

# A Guide for Patients: Carotid Artery Disease (CAD)



## What is carotid artery disease (CAD)?

The carotid arteries are two large blood vessels in the neck. They carry blood from the heart to the brain. When they are healthy, blood flows smoothly and brings the necessary oxygen and nutrients that the brain needs.

As people get older, fatty deposits called plaque can build up inside these arteries. Plaque consists mainly of fat and cholesterol. It narrows and stiffens the arteries, a problem often called "hardening of the arteries," or atherosclerosis.

When carotid arteries become too narrow or blocked, it can progress to carotid artery disease (CAD). This can reduce blood flow to the brain and may cause a stroke or a "mini-stroke", which happens when blood flow to the brain is blocked for a short time and can be a warning sign that a bigger stroke could happen later.



### **Symptoms**

Carotid artery disease may not cause any symptoms, at first. In some cases, the first sign is a stroke. Strokes often have warning signs called "mini-strokes," or transient ischemic attacks (TIAs). The symptoms of a TIA usually last only a few minutes or hours, but they are a warning that a stroke could happen. TIAs are medical emergencies and need treatment right away.

Signs of a TIA or stroke can include:



Weakness, numbness or tingling on one side of the body



Trouble moving part of the body



Loss of vision or blurry vision in one or both eyes



Trouble speaking clearly



Trouble understanding what others are saying

#### **Causes and Risks**

These factors can increase your chances of carotid artery disease:

- Age
- Obesity
- High blood pressure
- Lack of exercise
- Diabetes
- Family history
- Smoking
- High cholesterol

#### Talk to a Doctor

Patients who suspect they are having a stroke or TIA should immediately seek emergency medical treatment. Learn the stroke warning signs: F.A.S.T.

- Face Drooping
- Arm Weakness
- Speech Difficulty
- Time to call 911











Arm Veakness

Speech Difficulty





## **Recognizing CAD**

If your doctor thinks you may have carotid artery disease, they may order an ultrasound test to be done by a technician in lab or even the doctor's office. This test is painless and shows if you have CAD and how serious it is.

## Role of a Vascular Surgeon



If you have CAD symptoms or think you might have CAD, ask your doctor if you should see a vascular surgeon. Vascular surgeons are the only specialists trained to diagnose and treat the full spectrum of vascular diseases. They can provide treatments, including medication, minimally invasive procedures, stents and, if needed, open bypass surgery.

#### **Treatment**

There are several treatment options for CAD, depending on your diagnosis. Lifestyle changes can be made to improve symptoms, including:

- Stopping smoking
- Exercising regularly
- Eating a healthy diet and managing weight

Medication may also be a part of your treatment plan. In more serious cases, a procedure may be necessary to clean out the plaque or open blocked arteries and keep them open.