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
93975 study includes arterial infl ow and venous outflow

Indications
Chronic kidney disease, uncontrolled or new onset of hypertension.

Contraindications
None.

How Does The Patient Prepare?
No patient preparation is required.

What Happens During the Test?
The technologist (sonographer) will obtain a thorough medical history. The patient may be asked to remove clothing from the waist down and will be provided a gown and blanket. A clear gel is applied to the abdomen. The sonographer or radiologist will then press a small, hand-held device called a transducer against the skin and sweep it back and forth over the area of concern. 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. The patient may resume normal activities.

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

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

This information is intended for use as merely a guideline for referring physicians and their staff members only. It contains information pertaining to the most commonly ordered exams and indications. However, Shawnee Mission Medical Center 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.