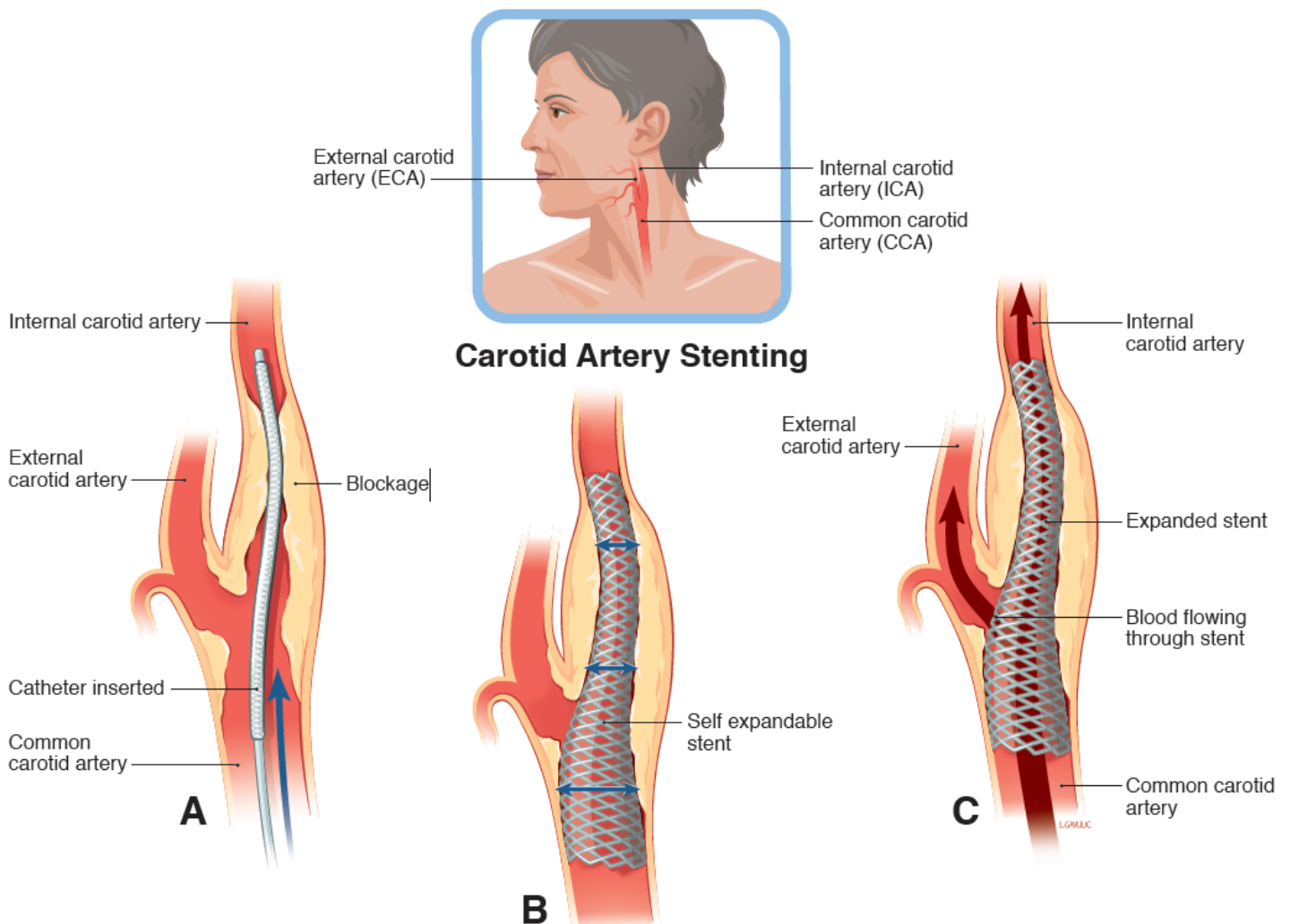


How to Care for Yourself after Carotid Artery Angioplasty and Stenting

What is Carotid Artery Angioplasty and Stenting?

This procedure is used to open the carotid artery and restore normal blood flow. A thin tube with a deflated balloon on the end is threaded through a blood vessel in your neck to the blocked artery. Once in place, the balloon is inflated to push the plaque against the artery wall and small wire mesh coil (stent) is then put into the artery to keep the artery open.



What will my hospital stay be like?

After your procedure you will be admitted for evaluation and observation. You may be able to go home the next day. Your doctor will tell you more about what to expect. Our team will continue to help you recover from your procedure.

When you arrive to the unit, your nurse and patient care technician will meet you. They will orient you and your family to the unit.

Our Visitation Policy

- Michigan Medicine welcomes the presence of loved ones.
- Family members are welcome at your bedside 24 hours a day. We want you to feel supported, not only by the care we provide but by your loved one's presence as well.
- "Family" (for purpose of visitation) is defined by you and is usually 1 or more individuals who play a significant role in your life. Family members may be related in any way- biologically, legally or emotionally. Your family member may include a person(s) who is not legally related to you.
- At times, we may ask your family members to step outside of the room if procedures or other necessary interventions need to be done. Your family will be welcomed back as soon as possible.
- Visitation policy may change due to the COVID-19 pandemic

When you first arrive

- You may feel sleepy from the sedative given to you, but this should wear off in time.
- You may be asked to stay in bed for several hours, keeping your leg or arm straight to prevent bleeding or bruising at your procedure site.
- You will be asked to drink a lot of fluids to flush the contrast dye out of your system.

What type of monitoring will I need while I'm here?

When you arrive on the unit, heart monitoring patches will be attached to your chest. The patches will send your heart rate and rhythm to monitors located at your bedside and at the nursing station.

Other care you may receive includes:

- The nurses and techs will regularly check your blood pressure, heart rate and temperature.
- After the procedure, you may have an ultrasound of your carotid artery.
- The nursing staff will also examine you, specifically your speech and movements regularly.
- Your procedure site will be checked frequently.
- You may have your blood drawn for lab tests
- We will measure how much you drink and urinate. We will provide a container for you to urinate into for measurement. We will also ask that you keep track of the amount of fluid that you drink and report it to your nurse or tech.
- You may be weighed.
- A staff member (either a nurse or tech) will enter your room to assess your needs hourly.

Pain and discomfort after your procedure

What kind of pain or discomfort will I feel after my procedure?

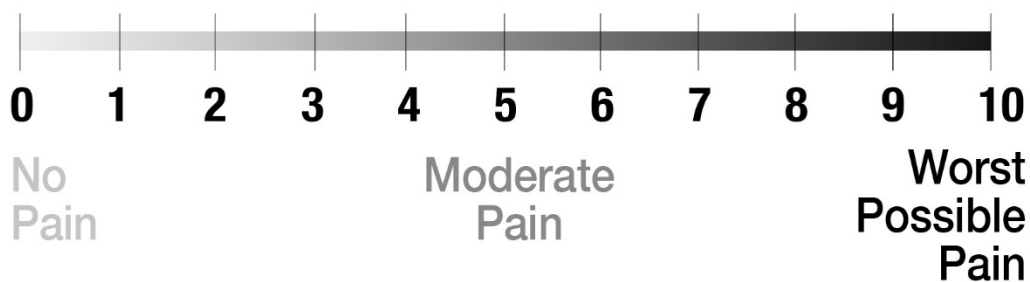
You may feel slight pain at the puncture site (groin or neck). You should not feel significant discomfort anywhere else and the pain should be controllable with Ibuprofen and Acetaminophen.

What can I do to help keep my pain under control?

Your doctor will order effective medication for you to take. Narcotics are not typically prescribed for this procedure and so you will most likely receive Ibuprofen and Acetaminophen. Your nurse will ask you about your pain regularly throughout your recovery. You shouldn't hesitate to ask for pain medication if needed.

Throughout your hospital stay, the nurses will monitor your need for pain medication. You can use the numeric pain rating scale below to measure your pain. This is a helpful tool you can use to describe how much pain you are feeling and to measure how well treatments are relieving your pain. You will be asked to rate your pain using a 0-to-10 pain scale. 0 means “no pain.” 10 means the “worst pain possible.”

Numeric Pain Rating Scale



Why is it so important to control pain after my procedure?

Having good pain control not only helps you feel more comfortable, but also helps you recover faster and may reduce your risk of developing certain complications, such as pneumonia and blood clots. If your pain is well managed, tasks such as sitting, walking, coughing, deep breathing and eating will be easier.

What exercises will I do after the procedure?

Exercise is an important part of the recovery process after your procedure.

Below are activities you will be expected to perform during your hospital stay:

- **Deep breathing and Coughing**

Use your breathing machine (Incentive Spirometer) 10 times every hour while you are awake. For example, if you like watching TV, you can use your Incentive Spirometer 2-3 times during each commercial break.

Tips when using the incentive spirometer:

- Do not get discouraged if you do not reach the number marked for you. You will improve with practice as your body heals.
- If you start to feel dizzy or light-headed, remove the mouthpiece from your mouth and take some normal breaths. Contact your nurse for further instruction.



How to Use an Incentive Spirometer

[By BruceBlais - Own work, CC BY-SA 4.0](#)

- **Walking**

Walking after your procedure is one of the most important things you can do. Beginning the day of your procedure, you will have exercise goals once you are off of bedrest. With permission from your nurse, you may be able to:

- Walk the halls
- Sit up in the chair for meals

- **Repositioning**

To prevent pressure injuries during your hospital stay, you need to change your body position. The following recommendations will help you reposition yourself:

While in bed:

- Turn your body at least every 2 hours from side to side.
- Keep the head of your bed at a 30-degree angle or lower to prevent too much pressure on your bones.
- Place a pillow between your ankles and knees when lying on your side.

- Place a pillow under your lower legs to elevate the heels when lying on your back.

When sitting:

- Change your position every 15 minutes by tilting your body forward or to the side so that your bottom lifts off the seat.

What will my diet be after my procedure?

Your food will be low in fat and cholesterol and will not have any added salt or sugar. It may taste different than what you are used to eating at home. It is very important for you to eat to improve the healing process. Healthy food choices play a key role in the healing process.

Guidelines:

Eat a balanced diet of:

- Carbohydrate-rich foods high in fiber
- A variety of fruits and vegetables
- Low-fat dairy products
- Lean meats
- Protein-rich foods very important for wound healing. Good sources of protein include: fish, eggs, dairy, beans and nuts.

Room service is available at any time of the day. Our staff will bring you a menu so you can choose what you would like to eat. We will check to see if you ordered food and will assist you if needed.

If you are diabetic or insulin dependent, your nurse will ask you to call them before you eat so they can check your blood sugar. It is fine for your family to bring food from home, but it should be low in salt, and low to moderate in fat.

Many people experience constipation after their procedure due to inactivity and pain medication. Eating a diet rich in fiber, drinking enough fluids, walking the halls and taking a stool softener will help your bowels move. Sometimes a suppository or laxative is needed to help aid this process along.

Our registered dietitians are food and nutrition experts who are available to discuss heart healthy choices and salt alternatives or reduction. They provide sound, easy-to-follow nutrition advice. If you are interested in speaking to a dietitian, ask your nurse to arrange a visit.

How will I care for myself while in the hospital?

- Wash your hands frequently or use hand sanitizer or sanitizer wipes that we provide to you. Hand hygiene is very important to decrease your risk of infection.
- When your surgeon approves, begin to shower daily with the assistance of a staff or family member.

Discharge to Home

You may be discharged from the hospital within 24 hours after your procedure. Do not plan on driving yourself home or going home alone in a cab or bus. When you're ready to go home, you'll need to have a family member or friend drive you.

What can I expect on the day of discharge?

- Ask a family member or friend to arrive at 9:30am to review final discharge instructions with you and your nurse.
- Your case manager nurse will be in contact with you to explain your final discharge plans.
- Your nurse will review all discharge instructions with you. During this time, ask any questions that you may have about your care after discharge.
- Be sure to understand:
 - Your medications and prescriptions
 - Incision care
 - Activity and restrictions
 - Diet
 - Reasons to call your doctor

- Follow up appointment information
- At home you will need to monitor your temperature until your next appointment. Please make sure that you have a thermometer before you are discharged.

When do I need to seek emergency care?

Call 9-1-1 immediately if:

If you have any of the following **symptoms of a stroke**:

- Sudden confusion or trouble speaking or understanding others
- Sudden trouble seeing in one or both eyes
- Sudden numbness or weakness of the face, arm, or leg, usually on one side of your body
- Sudden trouble walking, dizziness, or loss of balance or coordination
- Sudden or severe headache with no known cause

If you have any of the symptoms listed below:

- Sudden onset of chest pain
- Shortness of breath not relieved by rest
- Severe bleeding or swelling at your procedure site
- If your legs feel numb, tingly, cold or look blue
- You believe you are experiencing a true emergency

When do I need to call my doctor?

- Under the tongue temperature above 101° degrees Fahrenheit
- Bleeding, redness, swelling, increased pain or foul smelling drainage near your procedure site
- Bruising at your procedure site that increases in size quickly
- Procedure site that opens up after you leave the hospital
- Increased swelling in your legs or ankles
- Weight gain of more than 5 pounds in 3 days
- Increased shortness of breath/difficulty breathing
- Trouble urinating

- Nausea, vomiting or diarrhea
- Stomach pain or bloating
- Chills or excessive sweating
- A vague feeling that something is wrong
- Black or blood stools

What is the number to call?

- Call your doctor at the number provided on the discharge sheet Monday through Friday from 8:00am to 4:30pm.
- If you call after 4:30pm or on weekends or holidays the voicemail will give you specific instruction to contact your provider.

What type of follow up care will I receive?

- You will have a post-operative visit 4-6 weeks after your procedure. During your appointment you may have a **carotid duplex ultrasound**. This is an imaging test (a scan that produces pictures of areas inside the body) used to view the carotid arteries in your neck. This test will provide your doctor with a starting point of your condition to compare to future tests.
- You will be monitored with ultrasound or another imaging test every 6 months for 1-2 years after your procedure. After that, you'll be monitored at least every 12 months.

What steps should I take to monitor my health at home?

You will need to perform and record the following self-checks daily:

- Check your procedure site daily for bleeding. A small bruise and an occasional drop of blood at the site is normal.
- If your groin was used for the incision site, you will monitor the leg for changes in:
 - Temperature
 - Color
 - Numbness
 - Tingling
 - Loss of function

Although the procedure **is done** in the groin, complications can occur in the entire leg.

- Check your procedure site daily for signs of infection including:
 - Increased redness
 - Tenderness
 - Swelling
 - Warmth
 - Drainage
- Take your temperature each morning (for the first week after your procedure) before eating and drinking. You should also take your temperature anytime you think you may have a fever.
- Weigh yourself each day:
 - At the same **time**
 - On the same **scale**
 - In the same **clothes**
 - And in the same **way**

How do I care for my procedure site?

You will have a procedure site in your groin, neck, or arm. It may remain tender, swollen and bruised for up to a week. There may be a small area of discoloration or a small lump in the area of the puncture.

- You will be discharged from the hospital with a dressing over your procedure site.
- Keep your dressing on for 72 hours after your procedure.
- Remove your dressing and take your first shower 72 hours after surgery.

Follow these guidelines to care for your procedure site while bathing:

- Wash your procedure site(s) with your usual bath soap and water every day. Pat dry and leave open to air. Use a freshly laundered wash cloth and towel each time you shower.
- **Do not** put any creams, lotions, powders or ointments on your surgical incision(s) until they heal.

- **Do not** soak in a bathtub, hot tub or get into a swimming pool until instructed by your surgeon.

What are my activity instructions? Restrictions

- **Do not** lift anything over 10 pounds (4.5 kg) for 3 days after your procedure.
- **Do not** participate in strenuous activities (weight lifting, running etc.) until you return for your follow-up appointment with your provider.
- Talk to your doctor about driving, returning to work, and other activities at your follow-up clinic visit.

- **Driving:**
 - Your doctor may allow you to resume driving 7 days after your procedure if you have full range of motion in your neck and no discomfort
 - **Do not** drive if you are taking narcotic (opioid) pain medication.
 - You can ride as a passenger in a car at any time, but, as always, you should wear your seatbelt.

Activities

- Try to get back to your normal routine as much as possible.
- Take short walks every day to increase your endurance

How will I manage my discomfort at home?

You will experience minimal pain after your procedure. Your goal at home is to control your discomfort so you can do the things you need to do to heal. It is important to know that discomfort is normal after this procedure. You may take acetaminophen (Tylenol[®]) or ibuprofen (Motrin[®]) for any discomfort at your procedure site.

Below are a few tips to help you relieve your discomfort:

- Remember to take acetaminophen (Tylenol[®]) or ibuprofen (Motrin[®]) before activity and at bedtime.
- Be sure to get enough rest. If you are having trouble sleeping, talk to your primary care doctor.

- Use pillows to support you when you sleep and when you do your coughing and deep breathing exercises.
- Try using alternative methods for pain: guided imagery, listening to soft music, changing your position in bed, or massage.

What are my medication instructions?

- When you are discharged from the hospital, you will receive a complete list of the medications that you should take at home.
- Your medication list will include the following information:
 - Medication name(s)
 - Dose of the medication
 - Number of times to take the medication each day
 - The last time you took each medication
 - The next time that you should take each medication
- Your doctor will give you any new prescriptions for your recovery before you leave the hospital. Contact your primary care provider if you need refills for your ongoing medications.
- Have your insurance cards with you to help speed up the filling of your prescriptions.
- Take your medicine exactly as your doctor prescribes.
- Do not take other medication without telling your doctor.
- Follow-up with your primary care provider within 2 weeks of discharge. They will need to make sure your medication list is complete and accurate. They may also need to adjust or change your doses for the most effective treatment.
- Keep a current list of your medicines, dosages, and times to be taken in your wallet or purse.
- Take your **antiplatelet medication** exactly as prescribed by your doctor. If another provider asks you to stop this medication for any reason, **contact** your neurosurgeon first.
 - These medications will help prevent blood clots from forming on your stent.

- When taking anti-platelet medications, you may bruise more easily.

What can I do to stay healthy?

Although carotid stenting opens your artery and keeps blood flowing, it does not stop plaque from building up again. To prevent your arteries from becoming narrow again, consider the following lifestyle changes:

- Eat more foods low in saturated fat, cholesterol, and calories
- Exercise regularly, especially aerobic exercises such as walking
- Maintain your ideal body weight
- Quit smoking
- Take your medications to control cholesterol and to thin your blood if your provider prescribes it.

Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

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