

## Renal Artery Duplex

### What is a Renal Artery Duplex?

A Renal Artery Duplex is an ultrasound test that uses high frequency sound waves (ultrasound) to examine the renal arteries and measure the blood flow. The renal arteries deliver blood to the kidneys.

### Why is a Renal Artery Duplex performed?

Renal artery disease, including narrowing (stenosis) due to atherosclerosis, can result in reduced blood-flow to the kidney. This can cause hypertension. Renal artery stenosis is the most common correctable cause of hypertension. Long-standing, untreated renal artery disease, is also an important cause of kidney failure.

### What can I expect during the Renal Artery Duplex?

- A personal history describing current vascular symptoms and family history will be obtained.
- You will be asked to remove outer clothing, put on a patient gown, and lie on the bed
- The lights in the room will be dimmed so the ultrasound screen can be seen clearly
- A gel will be used along with the transducer (Ultrasound probe that transmits sound waves) on your abdomen and firmly press against your skin. The sonographer will apply mild pressure with the transducer to obtain images of your renal arteries and a measurement of blood flow is taken.
- You will be asked to roll to your side and hold your breath for short periods of time during the test.

### Will I have pain or discomfort during the test?

You may feel some pressure as the transducer is moved over your abdomen, but it is mild and lasts for a short period of time. The pressure should not cause any pain. You should tell the sonographer if you are uncomfortable during the test.

### How long will the exam take?

The exam takes approximately 60 minutes.



## **How should I prepare for the exam?**

Fast for 6 hours prior to the test. This reduces gas build up to visualize the arteries more clearly.

## **How will I get the results of the exam?**

The images are reviewed by a board certified vascular physician. You should get your results, within 5 business days, from your ordering provider.

**Contact the Imaging department for any questions prior to your exam, 217-762-1820.**