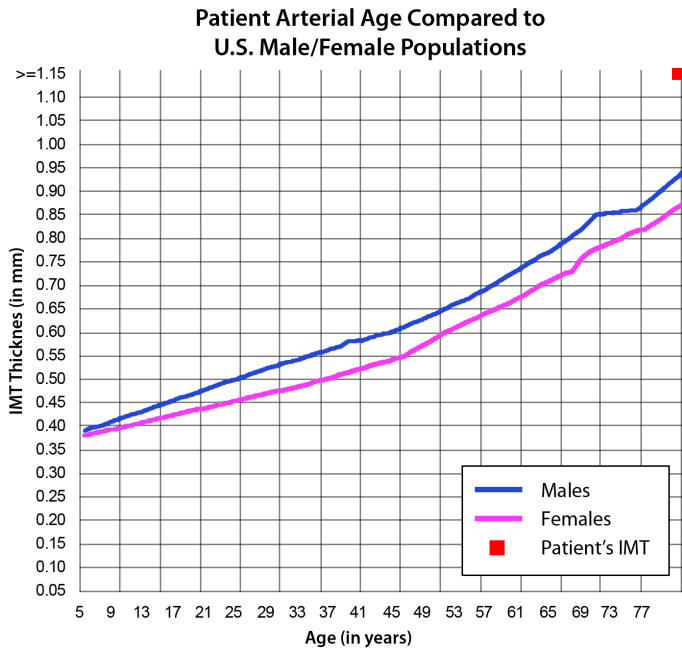
++ Early Event Risk refers to a patient's increased risk of having an event in the next 5.1 years \pm 2.3 years. It does not suggest the patient will have an event in that time frame, only that the hazard ratio significantly increases (from 1 to between 4.1 and 6.7 depending on the patient's Framingham risk score) (D Baldassare et al / Atherosclerosis xxx 2006 xxx-xxxx)

+ A progression rate of .034 mm or greater in the thickness of the mean IMT per year, increases the risk of future events significantly. (Hodis HN, et al / Ann Intern Med 1998;128:262-9)

* The Alert Value is the threshold measurement at which this patient's risk is inflated beyond a 'Normal' reading.

** Plaque Burden is the sum of the plaques found and measured. It does not have an Alert Value because plaques of any size are atherosclerotic and increase patient risk. The Plaque Burden score is intended to help physicians track progression of disease over time.

Patients with values in yellow or red on ANY risk test criteria have inflated risk.



Your Doctor should interpret the results from this report in conjunction with your other risk factors. Medical decision making takes a multitude of factors into account, and risk factor modification should be made in consultation with your Doctor. Arterial Age™: The mean distal 1 cm common carotid artery (CCA) IMT measured looks like the average same gender person in a general population which had no coronary heart history expressed as Arterial Age above. The risk assessment data provided above should be used with caution. Data from five different studies which used different criteria for participation, different training methods, and different scanning and reading protocols [A: Tonstad, S (1996) Arterioscler Thromb; B: Urbina, E (2002) Am J Cardiol; C: Oren, A. (2003) Arch Intern Med.; D: Tonstad, S. (1998) Eur J Clin Invest; E: Aminbakhsh, A (1999) Clin Invest Med] were used to create an approximate arterial age compared to normal populations found in these studies. Regression analyses was used to estimate population age over time based on the cited studies above. In a careful literature review, the data cited above is an approximation of the relationship between CIMT and age in epidemiologic studies. The above data relating age to CIMT is useful in comparing a single patient's result with a population mean, and takes on additional meaning when comparing a current CardioRisk CIMT score with a previous CardioRisk CIMT score on the same patient. It is important to note that these studies do not account for the highest risk patients, those who died from the disease.



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