

RENAL ARTERY DISEASE

Renal artery stenosis (RAS) is the narrowing of the main artery that supplies the kidney. Depending on the degree of narrowing, patients can develop hypertension called renal vascular hypertension (RVH).

Reduced blood flow through the renal artery causes the kidney to release renin, resulting in hypertension.

The kidney with RAS suffers from the decreased blood flow and often shrinks in size (atrophy).

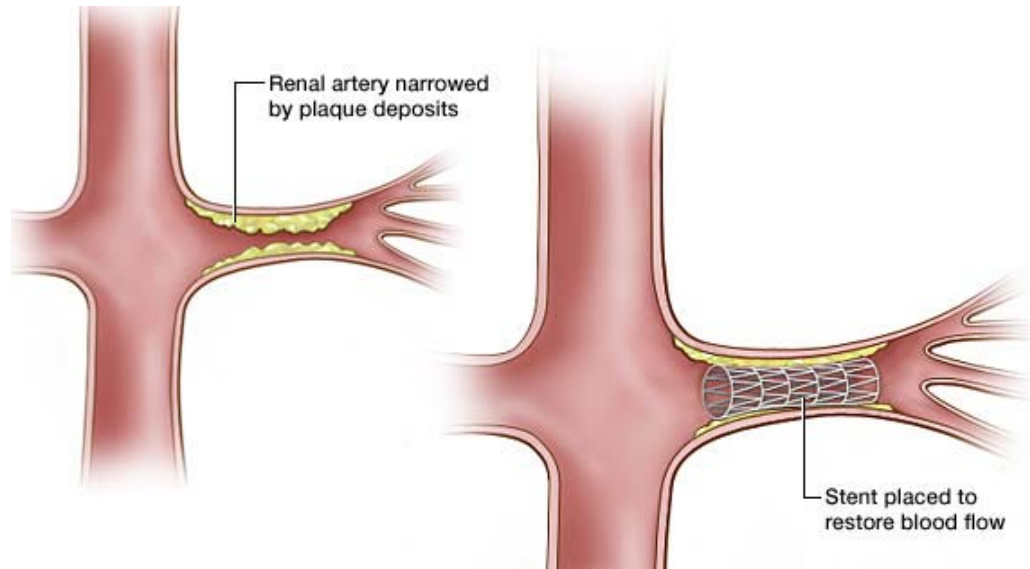
Risk Factors

Risk factors associated with the development of atherosclerotic RAS include the following:

- Carotid artery disease
- Coronary artery disease
- [Diabetes mellitus](#)
- [Hypertension](#) (high blood pressure)
- [Obesity](#)
- Age
- Peripheral vascular disease (vascular disease in the extremities, e.g., the legs)
- [Smoking](#)

Angioplasty and **stenting** may be used to improve blood flow. The goal is to improve the circulation of blood flow to the kidney and prevent the release of excess renin, which can help to decrease blood pressure. This helps to prevent atrophy of the kidney. In general, patients with AS-RAS should have stenting done because plasty by itself has a very high incidence of re-stenosis.

Surgery to bypass the narrowing may also be performed.



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