UW Medicine

Carotid Angioplasty and Stenting for Atherosclerosis

How to prepare and what to expect

This handout explains carotid angioplasty and stenting for atherosclerosis. It includes how to prepare for this procedure, what to expect, and self-care at home.

What is atherosclerosis?

Atherosclerosis is a disease in the blood vessels (arteries) that carry blood from the heart to the rest of the body. The disease causes fatty material called plaque to build up on the inner wall of the arteries. This buildup restricts blood flow through the artery.





A healthy artery

An artery with plaque buildup

What is carotid angioplasty and stenting?

The *carotid* artery is a large artery in your neck. *Carotid angioplasty and stenting* is a treatment for atherosclerosis in this artery. This procedure is done when a carotid artery has gotten very narrow or hard.

For this procedure, your neurosurgeon will widen the artery and place a *stent* (tube) inside it. This will improve blood flow, which may lower your risk for stroke.

How do I prepare?

- You will need to take blood thinners such as aspirin or clopidogrel (Plavix) before and after your procedure. You will take this medicine once a day for 1 week before and for 6 months or longer after your procedure.
- You will come to the clinic for a pre-surgery visit. You will meet with:
 - A **nurse**, who will give you information and instructions
 - A **pre-anesthesia nurse**, who will talk with you about the medicines that will be used during your surgery

- The **Neurosurgery Team**, who will answer any questions you have about the procedure
- Your patient care coordinator, who will make sure you have all your follow-up visits scheduled before your day of surgery

Day Before Your Surgery

A nurse will call you to review your instructions. The nurse will:

- Review your medicines and tell you if you need to stop taking any of them before your procedure
- Ask if you have any allergies to medications, contrast (X-ray dye), or shellfish
- Remind you what you can and cannot eat and drink in the hours before your procedure

Day of Your Procedure

At Home

- Up until **8 hours** before you arrive at the hospital, eat a healthy, balanced diet and drink liquids as usual.
- Up until **6 hours** before you arrive at the hospital, you may eat a light meal and drink liquids as usual. Avoid heavy or fatty foods.
- **Starting 6 hours** before you arrive at the hospital, do not eat anything. We advise you to drink clear liquids such as water, plain tea or coffee (no milk or creamer), clear broth, Gatorade, soda, apple juice, or Boost Breeze liquid supplement.
 - If you have diabetes: Avoid juice, regular soda, and sports drinks, since these can raise your blood sugar levels. Instead, drink clear liquids such as water, plain tea or coffee (no milk or creamer), clear broth, and diet sod
- Starting 2 hours before you arrive at the hospital, do not eat or drink anything, unless your doctor or nurse has told you otherwise.
- If you must take medicines, take them with **only** a small sip of water.

At the Hospital

- Check in at Surgery on the ground floor of the Maleng Building at Harborview Medical Center.
- A nurse will greet you and help prepare you for your procedure.
- The nurse will also review your health history and discharge instructions.

- Our transport service will take you on a stretcher to meet the Anesthesia Team.
- The Neurosurgery Team will review the consent forms with you and you will sign them if you have not already done so.
- An *intravenous* (IV) line will be placed in a vein in your arm.
- You will receive a *sedative* (medicine to make you relax) through the IV.
- You will be taken into the operating room.

The Procedure

- You will be given *general anesthesia*. This medicine will make you sleep during the procedure.
- A thin tube called a *Foley catheter* will be inserted into your bladder.
 This tube will drain urine from you bladder during and after surgery.
- A small plastic catheter will be inserted into your *femoral artery* (blood vessel in your thigh). A series of X-ray images will be taken while the catheter is being moved to your carotid artery.
- Contrast will be injected through the catheter and into each artery. A series of X-rays will be taken of the narrowed carotid artery and your *cerebral vessels* (blood vessels in your brain).
- The catheter will be moved to the narrowed carotid artery. A balloon at the end of the catheter will be inflated to widen the artery. The stent will then be placed.
- The procedure will last about 1 to 2 hours.

After Your Procedure

- You will be taken back to the recovery area. Your friends and family can visit you there.
- To keep blood from leaking at the puncture site, you must lie flat for the next 6 hours. During this time, your nurses will:
 - Monitor you closely
 - Tilt your bed so you can eat
 - Help you change position if you are not comfortable
 - Check your vital signs and level of awareness
 - Check your procedure site every hour
- After 6 hours the nurses will help you get up and walk.
- Most patients stay in the hospital for 1 night after this procedure.

• When you are discharged, you must have a responsible adult with you when you are ready to leave. This adult may drive you, or may ride with you in a bus or taxi.

Follow-up Care

You will have follow-up angiograms or other exams at 6 months and 12 months after your procedure. These are very important exams that show your neurosurgeon how your treatment is working. Your neurosurgeon will talk with you about any other tests or treatments you may need.

Recovery At Home

Your health is important to us. A nurse will call you the day after your procedure to ask how you are doing and answer your questions.

For 24 Hours

- Do not drink alcohol.
- Do **not** drive or use machinery.
- Do **not** sign legal papers or make important decisions.
- Do not be responsible for the care of another person.

Self-Care

- You may remove the dressing after 24 hours and take a shower.
- For mild to moderate pain, you may take *non-steroidal anti-inflammatory drugs* (NSAIDs) such as ibuprofen (Advil, Motrin) or naproxen (Aleve, Naprosyn). Follow dose instructions on the bottle.
- Walk often to speed your recovery. It is OK to walk up and down stairs.

For 7 Days After Your Procedure

- Do **not** take baths or allow the puncture site to be covered in water
- Do not do any deep knee bending
- Do not do heavy exercise (anything that increases your heart rate or makes you breath hard).
- Do **not** lift more than 10 pounds (a gallon of milk weighs almost 9 pounds).

What to Expect

After this procedure, it is normal to have bruising and tenderness in the groin area. This should go away after a few days.

When to Call 911

Call 911 **right away** if you:

- Start to bleed at the incision site. Apply constant pressure while you wait for help to arrive.
- Develop a lump at the groin area.
- Have any stroke-like symptoms such as:
 - Weakness or loss of feeling
 - Problems talking
 - Problems walking
 - Problems seeing
 - Severe headache that starts suddenly

Questions?

Your questions are important. Call your healthcare provider if you have questions or concerns.

Weekdays from 8 a.m. to 4 p.m., call 206.744.9340 and press 2 to talk with a clinic nurse.

After hours and on holidays and weekends, call the Community Care Line (24-hour nurse): 206.744.2500 or toll-free 800.607.5501.