

## **Carotid Artery Disease**

The carotid artery is the major artery of the neck and supplies the brain with blood. There are four blood vessels to the brain, two carotid arteries and two vertebral arteries. Carotid artery disease occurs when the artery becomes narrowed and diseased. This is a serious problem because it can lead to stroke. Disease in the left carotid artery may lead to symptoms on the right side of the body and *vice-versa*. The causes of carotid artery disease in general are the same as for all atherosclerosis and include:

- Smoking
- Hypertension
- Hypercholesterolaemia
- Diabetes
- Family History

### **Symptoms of Carotid Artery Disease.**

Carotid artery disease is often asymptomatic and most patients are unaware that they may have a problem. Asymptomatic carotid artery disease may have an increased risk of stroke, and certain categories of patients may benefit from surgery.

Symptomatic carotid artery disease may cause warning or herald symptoms of a stroke. These symptoms may include:

- Amaurosis Fugax, a fleeting blindness in the eye, or like curtains coming down that lasts for a variable time, minutes to hours.
- Transient Ischaemic attacks or TIAs, this causes sudden onset weakness of an arm or leg that lasts for minutes to hours, but typically resolves within 24 hours.
- Loss of sensation or pins and needles in an arm or leg (Sensory TIAs)
- Difficulty with speech or facial asymmetry.

If you experience a TIA or other symptom, it could mean that you are at serious risk of a stroke in the near future. You should report TIA symptoms to your doctor immediately, and arrange for further investigations and treatment.

## Assessment for Carotid Disease

Your vascular surgeon will perform an evaluation based on clinical history, examination and investigations. If there is any suspicion of carotid artery disease, your surgeon may arrange a carotid ultrasound scan in the vascular laboratory. This is an ultrasound of your neck, which is quick, painless and non-invasive and measures the severity of disease to the carotid arteries and also assesses the vertebral arteries.

Further more sophisticated imaging may be required and may include;

- Computerized Tomography (CT), of the blood vessels and brain.
- Magnetic Resonance Imaging (MRI/MRA).
- Angiography

## Treatment

Based on the degree of narrowing, the severity of symptoms, and on the balance of risks and benefits your vascular surgeon may recommend;

- Medical Management
- Carotid Endarterectomy and Patch
- Carotid Artery Stent

Vascular surgery for narrowing in the carotid artery.

<http://www.abc.net.au/radionational/programs/healthreport/vascular-surgery-for-narrowing-in-the-carotid/2951150>

[Do patients with asymptomatic carotid stenoses still benefit from surgical intervention?](#)

ANZ Journal of Surgery; Volume 81, Issue 4, April 2011, Pages: 211–213, Irwin V. Mohan and Shannon D. Thomas.

[Carotid artery stenting: where are we up to with evidence-based practice?](#) ANZ Journal of Surgery; Volume 82, Issue 7-8, July/August 2012, Pages: 486–488, Irwin V. Mohan and A. Ross Naylor.