



Pacific Cardiovascular Associates Medical Group

Renal Artery Duplex Test

The renal arteries provide blood flow to the kidneys. Renal artery disease, including narrowing (stenosis) due to atherosclerosis, can result in reduced blood-flow to the kidney. This can cause hypertension (high blood pressure). 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.

Your doctor may order this test if:

- You have high blood pressure (hypertension)
- History of renal artery stenosis

How the test is performed:

The test is done in a vascular lab. The vascular tech applies a water-soluble gel on your skin and gently glides a handheld device called a transducer over the area of the aorta and renal arteries in your abdomen. Blood-flow velocities and flow patterns in the aorta and renal arteries are evaluated with Doppler ultrasound. Scanning may be performed from the front or sides of the abdomen and can be facilitated by the patient lying on one side or the other.

You may feel some pressure as the probe is moved around your abdomen. The pressure should not cause any pain. You may also hear a “whooshing” sound.

Why the test is performed:

The renal arteries provide blood flow to the kidneys. Renal artery disease, including narrowing (stenosis) due to atherosclerosis, can result in reduced blood-flow to the kidney. This can cause hypertension (high blood pressure). 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.

How you prepare:

The test is performed after an overnight fast, meaning NO EATING OR DRINKING 8 HOURS PRIOR TO TEST (small sips of water with medications is fine). Additionally, it's important to **avoid tobacco and caffeine prior to the test**. It is important to fast prior to the test because gas in the intestinal tract can interfere with the ultrasound evaluation.

How long the test will take:

The test will take around 30-45 minutes

Frequently Asked Questions

Are there any risks involved in this test?

There are no specific risks related to having this test.

What number do I call if I have any questions?

Please call 877-430-7337 if you have any questions regarding your test, would like to schedule an appointment or would like to cancel your appointment.

What is the cancelation policy if I cannot make my appointment?

If you are unable to make your appointment due to a bona-fide emergency no cancellation fee will apply provided you provide written documentation or proof of the emergency. In all other instances a \$50.00 no show/cancellation fee will be charged, without exception, for un-kept appointments not canceled 48 hours before the scheduled appointment time.