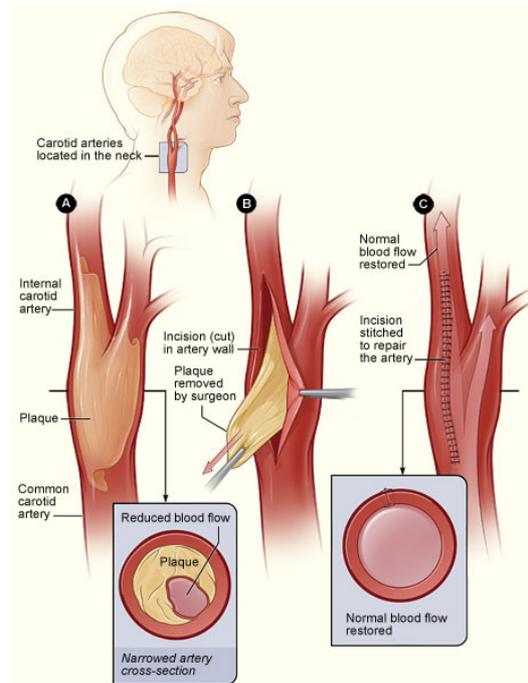


Carotid Endarterectomy

The carotid arteries are the major blood supply to the brain. They are present in the neck and divide into 2 branches. One of the branches is called the internal carotid artery (ICA), which supplies most of the brain on the same side.



Atherosclerosis:

Is also known as hardening of the arteries, which occurs in patients with risk factors such as high cholesterol and high blood pressure. With atherosclerosis the arteries are damaged and build up a plaque that narrows the artery also known as stenosis.

With the narrowing, ulcers and clots can form and be carried to the brain and causing a mini stroke also known as transient ischaemic attack or a major disabling stroke or death.

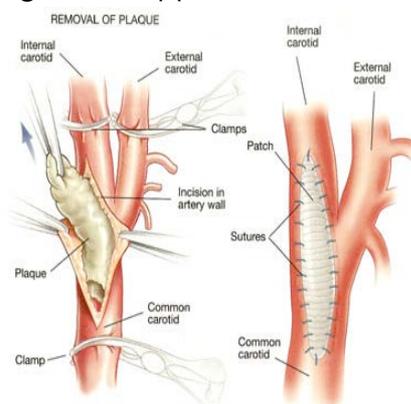
The role of carotid endarterectomy is to clean the narrowed artery by removing the plaque and use of a synthetic patch to close the artery keeping it wide open. The operation does not reverse any effect of a stroke that already occurred.

Before surgery:

- Complete history and examination
- Investigations including ultrasound and CT scan
- Antiplatelet therapy for e.g. Aspirin or Plavix
- Cholesterol lowering drugs
- Control of high blood pressure and diabetes
- Smoking cessation
- Consultation with the anaesthetist to confirm fitness for surgery

The surgery:

- Usually admission on the day of surgery or a day before if clinically indicated
- Mostly general anaesthetic (you will be asleep during the operation)
- You will be given antibiotics
- The incision will be at the side of the neck
- The arteries will be exposed and you be given heparin to thin your blood
- The artery will be opened and the plaque removed as shown below
- A patch will be sewn to keep the artery wide open
- A wound drain will remain for 24 hrs
- The skin will be closed with sutures under the skin that do not need to be removed
- A wound dressing will be applied



After the surgery:

- You will be closely monitored in the intensive care unit for blood pressure control and any signs of stroke
- The wound and drain will also be monitored
- You will continue taking your Aspirin
- You will be allowed to have some water and later dinner
- Next day, the drain and the bladder catheter will be removed
- On the third day, you will be discharged provided no complication has been detected
- In 6 weeks you will be reviewed to have an ultrasound scan of the operated side
- Most patients will recover during the 2 weeks following the surgery
- Most activities are advised provided no heavy exercise or lifting is undertaken

Risks and complications

1. Stroke around 2-3%
2. Bleeding requiring return to theatre less than 3%
3. Reperfusion syndrome (headache, dizziness, vision changes, fever or arm and leg weakness) where the brain gets inflamed because of the return of high blood flow following removing the narrowing plaque
4. Nerve damage:
 - The nerve supplying the same side of the tongue, usually temporary in less than 3%
 - Nerve supplying an area under the chin, usually gets cut during the incision and cause numbness at this patch
 - Nerve supplying the ear lobe which can become numb
 - Other nerves like the nerves to the larynx which can affect the voice quality

5. Return of the narrowing to the carotid artery which most of the time does not cause stroke and can be dealt with using a stent rather than reoperation
6. Wound infection less than 5%
7. Heart attack
8. Chest problems

Warning symptoms

- Numbness or weakness of the arm, leg or face
- Visual change
- Unsteady
- Garbled speech
- Fever
- Wound swelling or pain
- Discharge from the wound
- Breathing difficulty
- Chest pain

If you develop any of those symptoms, please call the above number, Call the duty manager of the hospital where you had the procedure, present to the emergency department or see your GP.

For further information, please visit my website www.AdvancedVascular.com.au