Cardiovascular Specialists of Frederick

Patient information form: Arterial Duplex Ultrasound.

Definition of Arterial Duplex ultrasound:

This test uses ultrasound to examine the blood flow in the major arteries in the legs.

How the test is performed:

You will be asked to lie on your back.

The Vascular technologist applies a water-soluble gel on your skin and gently runs a handheld device called a transducer over the area of the arteries in your leg.

The device sends high-frequency sound waves to the arteries in the leg. The sound waves bounce off the blood vessels and form images or pictures of the insides of the arteries.

How to prepare for the test:

You will need to remove clothing from the arm or leg being examined.

There is no food or medication restrictions for this test.

How the test will feel:

You may feel some pressure as the wand is moved over the body, but there is usually no discomfort.

Why the test is performed:

Duplex ultrasound is a less invasive option to arteriography. A duplex ultrasound can show how blood flows to many parts of the body. It can also tell the width of a blood vessel and reveal any blockages.

The test may also be used to evaluate injury to the arteries and to monitor arterial stents or Bypass grafts in the legs.