

# Carotid Artery Disease

#### What Are the Carotid Arteries?

The **carotid arteries** are blood vessels that carry oxygen-rich blood away from the heart to the brain. Carotid arteries are important because they supply blood to the part of the brain that controls thinking, speech, personality, and the ability to feel and move.

Carotid arteries are located on each side of the neck. You can feel them throb by placing your fingers gently on either side of your neck, just under your chin.

## What Is Carotid Artery Disease?

Atherosclerosis occurs when arteries narrow and harden due to a buildup of fatty deposits called plaque. Carotid artery disease (CAD) is when atherosclerosis happens in the carotid arteries.

For more information, review these related flyers:

- Lifesaving Tips About ... High Blood Pressure and PAD
- Stroke



Over time, the narrowing of the artery may become so severe that a blockage occurs. This can decrease blood flow to the brain and cause:

- A stroke, leading to permanent loss of brain function, or
- A transient ischemic attack (TIA), also known as a "ministroke." A ministroke

is like a stroke, but the symptoms are temporary and can last from a few minutes to 24 hours.

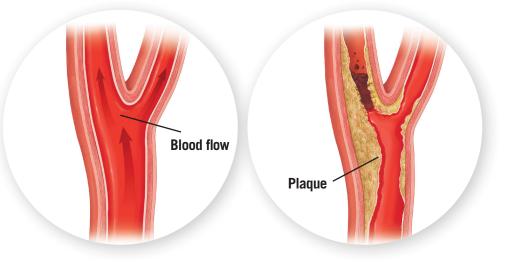
According to the National Stroke Council, more than half of strokes in the U.S. occur because of CAD.

## Symptoms

For many people, a TIA is the first obvious sign of arterial disease. Symptoms of stroke and TIA are similar and may include:

- Blurring, dimming, or loss of vision
- Tingling around the mouth or difficulty with speech
- Inability to move an arm or leg normally
- Numbness in part of the body
- Rarely, a sudden, severe headache

A TIA is a strong warning sign. The symptoms may resolve, but when a TIA occurs, it increases the risk of a stroke. A TIA should be treated as a medical emergency. *If you think you are experiencing a stroke or TIA, get medical attention immediately!* 



## **Diagnosis**

CAD is often first detected during a routine exam. Doctors can hear sounds called carotid bruits with a stethoscope. Imaging tests then can assist in diagnosing CAD. These tests include:

- Carotid artery duplex scan—an ultrasound examination of the neck arteries
- Angiogram, which can detect blockages on images taken when a contrast dye is injected into the blood vessels. Options include:
  - Magnetic resonance angiogram (MRA)
  - Standard (X-ray) angiogram

#### Treatment

The goal when treating CAD is **normalization**, or to reduce the risk factors that cause artery blockages. This can include:

- Taking specific medications (such as antiplatelet medications) as determined by your health care provider
- Angioplasty, a surgical procedure to open a narrowed carotid artery
- Placement of a stent
- Lifestyle changes, such as quitting tobacco products or improving diet and exercise to lower cholesterol and high blood pressure

Individuals with severe blockages (up to 60% or 70%) of the carotid artery may be referred for a surgical treatment called a **carotid endarterectomy**. This procedure removes plaque from the artery wall to restore blood flow. It is an outpatient procedure, and patients usually recover

quickly. Most people can soon resume their normal day-to-day activities.

There are always new or improved ways to treat and manage CAD. Talk with your health care provider about which options are right for you.

#### **Prevention**

It is important to care for your health through exercise, proper nutrition, and taking medications as prescribed. If you have risk factors for CAD, you should talk with your health care provider. *If you have any symptoms, it is critical to seek help right away to manage and reduce your risk.* 

# Risk Factors for CAD

Carotid artery disease has risk factors similar to peripheral artery disease (PAD) and coronary heart disease:

- Family history of atherosclerosis
- Age and gender
  - Men have a higher risk before age 75
  - Women have a higher risk after age 75
- Smoking
- Hypertension (high blood pressure)
- Diabetes
- High cholesterol, and especially high amounts of low-density lipoprotein (LDL, or "bad") cholesterol
- Existing diagnosis of PAD or heart disease

# Questions for Your Doctor



It is important to work

closely with

your health care provider about your diagnosis and treatment. You can bring this form with you to help talk to your medical provider about any questions and concerns you may have.

