

Mesenteric Ischemia

# **Mesenteric Ischemia**

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Mesenteric ischemia is poor circulation in the vessels supplying blood flow to your mesenteric organs: your stomach, liver, colon and intestine. With poor circulation, blockages can form and compromise the function of these organs.

# Can be acute or chronic

Mesenteric ischemia can come on suddenly or build slowly and become an ongoing health issue. It is part of a systemic disease process known as peripheral vascular disease or peripheral artery disease (PAD).

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## **Symptoms**

# SUDDEN, SEVERE STOMACH PAIN

ACUTE mesenteric ischemia can cause sudden, severe stomach pain, sometimes with nausea or vomiting.

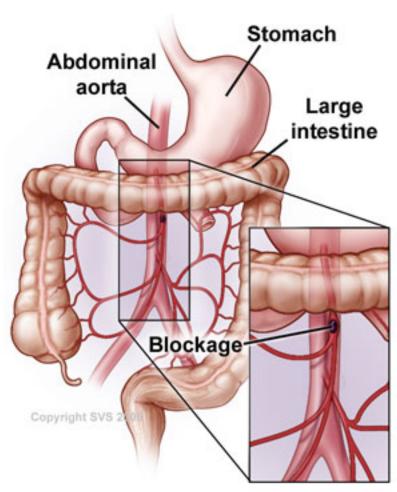
### SEVERE STOMACH PAIN AFTER EATING

CHRONIC mesenteric ischemia often causes severe stomach pain 15–60 minutes after eating. The pain may last for as long as 2 hours and, unfortunately, tends to recur with every meal. You may also experience nausea, vomiting, diarrhea or flatulence.

## **WEIGHT LOSS**

CHRONIC mesenteric ischemia sometimes leads you to lose weight because, although you may feel hungry, you eat less or less frequently to avoid the pain.

#### Causes



ACUTE mesenteric ischemia is commonly caused

by a blood clot, which travels to one of the mesenteric arteries and suddenly blocks blood flow. These clots often originate in the heart and are more common among patients with an irregular heartbeat or heart disease.

CHRONIC mesenteric ischemia is frequently due to atherosclerosis (hardening of the arteries), which slows the

amount of blood flowing through the arteries. An artery becomes blocked by plaque, which is formed by fats and other materials circulating in your blood. As more plaque builds up along the blood vessel wall, the artery can narrow and stiffen. Eventually, enough plaque builds up to reduce blood flow or even completely block the arteries.

## Diagnosis

#### SEE A VASCULAR SURGEON

If you have the symptoms outlined above, see a vascular surgeon. You will be asked about your history of smoking, high blood pressure, diabetes and heart disease, and details about when and how often the symptoms occur and how long they last. The vascular surgeon will also perform a physical exam.

#### TESTS MAY BE RECOMMENDED

A Doppler ultrasound, a CT angiogram (CTA), or an angiogram may be recommended.

A computed tomography (CT) scan is the test of choice. A CTA creates detailed three-dimensional images from X-rays taken of cross-sections of your body. These images can identify problems with your arteries or with your abdominal organs.

An angiogram (also called an arteriogram) is a more invasive test but may be preferred if a rapid diagnosis is very important. This test uses X-rays to view your blood vessels.

#### **Treatments**

The goal of treatment for mesenteric ischemia (both chronic and acute) is to re-open the artery to allow adequate blood flow to your intestine so it will work properly. This must be accomplished before permanent damage is done. The specifics of your condition will guide your vascular surgeon on whether to recommend treatment on an emergency or elective (scheduled procedure) basis.

# IN ACUTE CASES...

- Narcotic pain medications may be given to alleviate severe pain.
- Treatment is usually an emergency procedure since severe intestinal damage can occur rapidly.
- If a clot is found early, your vascular surgeon may recommend thrombolytic therapy. This treatment involves
  injecting clot-dissolving medication into a blood vessel, and is often given at the same time as a diagnostic
  angiogram.
- If there is evidence of intestinal damage or too little time is available for the thrombolytic agent to work, surgery may be needed to remove the clot and restore blood flow to your intestinal arteries.
- Some patients require surgery to remove damaged portions of the intestine. This is a decision your vascular surgeon will make, often in conjunction with other surgical specialists.

#### IN CHRONIC CASES...

- Minimally invasive endovascular treatment has become the first-line approach in most instances. Balloon angioplasty and stenting are sometimes performed at the same time as a diagnostic angiogram to avoid a second procedure and begin treatment as soon as possible. A tiny balloon device is inserted inside the narrowed artery. Your vascular surgeon inflates and deflates the balloon to push plaque against the wall of the artery. Once the artery is widened, your vascular surgeon inserts a stent, a tiny metallic mesh tube designed to support the artery walls to keep the vessel open.
- If you are not a candidate for angioplasty and stenting, bypass surgery is recommended. The vascular surgeon
  creates a detour around the narrowed or blocked section of the affected artery. To create the detour, one of
  your veins or a synthetic tube is used as a graft, sewn-in above and below the blocked area to restore adequate
  blood flow to your intestines.

# Staying Healthy

- · Follow a heart-healthy diet.
- Avoid smoking. If you do smoke, ask your vascular surgeon to help you find a smoking cessation program that will work for you.
- · Exercise regularly.
- · Stay hydrated.
- Manage chronic medical conditions including diabetes, high blood pressure, kidney failure and heart disease.

#### Resources

Peripheral Arterial Disease (PAD) Atherosclerosis Thrombolytic Therapy

Find a vascular specialist near you