

Ultrasound

Vascular Duplex Sonography of Peripheral Veins & Arteries, Carotid Arteries, Abdominal Arteries

Patient Education & Preparation Instructions

What is an Ultrasound Examination?

Ultrasound is a way of imaging your body using high-frequency sound waves that are not audible to the human ear. All ultrasound exams are performed by board-certified sonographers. The results are then interpreted by a radiologist, a physician who specializes in imaging diagnosis. A formal report is then provided to your physician in writing, or in emergency cases, verbally by telephone.

What are the Risks?

For standard diagnostic ultrasound, there are **NO** known harmful effects on humans.

What Should I Expect During My Exam?

To begin, most exams are done with the patient lying flat on his or her back. A water-soluble gel is applied to the skin at the area of interest. A small transducer is then pressed firmly over that area. You may be asked to briefly hold your breath to ensure that our images are not blurry and for other technical reasons.

What is Vascular Ultrasound Imaging?

Vascular ultrasound is a useful way to evaluate your body's circulatory system. Duplex imaging can demonstrate structure, movement and function in the body's blood vessels in real-time. During various times of the exam, the sonographer will use doppler, which will enable you to hear your blood as it moves throughout your body. The doppler creates a visual spectral analysis of your blood velocities as it flows through your vessels and thus, aids in identification of disease.

What are Some Common Misconceptions?

Patients often ask how much radiation they are being exposed to. The answer is **NONE!** Again, ultrasound is imaging using high-frequency sound waves that are inaudible to human ears.

Ultrasound also is commonly misconceived as being used only for pregnancy. In actuality, it is used to identify anatomy and aids in disease diagnosis throughout the body.

There are many ways to image the body and each modality has specific advantages and disadvantages. Your doctor will decide whether ultrasound is the best imaging method for you based on your clinical history and current symptoms.

What are Some Common Uses of Vascular Sonography?

Vascular sonography provides a fast, noninvasive look at veins to reveal blood clots that require treatment, such as anticoagulant therapy (blood thinner) or filters to prevent clots from traveling to the lungs (embolism).

With knowledge about the arterial blood flow gained from noninvasive images in the peripheral vascular system, the radiologist can often determine whether a patient is a good candidate for a procedure such as angioplasty. It may also be useful to plan or review the success of procedures that graft or bypass the diseased blood vessels.

Vascular imaging of the blood flow in the neck arteries to the brain can also provide a fast, noninvasive look at potential stroke-causing blockages.

How Should I Prepare for the Procedure?

You should wear comfortable, loose-fitting clothing for your ultrasound exam. For all vascular procedures **EXCEPT AORTA, RENAL and VASCULAR ABDOMEN**, no other preparation is required. If your abdominal vessels are being studied, you will need to fast for a minimum of 6 hours prior to the procedure. Small sips of water are allowed to take necessary medications.

To avoid appointment delays, pre-registration is required prior to your date of service.

How Long will My Procedure Last?

See the specific procedure listing for approximate times, which may vary depending on severity of disease.

Which Vascular Ultrasound Procedure am I Being Scheduled for?

Please check the following box that indicates the procedure being scheduled.

Venous Dopplers

___ Right ___ Left Upper Extremity(ies)

This examination includes grayscale and Doppler evaluation of the veins from the neck to the wrist.

Exam Time: Please allow 45 minutes per arm.

___ Right ___ Left Lower Extremity(ies)

This examination includes grayscale and Doppler evaluation of the veins from the groin to the foot.

Exam Time: Please allow 45 minutes per foot.

Bilateral Carotids

This examination includes grayscale and doppler evaluation of the arteries on both sides of the neck.

Exam Time: Please allow 1 hour for this exam.

Arterial Dopplers

___ Right ___ Left Upper Extremity(ies)

This examination includes grayscale and doppler evaluation of the arteries from the shoulder to the wrist.

Exam Time: Please allow 45 minutes per arm.

___ Right ___ Left Lower Extremity(ies)

This examination includes grayscale and doppler evaluation of the arteries from the groin to the foot. Segmental blood pressures will be obtained on patients based upon clinical and sonographic indications.

Exam Time: Please allow 60 minutes per leg with an additional 30 minutes for segmental blood pressures.

Vascular Abdominal Exams

Preparation: Eat a low-fat meal the evening before the examination, then nothing to eat or drink after midnight.

(When necessary take only small amounts of liquids as required for medications. It is important to take all medication especially heart medication, as prescribed by your physician.)

Aorta

This exam is used to look for aneurysms (bulging) of the main artery in the abdomen.

Exam Time: Please allow 45 minutes for this procedure.

Vascular Renal Ultrasound

This exam includes an extensive examination of the kidneys and renal arteries using grayscale and doppler for renal artery disease.

Exam Time: Please allow 2 hours for this procedure.

Vascular Abdomen

This exam is used to rule out diseases such as portal hypertension, celiac and superior mesenteric artery disease.

Exam Time: Please allow 2 hours for this procedure in most cases.

Aspirus Riverview Hospital Imaging Services Department 715-421-7430

PRE-REGISTRATION REQUIRED - Stop by the Registration Department in Aspirus Riverview Hospital's Lobby Rotunda: Monday-Thursday 8 am-5:30 pm; Friday 8 am-5 pm; Or call 715-421-7499

If you are unable to keep your appointment, please let Aspirus Riverview Hospital's Imaging Services Department know as soon as possible. Should you be admitted to the hospital, please inform your physician about your appointment.



RIVERVIEW HOSPITAL
410 Dewey Street, P.O. Box 8080
Wisconsin Rapids, WI 54495-8080
aspirus.org