Carotid Vertebral Duplex Scan

The carotid arteries, found in the neck, supply most of the blood to the brain. A carotid duplex scan uses sound waves to check how well the blood flows through the carotid arteries and to detect any blockage. The test takes about 60 minutes.

Before the Test

There is no preparation for this test. You may eat and take your usual medications.

If you are already hospitalized at Northwestern Memorial, a patient escort will bring you to the Vascular Lab on the 8th floor of the Feinberg Pavilion.

If you are an outpatient, plan to arrive 15 minutes before your test time. Be sure to bring:

- Your doctor’s written order for the test if one was given to you.
- A list of allergies.
- A list of all your current medications (prescription, over-the-counter, and herbals).
- Photo ID.
- Medical insurance information and card.
- Medicare card (Medicare patients only).

For their own safety, children under 16 may not visit in the testing area. They may stay in the waiting room with a responsible adult.

Please come to the Galter Pavilion, 201 East Huron Street, and check in at the reception desk on the 8th floor. Parking is available for patients and visitors in the garage at 222 East Huron Street, across from the Feinberg and Galter pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Services Desks on the 1st and 2nd floor of the Feinberg and Galter pavilions; 1st floor of Prentice (including the Prentice 24-hour desk near the Superior Street entrance).
During the Test

The exam is done by a technologist (tech) in the Vascular Lab. The exam is done without needles or injections. The tech will assist you in lying on your back on an exam table. A warm gel is applied to your neck. Then the tech moves a small, handheld device (transducer) on the skin over the arteries being examined. The transducer transmits sound waves to a monitor, where images can be seen and saved for later review. Pictures of the arteries at various sites are taken. The tech also listens to the blood flow through these arteries and records the sound. There is a carotid artery on each side of the neck and both sides always are tested. The vertebral arteries that run up the back of your neck also are examined.

After the Test

The tech will provide towels to help remove the gel. You may resume your normal diet and activities.

Your doctor will discuss the results of this test with you. Most often, the vascular surgeon who reads the test will send the written results to your doctor in about 5 business days.

Please feel free to ask questions before, during or after the test.

Health Information Resources

For more information, visit Northwestern Memorial Hospital’s Alberto Culver Health Learning Center. This state-of-the-art health library is located on the 3rd floor of the Galter Pavilion. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Center by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nm.org.

For additional information about Northwestern Medicine, please visit our website at nm.org.