

— PATIENT GUIDE: KIDNEY ARTERY SCREENING —

Renal Arterial Duplex Ultrasound

An ultrasound of the arteries supplying your kidneys — detecting a common, treatable cause of high blood pressure and kidney decline.

WHAT IS A RENAL ARTERIAL DUPLEX ULTRASOUND?

The renal arteries supply blood to your kidneys. Narrowing of these arteries (renal artery stenosis) reduces blood flow to the kidneys, causing them to trigger a hormonal cascade that raises blood pressure — often severely and persistently.

This ultrasound uses sound waves to visualize both renal arteries and measure blood flow, identifying stenosis or other abnormalities without radiation or contrast dye.

WHAT CONDITIONS DOES IT DETECT?

- Renal artery stenosis (narrowing of one or both kidney arteries)
- Renovascular hypertension — high blood pressure caused by kidney artery disease
- Atherosclerosis of the renal arteries
- Fibromuscular dysplasia — a non-atherosclerotic cause of stenosis, common in younger women
- Kidney size discrepancy caused by reduced blood supply

WHO SHOULD CONSIDER THIS SCAN?

- Anyone with high blood pressure that is difficult to control with medications
- People whose blood pressure suddenly worsened without an obvious cause
- Patients with unexplained decline in kidney function
- Anyone with atherosclerosis in other arterial beds (heart, legs, carotid)
- Younger patients — especially women — with treatment-resistant hypertension

WHY PHYSICIANS RELY ON THIS TEST

Renal artery stenosis is a correctable cause of hypertension. When identified and treated (via medication, angioplasty, or stenting), blood pressure often improves dramatically — reducing the long-term risk of heart attack, stroke, and kidney failure.

This scan is also a critical component of evaluating patients before kidney donation or transplant.

HOW TO PREPARE

- Fast for 4–6 hours before the scan — this reduces intestinal gas for clearer images
- Water and regular medications may be taken as usual
- Wear loose, comfortable clothing that allows abdominal access

YOUR RESULTS

Dr. Gandelman provides a report including peak systolic velocity measurements, renal-to-aortic ratio, and clinical interpretation — delivered within 24–48 hours.

PRICING

- Individual scan: \$397
- Included in: Diabetic Complication Package (\$1,097), Comprehensive Vascular Package (\$1,797), Comprehensive Cardiovascular Package (\$2,197)

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