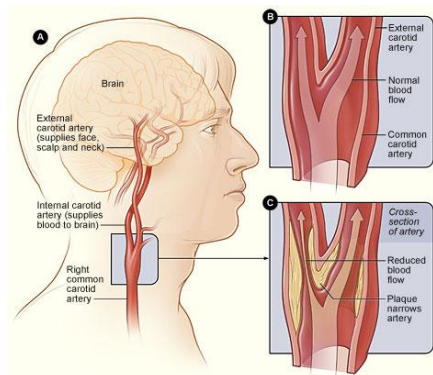


CAROTID ARTERY DOPPLER / DUPLEX ULTRASOUND



What is it?

A carotid ultrasound uses high-frequency sound waves or echoes to create pictures of the insides of your carotid arteries.

There is a common carotid artery on each side of your neck and each divide into internal and external carotid arteries. The internal carotid arteries supply oxygen-rich blood to your brain while the external carotid arteries supply oxygen rich blood to your face, scalp, and neck.

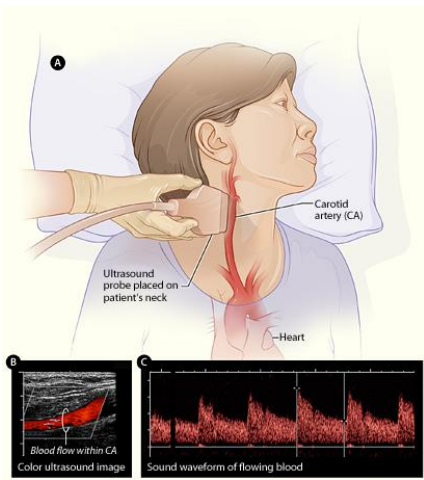
The carotid doppler ultrasound uses the blood flow through your carotid arteries to check for the presence of plaque buildup. This condition is called carotid artery disease. Over time, the plaque can either harden or rupture. Hardened plaque causes narrowing of the carotid arteries and reduces the flow of oxygen-rich blood to the brain while ruptured plaques form clots which prevent blood flow through a carotid artery, thereby causing a stroke.

Who needs it?

A carotid ultrasound may be recommended if:

- You had a recent stroke or mini-stroke
- You experience headaches and dizziness
- Your doctor hears an abnormal sound in your carotid arteries (carotid bruit)
- Your doctor suspects blood clots in one of your arteries
- Your doctor wants to check for restoration of blood flow through the artery following carotid artery surgery (carotid endarterectomy) or to check correct positioning of a stent following carotid stenting.

What to expect before, during, and after?

Before	No preparation for this test is necessary.	
During	 The illustration shows a patient lying on their back with an ultrasound probe on their neck. Labels include 'Carotid artery (CA)', 'Heart', and 'Ultrasound probe placed on patient's neck'. Below are two inset images: 'Color ultrasound image' showing 'Blood flow within CA' and 'Sound waveform of flowing blood'.	The carotid ultrasound is a painless and non-invasive test. Typically performed by a technician, you will be asked to lie on your back on an exam table holding still. Gel will be applied on your neck where the carotid arteries are located. The gel will help the transducer give off ultrasound waves and detect their echoes as they bounce off the arterial walls and blood cells. This sound is not audible by the human ear. Pictures are displayed on the computer recording the results of the echoes.
After	The doctor will provide you with results and recommendations for prevention and/or treatment right after completion of the test.	

Are there any risks I should be aware of?

No risks are associated with this test. The sound waves are harmless and the gel is easily removed off your skin.