### 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.
- The sonographer will place a water-soluble gel on your abdomen and firmly press against your skin with a transducer. The transducer is a small hand-held device that resembles a microphone. When the transducer is placed against the skin, an image of the artery is shown on a screen. The renal arteries are identified and a measurement of blood flow through each artery will be made.
- 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.
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How long does the Renal Artery Duplex take?
You will be in the vascular lab for 1 hour.

What should you wear?
Wear loose fitted clothing that is easy to remove.

Specific Preparation:
- Do not eat or drink 4 hours before the test. This is necessary to minimize gas.
- At 2 hours before the test start time-drink 16 oz. of water.
- Do not chew gum/candy or smoke the morning of the exam. As this may increase the swallowing of air.
- Do not apply cologne, perfume, body lotion, or powder.

When will you know the results of your test?
The images from the test will be reviewed by a board certified cardiologist. The results of the test will be sent to the doctor that ordered the test for you. The test results will also be sent to your family doctor. It may take 3 to 4 days before you know the results of your test.