



CIMT Screening

Carotid Intima-Media Thickness Test

The carotid intima-media thickness test (CIMT) is a measure used to diagnose the extent of carotid atherosclerotic vascular disease. The test measures the thickness of the inner two layers of the carotid artery—the intima and media—and alerts physicians to any thickening when patients are still asymptomatic.

Early detection may indicate the need for a more aggressive approach to managing the risk factors associated with heart disease and stroke.

Aging is a contributing factor to increased carotid intima-media thickness. Other risk factors include high lipoprotein levels, high blood pressure, smoking, diabetes, obesity and a sedentary lifestyle.

Physicians use CIMT testing to determine the "age" of the carotid arteries. Knowing that patients may not be experiencing the symptoms of arteriosclerosis, there still may be subtle changes in artery thickness. Armed with this information, physicians may develop an aggressive medical approach by prescribing medications such blood pressure and cholesterol lowering agents and aspirin, and patients may be encouraged make lifestyle and dietary improvements.

What to Expect During the Carotid Intima-Media Thickness Test

No preparation is required for the CIMT test. Patients may resume normal activities immediately following the test unless otherwise instructed.

A physician or a diagnostic medical sonographer will perform the test.

A thick gel, the same consistency as hairstyling gel, is applied to the skin of the neck. With the use of a transducer (a small microphone-like device), the gel helps the sound waves to get from the machine into the body.

Sound waves bounce off the carotid arteries. This creates "echoes" that are reflected back to the transducer, which converts them to electronic signals. A computer then processes the signals into pictures and shows them on a computer monitor.

The test generates a CIMT measurement and a report identifying the patient's risk profile.