

## POST PROCEDURE

Once the catheter is removed from the blood vessel you will need to lie flat; try not to lift your head or the leg/s that has had the catheter go through. Lifting your head or leg will increase the pressure on the femoral artery in the groin and can lead to the artery bleeding, causing bruising or swelling.

You will be admitted to a ward for monitoring for 1 to 3 days. Blood thinning medications may be given and blood pressure monitored. You will gradually be mobilised over 1-2 days and assessed to make sure you are safe to go home.

## RISKS OF THE PROCEDURE

Complications can occur during this procedure. The risk can depend on your age, current medical condition and any treatment that you are receiving.

Risks include:

1. *Complications at the groin puncture site*
  - Although local anaesthetic is used, occasionally you may experience pain or discomfort at the catheter insertion site.
  - Bleeding and oozing may occur. This is usually minor but occasionally a large bruise or lump can form. Inform your nurse if this happens.
  - Rarely the femoral artery can be injured affecting blood flow to the leg. This could possibly require surgical or endovascular treatment.
  - Infection in the wound. This is rare but if you experience redness, pain or discharge see your doctor.
  - Clot formation in the veins of the leg or pelvis (deep vein thrombosis). This is rare but serious as this clot can break and go to the lungs and be potentially fatal.

### 2. *Complications related to the X-ray dye*

- Uncommonly allergies may occur to the dye which can be mild or severe.
- The dye can affect the function of the kidneys. This is more likely if there is pre-existing kidney problems or a history of diabetes. Staff may give you intravenous fluids or medications before your procedure to prevent this.

### 3. *Stent related complications*

- Any damage to the blood vessels leading to the brain could potentially cause stroke or bleeding. If severe this could cause death.
- Clotting within the stent. Any foreign material in the artery can cause clots to form. The Plavix and Aspirin your doctor has prescribed will prevent this. It is important not to stop this medication without consulting your doctor first. If other doctors want to stop these medications then let them know why you are taking it.
- Re-narrowing of the stented carotid artery (rare). The same disease process that narrows your artery can also cause narrowing in the stent. Your doctor will arrange regular Doppler ultrasound tests to ensure this is not happening. It is very important that all your risk factors remain under control such as smoking, blood pressure, hypertension, diabetes and high cholesterol.

*Your Interventional Neuroradiologist is always available to discuss your concerns.*

Your stent is booked at: \_\_\_\_\_

**ROYAL PERTH HOSPITAL  
WELLINGTON STREET  
PERTH 6000  
Ph: (08) 9224 2244**

**SIR CHARLES GAIRDNER HOSPITAL  
VERDUN STREET  
NEDLANDS 6009  
Ph: (08) 9346 3333**



**Neurological Intervention and Imaging  
Service of  
Western Australia**

## PATIENT INFORMATION

*for*

## CAROTID STENT

**NIISWA – Sir Charles Gairdner Hospital  
1<sup>st</sup> Floor G Block (access Gold lifts)  
Phone: (08) 9346 4455**

**NIISWA – Royal Perth Hospital  
3<sup>rd</sup> Floor Imaging Services North Block  
Phone: (08) 9224 1069**

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## INTRODUCTION

Narrowing of the carotid artery is caused by atherosclerosis. This is a build up of cholesterol and calcium in the wall of the artery causing a reduction in blood flow to the brain. This can eventually cause stroke, brain damage and possibly death.

Carotid stent insertion is a minimally invasive procedure which aims to improve blood flow to the head and brain by opening up the narrowing.

This procedure is not without risk and your specialist in conjunction with the treating Consultant Neurointerventional Radiologist (the doctor performing your stent procedure) has determined that the benefits outweigh the potential risk of complications.

## PRE-PROCEDURE

You will be required to fast for 6 hours prior to the procedure.

- If you take Warfarin or other blood thinning agents, notify the booking staff as this may require cessation or blood tests prior to the procedure.
- Notify the nurse or doctor:
  - . Of any **Allergies** – especially iodine as the contrast medium used could cause a reaction.
  - . Or if you *are* or *may be pregnant* or **breastfeeding**.
  - . If you have **diabetes**. Drugs like Metformin should not be taken on the day of the procedure and for 48 hours after.

Your specialist will discuss with you the details of the procedure and potential complications.

The Consultant Interventional Neuroradiologist will also discuss the procedure with you and answer any questions you may have in the outpatient clinic and on the day of the procedure. Please take this time to ask any questions regarding this procedure and outline any concerns you may have.

After this you will need to sign a **CONSENT** form for the procedure either in the pre-admission clinic or on the day of the procedure.

Your doctor will require you to commence taking clopidogrel (**Plavix**) and **Aspirin** one week before your procedure to minimise the risk of clotting. This is usually organised at the time of your consultation with the Consultant Neurointerventional Radiologist.

Ensure you take your Plavix and Aspirin on the morning of your procedure.

## PROCEDURE

Intravenous medication may be given to help make the operation safe and to make you more comfortable. This will be administered by your Anaesthetist.

The procedure is not painful and the staff will talk to you throughout so that you are aware of what is happening.

You will be draped with sterile sheets from chest to feet to prevent infection.

The procedure is performed via the femoral artery in the groin. A tiny local anaesthetic needle will numb the skin of this area. This may sting a little but the area goes numb in a few seconds. A small tube called a sheath will be inserted into the artery in the groin.

A selection of special wires and catheters will then be guided using x-rays to the area of narrowing in the carotid artery.

An embolic protection device (balloon, basket or filter) will then be placed via the catheter to beyond the place of narrowing. This will help catch any clot or debris that may break away during the procedure.

A stent is then placed across the narrowing and deployed. Any residual narrowing will be balloon angioplastied to fully open the artery.

At the end of the procedure the catheter is carefully withdrawn from the artery in the groin. The hole may be sealed with a special plug device or a suture; or staff will press on the puncture site for 10-15 minutes until the puncture wound seals. The clot that seals the hole gradually hardens over 3-4 hours and must not be disturbed.

This stent will remain in for life. The Plavix and Aspirin will prevent clots from forming and allow the body to form a layer of protective endothelium over the stent. This layer forms over the short to medium term. Your doctor will likely stop the Plavix when they consider this has occurred. The Aspirin is usually taken life-long.