

STROKE / CAROTID ARTERY

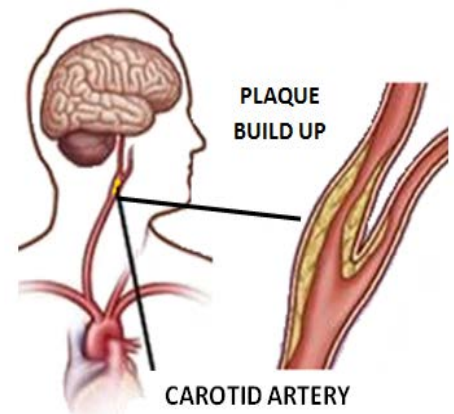


What are the carotid arteries?

The carotid arteries are the blood vessels that carry oxygen-rich blood away from the heart to the head and brain. Located on each side of the neck, these arteries are essential as they supply blood to the large front part of the brain.

What is carotid artery disease?

Carotid artery disease is the narrowing or blockage of the artery due to plaque build-up. The plaque that blocks these arteries (atherosclerosis) is basically the same plaque that causes coronary artery disease and peripheral artery disease (PAD). The slow build-up of plaque is caused by high blood pressure, diabetes, smoking, high cholesterol and other modifiable risk factors. Over time, this narrowing can become so severe that it decreases blood flow to the brain and may tragically cause a stroke. A stroke can also occur if a piece of plaque or a blood clot breaks off from the wall of the carotid artery and travels to the smaller arteries of the brain.



Solution

Using harmless and painless sound waves, soft and calcified plaques can be seen attached to the walls of the carotid arteries. Color flow Doppler makes it possible to see the blood flow in the carotid arteries non-invasively (without using any needles or dyes or piercing the skin). Plaque in the carotid arteries can be as significant as 95%, cause no noticeable symptoms and can be easily missed during a routine physical with a stethoscope. Ultrasound is the most affordable, non-invasive imaging tool to detect carotid artery disease, and remains one of the best weapons to prevent ischemic stroke.