

Renal Artery Duplex Ultrasound



What is a Renal Artery Duplex Ultrasound?

Ultrasound imaging or sonography uses sound waves to produce pictures of the inside of the body. Ultrasound exams do not use radiation. Ultrasound images are captured in real-time so they can show the structure and movement of the body's internal organs, as well as blood flowing through blood vessels.

Renal artery ultrasound is a test that shows the renal arteries, the arteries that carry blood to the kidney. These arteries may narrow or become blocked and this may result in kidney failure or hypertension. The speed of blood flow through the arteries is measured and determines the degree of narrowing of the artery or renal artery stenosis (RAS).

Organs visualized include: both kidneys, bladder, aorta, and blood flow to the kidneys.

CPT Code

76770 complete study all organs visualized
76775 limited organs visualized
93975 study includes arterial inflow and venous outflow

Indications

chronic kidney disease, uncontrolled or new onset of hypertension

Contraindications

none

How Does Your Patient Prepare?

No patient preparation is required.

What Happens During the Test?

A technologist will obtain a detailed medical history. Your patient will be asked to lie down on an examination table. The technician will place a clear gel on his abdomen. The sonographer (ultrasound technologist) or radiologist then presses the transducer against the skin and sweeps it back and forth over the abdomen. The transducer is a small hand-held device that resembles a microphone, attached to an ultrasound machine by a cord. When the transducer is placed against the skin, an image of the artery is shown on a video screen. The renal arteries are identified and a measurement will be made of the speed of blood flow through each artery.

The test takes approximately 30 minutes to complete.

After the Test

After the exam the gel is wiped off. Your patient may resume normal activities.

The Results

A radiologist will analyze the images and send a signed report to the referring physician within 1 business day.

(Information adapted from www.radiologyinfo.org and Dr. Jill Westercamp)

This manual is intended for use as merely a guideline for referring physicians and their staff only. It contains information pertaining to the most commonly ordered exams and indications. However, Iowa Radiology does not recommend any particular examination. Individual radiologist preference or patient circumstances may dictate ordering alternative studies. Although contrast codes are not needed to place an order, the following contrast codes may be used in placing orders: CT Contrast Q9967, MRI contrast A9577 and A9579.