Transcranial Doppler (TCD)

A transcranial doppler (TCD) test uses ultrasound waves to measure the blood flow rate in the main (cerebral) arteries of the brain. It helps detect blockages, narrowing or spasms of the arteries. The exam does not involve the use of needles or injections. A TCD test, done in the Vascular Lab, takes about 1 hour.

Before the test

There are no diet or activity restrictions before this test. Plan to arrive 15 minutes before your test time. Be sure to bring:

- Your physician’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 8th floor reception desk.

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, and on the 1st floor of Prentice (including the Prentice 24-hour desk near the Superior Street entrance).

During the test

The technologist (tech) will assist you onto an exam table. Then, the tech will apply gel and move a small, hand-held device (transducer) over the skin:

- On each side of your head
- Under your chin
- Over your closed eyelids
- On the back of your neck
The transducer will transmit sound waves to a monitor that records the blood flow rates. You may hear a pulsating sound that corresponds to your heartbeat. It is important to lie still and not talk during this exam.

**After the test**

The tech will provide towels to help remove the gel. You then are free to leave. You may resume your normal diet and activities. Most often, initial findings are sent to your physician within 48 hours. A full report will follow in about 5 business days.

If you have questions about this test, please call the Vascular Lab at 312.926.5809 or talk with the tech.

**Northwestern Medicine—Health Information Resources**

For more information, contact Northwestern Memorial Hospital’s Alberto Culver Health Learning Center (HLC) at hlc@nm.org, or by calling 312.926.5465. Health information professionals can help you find the information you need and provide you with personal support at no charge.

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