



St. Luke's Imaging Services Patient/Family Information

Non-Invasive Vascular Testing

What is Non-Invasive Vascular Testing?

Non-invasive vascular testing is a radiology procedure used to evaluate blood flow in your arteries and veins. The testing provides valuable information that your doctor can use to:

- Find and evaluate arterial disease
- Evaluate leg pain
- Locate narrowing (stenosis) in blood vessels
- Find blood clots
- Follow up studies after angioplasty or atherectomy

Preparation

There is nothing you need to do to prepare for the exam. Testing is "non-invasive" which means no needles are used. The test takes approximately 1 to 1 ½ hours and you may return to your normal activities when you are finished.

How is the test done?

Upper and Lower Extremity Arterial Testing

This test is done to learn about the blood flow and presence of narrowing (stenosis) within your arteries. Testing involves taking a series of blood pressure measurements from various levels on your extremities and examining waveforms (a picture of how your blood flows). Blood pressure cuffs and a Doppler device will be applied to the skin. You will experience a "tightness" or pressure as the cuffs inflate and deflate.

Exercise testing is done by walking on a treadmill for 5 minutes at a constant rate or until leg discomfort appears. Repeat blood pressure measurements are taken and compared to resting pressures.

Venous Doppler

Venous Doppler testing is used to check the veins in your legs for blood clots. The test is done while you are lying on a cart. A scanning gel is placed along your leg from the hip down to the calf and the veins are carefully checked for any evidence of a clot. This involves a series of gentle compressions up and down the leg. (Venous doppler and arterial doppler exams cannot be scheduled on the same day.)

Carotid Doppler

A Carotid Doppler exam is used to evaluate the carotid and vertebral arteries in the neck for vascular disease. You will be lying flat on a cart for this procedure. A small amount of scanning gel is placed on the neck and a Doppler device is used to scan the arteries for the presence of narrowing (stenosis). The blood flow is also carefully examined in each vessel by watching and listening to the blood flow. This exam usually takes about an hour.

Test

- Upper Extremity Arterial Evaluation
- Lower Extremity Arterial Evaluation
- Venous Doppler
- Carotid Doppler
- Other _____

History

- High Cholesterol Level
- Smoking
- Hypertension
- Diabetes
- Heart Attack (MI)
- Ulcers (On Legs)
- Grafts (Bypass)
- CABG
- Peripheral
- Leg Pain
- Leg/Arm Swelling
- Weak/Absent Pulses
- Headaches
- Visual Disturbances
- Dizziness
- Weakness/Numbness on One Side of Body

Who interprets the results and how do I get them?

A radiologist will review the images shortly after the exam is completed. A written report will be sent to your doctor. Your doctor will discuss the results with you. Please allow your physician the time needed to review these results.

Outpatient Instructions

Please register at the Outpatient Registration desk at the West Entrance. After registering, testing will be done in the Imaging Services Department on the second floor. Please use the elevators past registration on the left.

Name _____

Exam date/time _____