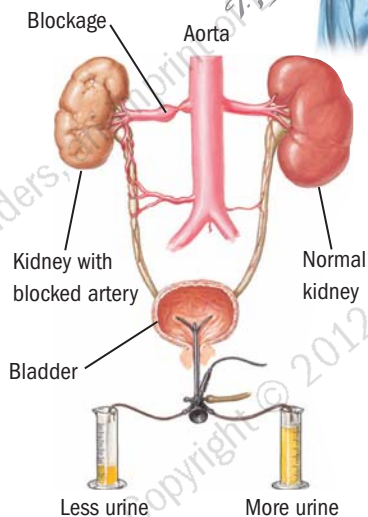


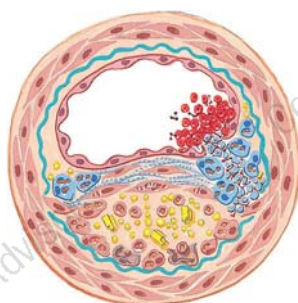
MANAGING YOUR RENAL ARTERY STENOSIS

Kidneys get blood through arteries that come from the aorta, connecting the heart. Renal artery stenosis is the narrowing or blocking of these arteries.



Narrow arteries can lead to high blood pressure. Blockage of both arteries can cause serious problems including kidney failure.

Causes include atherosclerosis and fibromuscular dysplasia, which block or narrow arteries.



Plaque in atherosclerosis



People usually have no symptoms. They don't know that they have renal artery stenosis until they develop high blood pressure or kidney failure.

Your doctor makes a diagnosis from your medical history, physical examination, blood tests, and angiography of renal arteries.



Angiography

What Is Renal Artery Stenosis?

Each kidney gets blood through an artery that comes from the aorta, the major blood vessel from the heart. Renal artery stenosis (RAS) is the narrowing or complete blocking of arteries bringing blood to the kidneys. Narrow arteries can lead to high blood pressure (hypertension). When both arteries are blocked, serious problems, including kidney failure, can result. One or both kidneys can be blocked.

What Causes Renal Artery Stenosis?

In older people, the usual cause is atherosclerosis (hardening of the arteries). In atherosclerosis, fat, cholesterol, and other substances collect in artery walls. In younger adults, a condition known as fibromuscular dysplasia is the most common cause. In this illness, tissue grows in walls of renal arteries and narrows or blocks them.

What Are the Symptoms of Renal Artery Stenosis?

People usually have no symptoms. They don't know that they have it until they begin to have high blood pressure or kidney failure.

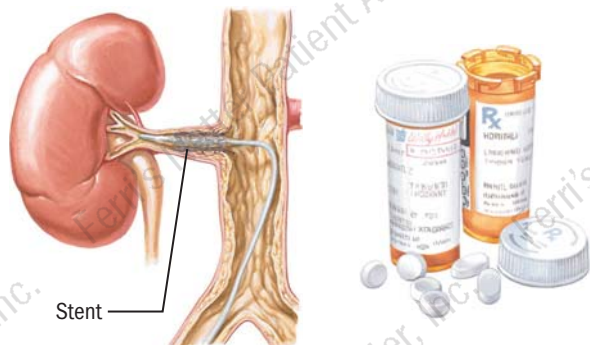
How Is Renal Artery Stenosis Diagnosed?

The doctor makes a diagnosis from a medical history and physical examination. Blood and urine tests and magnetic resonance angiography (MRA) of renal arteries may be done. MRA is a special x-ray of blood vessels bringing blood to kidneys.

How Is Renal Artery Stenosis Treated?

Treatment depends on the severity and cause of the stenosis and personal preference. Mild or moderate symptoms can sometimes be treated with medicine to control high blood pressure. A more severe condition may need the artery to be widened or reopened by surgery.

A treatment called angioplasty may be used instead of surgery. This treatment is more frequently performed when the cause is fibromuscular dysplasia but not atherosclerosis. A plastic balloon is used to open the narrowed artery. A metal or mesh tube called a stent may be put in to keep the artery open. The procedure may have to be repeated because narrowing may return. High blood pressure medicine may still be needed.



Treatment depends on the severity and cause of the stenosis and personal preference. Medicines to control high blood pressure are used for mild or moderate symptoms. More severe conditions may need the artery to be widened or reopened by surgery or angioplasty. A stent may be put in to keep the artery open.



Keep your heart healthy. Exercise regularly to reduce complications, such as heart disease, caused by high blood pressure. Eat healthy foods. Lower your blood cholesterol levels, and follow a low-salt diet.

Stop smoking! Smoking worsens blood pressure control and may increase chances of getting heart disease.



Make regular doctor appointments to check your kidneys and blood pressure.

Don't take over-the-counter drugs, such as ibuprofen, or herbal preparations unless your doctor says you can. Some may not be safe to take with your condition.



DOs and DON'Ts in Managing Renal Artery Stenosis:

- ✓ **DO** take your medicine regularly and as directed. This is the most important thing you can do to delay or prevent worsening of kidney function.
- ✓ **DO** exercise regularly. Exercise will reduce the risk of complications, such as heart disease, caused by high blood pressure.
- ✓ **DO** eat healthy food. Follow your dietitian's advice to lower your blood cholesterol levels. High levels increase the risk of heart disease. A low-salt diet also helps lower blood pressure.
- ✓ **DO** call your doctor if your blood pressure stays high.
- ✓ **DO** call your doctor if you have side effects from medicines.
- ✓ **DO** make regular appointments with your doctor to check your kidneys and blood pressure.
- ⊗ **DON'T** smoke. Smoking can damage your arteries.
- ⊗ **DON'T** miss appointments to have your blood pressure checked. Do this at least every 6 months.
- ⊗ **DON'T** stop taking your medicine without asking your doctor.
- ⊗ **DON'T** take over-the-counter drugs, especially drugs similar to ibuprofen, unless your doctor says you can. Some may not be safe to take with your kidney condition and may make it worse.
- ⊗ **DON'T** take herbal preparations. Some may cause kidney disease.

FROM THE DESK OF

NOTES

FOR MORE INFORMATION

Contact the following sources:

- National Kidney Foundation
Tel: (800) 622-9010
Website: <http://www.kidney.org>
- National Kidney and Urologic Diseases Information Clearinghouse
Tel: (800) 891-5390
Website: <http://kidney.niddk.nih.gov>