



Information for You from Your Health Care Team

Carotid Artery Occlusive Disease

What is carotid artery occlusive disease?

The carotid arteries are two blood vessels, one on each side of the neck, that carry blood from the heart to the brain. These arteries can become partially or completely blocked thereby decreasing blood flow to the brain. It is caused by a condition called atherosclerosis, also known as hardening of the arteries. Atherosclerosis is caused by a build up of cholesterol and calcium on the inside of the arteries. These deposits are called plaques, which may eventually become so thick that they completely block the flow of blood through the arteries. People with untreated blocked carotid arteries are more likely to have strokes.

What are the risk factors?

People who smoke cigarettes, are diabetic, have high levels of blood cholesterol, have high blood pressure, or have a genetic tendency toward it are at higher risk for developing a blocked carotid artery.

What are the symptoms?

Most people with blocked carotid arteries have no symptoms. The most common symptoms are transient ischemic attacks (TIAs), which are sometimes called mini-strokes and can last from minutes to 24 hours. Examples of TIAs include: slurred speech, weakness of the arm or leg, loss of vision, unsteady gait, or loss of coordination. A person suffering TIAs is at increased risk for a major stroke and should seek immediate medical attention.

How is it diagnosed?

The doctor will listen to the neck arteries with a stethoscope. Blood flow through narrowed arteries is noisier than normal blood flow. Depending on what is heard, tests may be ordered to measure the amount of blockage. These tests include ultrasound scans and/or special x-rays including an arteriogram, CT angiogram, or magnetic resonance angiogram (MRA).

How is it treated?

Carotid artery occlusive disease is a permanent but correctable condition. Treatment is designed to prevent further blockage and stroke. If there is some blockage but there are no symptoms, treatment may be just regular checkups, with ultrasound studies to monitor the condition and medications that thin the blood or prevent the blood cells from forming clots. Even severe narrowing may produce no symptoms. If the blockage is very tight, surgery may be recommended to decrease the risk of stroke, even if there are no symptoms.

The most common surgery, carotid endarterectomy, involves removing the plaque from the artery. For some patients, a balloon angioplasty (inflation of a balloon to flatten the plaque against the artery wall), with placement of a stent, may be performed.