Carotid Artery Disease

The carotid arteries are situated on the neck and lay either side of the windpipe. These are the major arteries that supply blood to the brain and other organs of the head. These arteries are smooth inside with no obstructions to the flow of blood. As we get older a fatty build up called plaque can occur over time, this plaque causes a narrowing in these arteries called an obstruction or stenosis that interferes with the blood flow. This process is known as atherosclerosis or hardening of the arteries. The surface of the plaque can become ulcerated which can allow blood clots to form and break off. Small particles of plaque may also dislodge break off and be carried to the brain where they may block smaller arteries and may cause mini strokes.

Not all people detected with a stenosis of the carotid arteries will require surgery. The narrowing of the blood flow can vary from a slight restriction to a severe stenosis only allowing a trickle of blood to be able to pass through. Most people will be monitored for their carotid disease with ultrasound scans and for symptoms by regular clinic visits to determine if surgery is necessary. Other scans such as MRI, CT or carotid angiogram may also be used to determine necessary treatment.

Symptoms of Carotid artery disease

› TIA (transient ischemic attack) is the name for a temporary blockage of the blood supply to a part of the brain this may last for a few minutes to a few hours. TIA’s are an important warning sign that you may be at risk of a stroke in the near future. Symptoms include weakness, numbness, and poor coordination of one side of your body, garbled speech or vision disturbances.

› Amaurosis fugax is a brief interruption of the blood flow to the eyes retina. Some patients describe this as someone pulling a blind slowly down over the eye.

› Non disabling or minor strokes symptoms like TIA but they last more the 24hrs but resolve without causing permanent damage.

› Neck bruit (brew-ee’) is the sound detected by your doctor when he listens to artery with a stethoscope. The noise is cause by the turbulence in the blow flow from of the narrowing or stenosis.

› Disabling strokes occur when blockages effects larger important areas of the brain for longer period causing the brain cells to die. These types of strokes may cause permanent impairment which surgery will not correct.

Carotid Surgery

Once your specialist determines that you need surgery for your carotid artery disease you will be booked for a procedure called a carotid endarterectomy.

The aim of this surgery is to clean out the plaque build-up by opening the artery and removing the plaque, then closing the carotid artery with a synthetic patch illustrated above. A shunt may be used during the operation to redirect blood flow if your surgeon determines this necessary. Your surgery will take 3 – 4 hours.
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Procedure

› You may be admitted either the day prior or on the day of your surgery
› You can expect to stay 3 – 4 days after your surgery if uncomplicated
› Surgery is usually done under local anaesthetic with sedation but may be under general anaesthetic if determined necessary by your surgeon
› After your surgery you will be monitored in the intensive care unit for 24 – 48 hours post your surgery. They will monitor you for any signs of a stroke, your blood pressure, breathing and you incision site for swelling
› Your wound at the surgical site will be closed with stitches under the skin that do not need to be removed. A dressing will be applied for protection in surgery and you may have a drain in place for 24 hours, the dressing is to be kept dry for 48 hours then it may be removed
› Your will be discharged home on the 3rd or 4th day if no complications
› You will need a carotid ultrasound prior to your clinic review in 6 weeks
› Most people recover in 2 weeks, normal activities are recommended but no heavy lifting or exercise
› Contact the room to make your postop appointment or if you have any concerns