

A vascular ultrasound duplex scan helps detect a blockage in blood flow that may cause pain or other problems.

Duplex Scan: Abdominal, Iliac, Mesenteric, Renal Vascular Ultrasound Exams

A duplex scan uses sound waves to check how well the blood flows through the arteries to different areas of the body. Scans of the lower portion of the body most often include the following:

- An *abdominal duplex scan* examines the aorta and the common iliac artery.
- An *abdominal graft duplex scan* looks at the aortic and/or iliac stents or bypass grafts in the abdomen.
- An *iliac duplex scan* focuses on the arteries in the lower abdomen (common, internal and external iliac).
- A *mesenteric duplex scan* looks at the arteries to the liver, spleen, stomach and intestine.
- A *renal artery duplex scan* examines the blood flow both to and within the kidney and the intestine.

All of these scans help to detect a blockage in blood flow that may cause pain or other problems. Each scan, done in the Vascular Lab, takes about 60 minutes.

Before the test

Do not smoke or have anything to eat or drink (including gum or candy) from midnight the night before the test until after the exam. You may take needed medicines with only small sips of water. For best results, this test should be done in the morning between 8 and 11 am.

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

During the test

The technician (tech) will help you lie on your back on an exam table. A warm, clear gel will be applied to your abdomen. Then, the tech will move a small, hand-held device (transducer) on the skin over the arteries being examined. The transducer will transmit sound waves to a monitor, where images can be seen and saved for later review.

During the test, you may be asked to take a deep breath and hold it for about 30 seconds. You may see the images on the monitor and hear some sounds as the tech records the blood flow.

After the test

The tech will provide towels to help remove the gel. You will receive test results at the end of the exam. You may resume your normal diet and activities.

The vascular surgeon who reads the test will send the results to your referring physician. Most often, these findings are sent to your physician within 48 hours. A full report will follow in about 5 business days.

If you have questions about the test, please call the Vascular Lab at 312.926.5809.

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.

Para asistencia en español, por favor llamar al Departamento de Representantes para Pacientes al 312.926.3112.

The entities that come together as Northwestern Medicine are committed to representing the communities we serve, fostering a culture of inclusion, delivering culturally competent care, providing access to treatment and programs in a nondiscriminatory manner and eliminating healthcare disparities. For questions, please call either Northwestern Memorial Hospital's Patient Representatives Department at 312.926.3112, TDD/TTY 312.926.6363 or the Northwestern Medical Group Patient Representatives Department at 312.695.1100, TDD/TTY 312.926.6363.

Developed by: NMH Vascular Laboratory

©February 2019 Northwestern Memorial HealthCare
900764 (2/19) Duplex Scan: Abdominal, Iliac, Mesenteric, Renal Vascular Ultrasound Exams