



# Vascular Ultrasound Detects Problems in Blood Vessels



vascular ultrasound

**This test uses sound waves to examine abnormalities in veins and arteries.**

In a vascular ultrasound, a small instrument called a transducer sends ultrasound waves into the body. They bounce off blood vessels in the target area. The ultrasound machine receives the returning sound waves, and the computer creates an image of the blood vessels. The images are displayed on a monitor. They can be recorded on videotape or stored digitally.

## Why do vascular ultrasound?

Usually to look for blockages in the arteries or blood clots in the veins. Different symptoms call for different kinds of vascular exams, such as:

- **Carotid duplex exam.** This is the most common test done in the vascular lab. It examines the arteries that supply blood to the head to find blockages that may have caused a stroke or stroke-like symptoms.
- **Venous duplex exam.** This test is used when a patient has swelling in a leg or other extremity. The physician may be concerned about a blood clot or deep vein thrombosis (DVT).
- **Arterial duplex exam.** This test is used when a patient has cramping or pain in an extremity and the physician is concerned about a blockage in the artery.
- **Renal artery exam.** This test is used when a patient has unexplained or uncontrollable hypertension.

## Is it safe?

Very. Ultrasound has been used for more than 30 years, and there are no known risks or side effects. Vascular ultrasound is painless, although there may be some slight discomfort from the pressure of the transducer.

## What are the benefits?

Vascular studies are non-invasive and low in cost when compared to other types of tests. They provide important information about the structure of blood vessels and the blood flow through them.

## What are the limitations?

Vascular studies may be less accurate if the patient is obese or if there is gas in the bowel.

## How soon will you know the test results?

If the vascular physician is present during the test, you may get the results before you leave. Usually patients discuss the results of the exam with their own doctor at a later date.



*In Affiliation with Sacred Heart Medical Center*