Northwestern Memorial Hospital

Patient Education

TESTS AND PROCEDURES

Quick Scan: Vascular Screening

A quick scan uses ultrasound to look at the basic health of 3 types of arteries in your body:

- If there is a chance you could
- be pregnant, please tell your healthcare
- Carotid arteries
- Abdominal aorta
- Leg arteries

An ultrasound (sonogram) test uses sound waves to project an image. It allows the physician to view the arteries. A small, handheld device (transducer) is placed on your 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 your quick scan results, your physician may order more tests or treatment.

Carotid arteries

provider.

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 can cause a stroke. Based on the scan results, the carotid arteries are graded on a scale of 1 to 3.

Grade	Findings
1	Normal blood flow is present with no sign of plaque build-up.
2	A small amount of plaque is present. There is no major decrease in blood flow or narrowing of the artery.
3	A large amount of plaque is present. There is decreased blood flow and narrowing of the artery. Further testing is advised.

Your right carotid artery was a Grade	
- ,	
Your left carotid artery was a Grade	

Abdominal aorta

The abdominal aorta is the main artery in the chest and abdomen. An aneurysm occurs when the wall of the aorta weakens. The pressure of the blood flowing through the vessel creates a bulge at the weak spot. Over time, as the pressure continues, it can grow in size. An aortic aneurysm can rupture (burst) and lead to a large amount of bleeding in a very short time.

The normal abdominal aorta is less than 3	centimeters (cm) in diameter.
Your abdominal aorta measures	.cm.

Leg arteries

The posterior tibial artery and the dorsalis pedis artery are the 2 main arteries in the lower leg. This test can show if there is reduced blood flow in these arteries. 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 your legs when you walk. Increased plaque buildup causes more severe pain even at rest.

During the exam, the blood pressure (BP) in both of your ankles and at the top of each foot is checked. Then this reading is compared with the BP in your arms (brachial). The measurements are placed into a ratio called the ankle/brachial index (ABI). ABI is a good measure of the blood flow to your legs.

ABI	Level of Arterial Blockage
0.90 or higher	Normal
0.70 to 0.89	Mild
0.40 to 0.69	Moderate
Less than 0.40	Severe

Your right ABI is
Your left ABI is
If you have any questions, please ask your healthcare provider