



Fact Sheet

Quick Facts on Carotid Artery Disease

- Carotid Artery Disease (CAD) occurs when the major arteries in the neck that supply the brain with blood become narrowed or blocked.
- As a person ages, plaque can build up in the artery walls and reduce or disturb blood flow through the carotid arteries. As more plaque builds up, the arteries narrow and stiffen causing hardening of the arteries.
- Only one percent of adults age 50 to 59 have significantly narrowed carotid arteries, but 10 percent of adults age 80 to 89 have this problem. Factors that increase the chances of developing carotid artery disease are diabetes, high blood pressure or high cholesterol.
- The first sign of carotid artery disease could be a stroke. A person may experience warning symptoms of a stroke called transient ischemic attacks, or TIA. These include weakness or numbness on one side of the body, inability to control the movement of an arm or leg, loss of vision in one eye and the inability to speak clearly.
- If a physician suspects that carotid artery disease, he or she will perform a carotid duplex ultrasound, CT scan and CT Angiography, MRA, or angiography:
 - During a carotid duplex ultrasound, a small ultrasound probe is held to the neck releasing high-frequency sound waves. The sound waves bounce off blood cells and blood vessels to show blood flow and problems with the structure of blood vessels. This test shows the physician how open the carotid arteries are and how quickly blood flows through them.
 - A CT scan can show an area of the brain that has poor blood flow. The physician may inject a contrast dye to make blood vessels visible on the x-ray image. CTA shows the arteries in the neck and head and will identify areas of arterial narrowing.

- An MRA uses radio waves and magnetic fields to create detailed images. Some forms of this test can show moving blood flow and may help evaluate carotid artery disease.
- In an angiography, a contrast dye is injected through a catheter that is threaded into the arteries and then takes x-ray pictures. The x-rays show how blood flows through the arteries and whether they are narrowed. Angiography carries some risks, including a small incidence of stroke, which is one reason physicians do not always use it as the first test to diagnose or follow carotid artery disease.
- Preventive measures to take to avoid developing carotid artery disease include:
 - Stop smoking
 - Exercise regularly
 - Eat a healthy diet
 - Maintain a healthy weight