



Renal and mesenteric artery occlusive disease are conditions in which the arteries that supply blood to the kidneys and intestines become narrowed or blocked. This can happen due to a buildup of fatty deposits inside the arteries, similar to what occurs in heart disease. When these arteries narrow, it reduces blood flow to the kidneys (renal) and intestines (mesenteric), which can lead to various health issues.

Symptoms

Most patients with renal and mesenteric artery disease have mild to moderate blockage and do not have symptoms. When blockage is severe, symptoms can occur and can vary depending on which arteries are affected.

Renal artery occlusion symptoms can include:

- High blood pressure: Often difficult to control with usual medications
- Kidney dysfunction: May not be obvious initially, but can lead to fluid retention, swelling in the legs, and changes in urine output
- Renal failure: In severe cases, the kidneys may fail to function properly, which can be life-threatening

Mesenteric artery occlusion symptoms can include:

- Abdominal pain: Typically occurs after eating, as the intestines do not get the blood flow needed for digestion
- Weight loss: Due to fear of eating because of the pain or poor absorption of nutrients
- Nausea or vomiting: Especially after meals
- Changes in bowel habits: Including diarrhea or, less commonly, constipation



All patients with these conditions need to be treated with medications to improve their blood vessel health. Patients also may be advised on healthy lifestyle activities

Causes and Risks

The main causes of these diseases are arterial blockages due to plaque buildup. However, the diseases can also be caused suddenly by a blood clot (embolism) or inflammation of the renal or mesenteric arteries.

Talk to a Doctor

If a patient is at risk of or has renal and/or mesenteric artery disease, they should ask their doctor for a referral to a vascular surgeon.

Role of a Vascular Surgeon

Vascular surgeons are trained in the different methods to diagnose and treat these conditions. Together with the patient, they can decide the best course of treatment.

Diagnosis

Diagnosis can be challenging because renal or mesenteric artery occlusion symptoms can develop gradually and be mistaken for other common conditions. If you experience symptoms listed here, particularly if they persist or are combined with other health concerns, medical evaluation is crucial to diagnose and treat the underlying cause.

If a vascular surgeon suspects renal or mesenteric artery occlusive disease, they will order a test to look at these blood vessels. The tests can include an ultrasound, a CT scan, or an MRI scan. The surgeon may advise an arteriogram, for which a catheter is inserted into a large artery and guided to the renal or mesenteric arteries. A contrast dye is injected, and X-ray images are taken to show the blood flow and any blockages.

Treatment

All patients with these conditions need to be treated with medications to improve their blood vessel health. Patients also may be advised on healthy lifestyle activities. Most patients without symptoms will not require further treatment, but they should be checked periodically to monitor the condition. Patients with symptoms or severe blockages can usually be treated with stents. If a stent is not possible or advisable, surgery may be recommended.

[YourVascularHealth.org](https://www.YourVascularHealth.org)

PRESENTED BY: **SVS** | Society for Vascular Surgery



Your
Vascular
Health™