

*If you have
any questions,
please ask your
physician.*

Arterial Vascular Ultrasound Exams

Arteries send the blood from the heart to the body. An arterial exam can include a scan and a series of blood pressure (BP) readings. The scan uses sound waves to check how well the blood flows through the arteries to different parts of the body. The arterial vascular ultrasound exams include:

- **Upper extremities, bilateral with pressures.** This exam looks at the arteries from under your arm to the wrist. They will check both arms.
- **Upper extremities, bilateral with digital pressures.** This exam is the same as the upper extremity exam, but includes the fingers.
- **Lower extremities, bilateral with pressures.** This exam looks at the arteries anywhere from the groin to the ankle or big toe. They will check both your legs.

- **Lower extremities, bilateral with pressures and exercise.** This exam checks the same arteries as the lower extremity exam but includes an exercise segment. Patients walk on a treadmill for 5 minutes or less. They will compare exercise and resting BP readings in the ankle. Patients who are over 80 years of age; patients who have a systolic BP reading (upper number) greater than 200; or those who have had a heart attack, stroke or heart surgery within the last year will usually not receive this test.
- **Ankle or brachial pressure (right, left or bilateral).** This exam looks at the arteries in the ankle or arm.
- **Duplex upper extremity (right, left or bilateral).** This exam focuses only on a selected artery or area in the arm. The scanner takes a picture of the artery wall.
- **Duplex lower extremity (right, left or bilateral).** This exam looks at only a certain area or artery in the leg. The scanner takes a picture of the artery wall.
- **Graft (upper or lower extremity, right, left or bilateral).** This exam looks at the blood flow in a post-surgery bypass graft.

All these exams help to find a blockage in blood flow (such as a blood clot). If the scan shows blockages, it shows us where and how severe they are. Each exam is done in the Vascular Lab. It takes about 60 minutes.

Before the test

There is no special preparation for this test. 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 you have one
- A list of your allergies
- A list of all your current medications (prescription, over-the-counter and herbal)
- 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 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 Feinberg and Galter pavilions.

For a discounted rate, bring your parking ticket with you. You can validate your ticket at the Customer Services Desks on the 1st and 2nd floor of Feinberg and Galter pavilions, and on the 1st floor of Prentice Women's Hospital.

During the test

The technician (tech) will help you to lie flat on your back on the exam table. They will apply a warm, clear gel to the skin. Then, the tech will move a small, hand-held device (transducer) on the skin over the arteries they are examining. The transducer will transmit sound waves to a monitor. The tech will see the images and save them for later review. During the test, the tech may ask you to take deep breaths. You may see the images on the monitor and hear some sounds as the tech records the blood flow. Depending on the area they are testing, the tech may take blood pressure readings in your arms or legs. They will record the readings and compare them.

For an *arterial exam of the lower extremities with pressures and exercise*, you will walk on a treadmill for 5 minutes. During exercise, you will have a heart monitor. After you walk, the tech will take your blood pressure in your ankles and arms again. If there is an arterial blockage, your blood pressure in your ankle will drop. The tech will take these readings about every minute until your blood pressure returns to the pre-exercise level.

After the test

The tech will give you towels to help remove the gel. You will get your 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, your physician will receive the findings within 48 hours. A full report will follow in about 5 business days.