

# So your ultrasound screening indicates Carotid Artery Disease

## Why should I be concerned?

Your arteries are responsible for delivering oxygen-rich blood from your heart to other parts of your body. Your carotid arteries are the two main arteries that carry blood from your heart, up through your neck, to your brain. Healthy carotid arteries are smooth and unobstructed, allowing blood to flow freely to the brain providing oxygen, glucose, and other nutrients that your brain cells need.

Typically with age, the carotid arteries build up plaque, a sticky substance made up mostly of fat and cholesterol. Plaque narrows the passageway within the arteries and causes them to become stiff and obstructed. Carotid artery disease results when the carotid arteries become too narrow or obstructed and limit the blood flow to the brain.

Strokes result either from obstruction of blood flow to the brain by the plaque, sudden clotting off of the carotid artery, or when bits of plaque and clots break off from the plaque and flow to the brain. If left untreated, carotid artery disease may lead to stroke, where lack of oxygen and other essential nutrients cause permanent damage to the brain. Depending on its severity, a stroke can be fatal. One-third of strokes are fatal. Even among the survivors, the impact of a stroke can be devastating. One year after suffering a stroke, two-thirds of survivors are still left with significant functional deficits, such as paralysis of an arm and/or leg, inability to speak, or blindness in an eye.

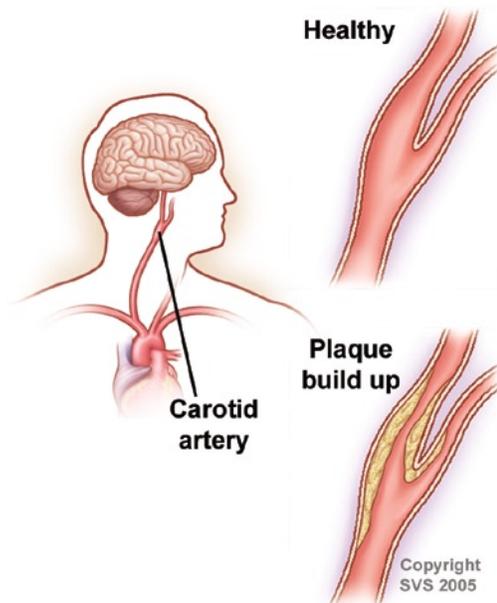
Many patients will experience a “mini-stroke,” or transient ischemic attack (TIA), as the first sign of carotid artery disease. In a TIA, the symptoms are exactly the same as a stroke, but resolve usually within minutes to a few hours. If you have experienced a TIA you should seek immediate medical attention. Very often, however, the first sign of carotid artery disease is a permanent stroke, which emphasizes why it is so important to be evaluated for carotid disease if you have specific risk factors.

## What should I do?

When your condition warrants, ask your primary care physician to recommend a vascular surgeon to evaluate your condition. You can find a vascular surgeon in your area at [www.VascularWeb.org](http://www.VascularWeb.org).

To prevent your carotid artery disease from getting worse, stop smoking, keep your blood pressure normal, and your cholesterol down, and take simple medications like aspirin.

Depending on the severity of your condition, treatment options may include lifestyle changes, medications, or a definitive procedure such as minimally invasive carotid stenting or open carotid endarterectomy. The vast majority of patients who are diagnosed with carotid artery disease through a Duplex ultrasound before symptoms develop can be managed medically.



Please call with any questions:



### Carotid Artery Disease Risk Factors

- Aging
- Hypertension (high blood pressure)
- Diabetes
- Smoking
- High cholesterol
- Obesity
- Coronary artery disease (angina chest pain or previous heart attack)
- Lack of exercise
- Family history of atherosclerosis (hardening of the arteries) and/or stroke
- Irregular heartbeat, particularly atrial fibrillation (a diagnosed condition where the heart chambers quiver and beat ineffectively).



### Symptoms of Stroke

- Weakness, numbness, or tingling on one side of the body
- Inability to control movement of a body part
- Loss of vision or blurred vision in one or both eyes
- Inability to speak clearly
- Difficulty talking or comprehending what others are saying
- Dizziness or confusion

### Treatment Options

#### Carotid Stenting

Your vascular surgeon will perform a balloon angioplasty of the obstructed carotid blockage and insert a small stent, a metal-mesh tube, that expands inside your carotid artery to allow blood to flow. The stent is inserted through an artery in your groin or arm after numbing the skin with local anesthesia. Patients are awake and alert during the procedure in most instances. You may be asked to squeeze a small ball so that your surgeon can monitor your brain function during the procedure. Hospital stays are usually one day.

#### Carotid Endarterectomy

Endarterectomy is a procedure that directly removes the plaque. Carotid endarterectomy procedures have been performed for more than 50 years, and in the hands of experienced vascular surgeons are extremely safe procedures. Patients are either put to sleep or the vascular surgeon numbs the area over the artery while the patient stays awake so that he can communicate with the patient during the procedure. The surgeon clamps the artery below and above the blocked segment, makes an incision over the blockage, directly removes the diseased plaque, and repairs the artery. Sometimes a temporary shunt is placed to detour blood to the brain while the artery is clamped. Most patients leave the hospital the day after surgery.

Vascular surgeons are the only physicians treating vascular disease today who can perform all treatment options available, including medical management, minimally invasive endovascular angioplasty and stent procedures, and open carotid endarterectomy. Only when you see a vascular surgeon who offers all treatment modalities will you be assured of receiving the care that is most appropriate to your condition.

Please call with any questions:

For more information visit:

[www.VascularWeb.org](http://www.VascularWeb.org)  
or call 877-282-2010