Quick Scan: Vascular Screening

Using ultrasound, the Quick Scan looks at the basic health of the arteries in 3 areas of your body:

- Carotid arteries
- Abdominal aorta
- Leg arteries

If there is a chance you could be pregnant, please tell the tech.

An ultrasound (sonogram) test uses sound waves to project an image. It allows the doctor to view the arteries. A small, hand-held device (transducer) is placed on the skin over the area to be examined. The sound waves from the transducer are reflected off the artery back to the transducer. The sound waves create an image on a video screen. The images are seen and captured in real time, showing movement. The test can detect narrowing or plaque (fat, cholesterol and calcium build-up) in the artery.

Based on the quick scan results, added tests or treatment may be needed.

Carotid Arteries

The carotid arteries are the major arteries in the neck that supply blood to the brain. A severe decrease in blood flow to the brain may result in stroke. Based on the scan results, the carotid arteries are graded:

1 = Normal flow with no sign of plaque build-up.
2 = Small amount of plaque is present. There is no major decrease in blood flow or narrowing of the artery.
3 = Large amount of plaque is present. This results in decreased blood flow and narrowing of the artery. Further testing is advised.

Your right carotid artery was a Grade ________.
The left carotid artery was a Grade ________.
Abdominal Aorta

The abdominal aorta is the main artery in the chest and abdomen. An aneurysm is a weakening of the artery wall. This causes the artery to dilate or become larger. If not treated, the artery will grow larger and rupture.

The normal abdominal aorta is less than 3 cm in diameter.

Your abdominal aorta measures ________ cm.

Leg Arteries (Tibial)

The tibial artery is one of the larger blood vessels in the leg. Narrowing of the leg arteries may be mild, and you may not be aware that anything is wrong. If plaque narrows the artery, you may have cramping and pain in the legs when you walk. Increased plaque build-up causes more severe pain even at rest.

During the exam, the blood pressure (BP) in both your ankles and at the top of each foot is checked. Then this reading is compared to the BP in your arms (brachial). This ankle/brachial ratio (ABI) is a good measure of blood flow to legs. An ABI of:

- 0.9 or higher, normal
- 0.70 to 0.89, mild disease
- 0.4 to 0.69, moderate disease
- Less than 0.40, severe disease

Your right ABI is ________.
The left ABI is ________.

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. You may also visit the HLC on the 3rd floor, Galter Pavilion at 251 E. Huron St., Chicago, IL. 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.