

# **Carotid Surgery**

## What is carotid surgery?

Carotid [kah-ROT-id] surgery, also called **carotid endarterectomy** [en-dar-tuh-REK-tuh-mee], is a treatment option for carotid artery stenosis [steh-NOH-sis].

The carotid arteries are the large blood vessels in your neck that carry oxygen-rich blood to the brain, face, and head. A fatty material called plaque [plak] can build up and narrow these arteries. This is called stenosis.

### Why do I need it?

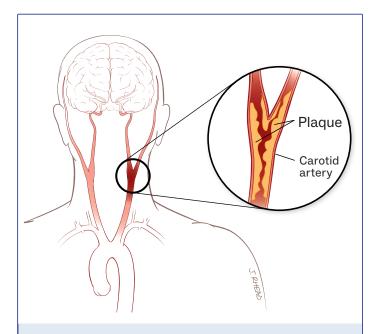
Your doctor may recommend carotid surgery if one or both of your carotid arteries are blocked or narrowed. Although sometimes there are no symptoms, signs of plaque buildup can include:

- A mini-stroke or stroke, with symptoms such as slurred speech, weakness, blurred vision, and confusion. A mini-stroke is alson known as a tranischemic [trans-is-KEE-mik] attack, or TIA.
- An abnormal sound in your artery (a bruit) that your doctor hears during a physical exam.

Your doctor will do tests to locate the blockage or narrowing and see how severe it is. If you have had a stroke, your doctor will assess whether the surgery will increase your risk of another stroke or help prevent it.

# How do I prepare for this surgery?

 Tell your doctor about all of the medicines you are taking. This includes prescription medicines, over-the-counter medicines (such as cough syrup or allergy pills), inhalers, patches, injections, vitamins, and herbal remedies. Be sure to tell your doctor if you are allergic to any medicines.



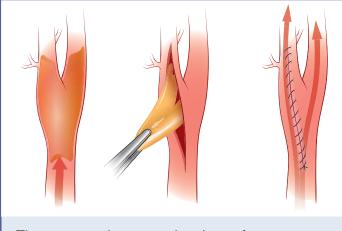
The carotid arteries supply blood to your brain. A fatty material called plaque can build up, narrowing these arteries. A blood clot can form in narrowed arteries. If the clot travels to your brain, it causes a stroke.

- Follow your doctor's directions about your medicines. Prior to surgery, you may need to stop taking some types of anticoagulants (also called blood thinners). You may need to adjust your medicine if you have diabetes. Always check with your doctor before you stop taking any medicines.
- Follow your doctor's directions about eating and drinking before surgery. This is to prevent any problems with anesthesia. If you do not follow these instructions, your procedure may have to be postponed.
- Tell your doctor or hospital staff if you:
  - Have a cold, flu, or other illness the day of the surgery.
  - May be pregnant.

### What happens during surgery?

The surgery usually takes about 2 to 4 hours. Here's what happens during the surgery:

- You will get medicine to make you sleep. You won't feel or remember the surgery. You will also get antibiotics to reduce the risk of infection.
- Other devices will be attached to keep track of your heart rate, blood pressure, breathing, and possibly your brain activity.
- You will lie on a surgical table with your head turned to the side on a padded support.
- The surgeon will make an incision (cut) in your neck.
- Blood flow to the artery will be stopped temporarily. A thin tube (shunt) may be used to change the route of blood to bypass the blockage. Your other carotid artery will continue to send blood to your brain.
- The surgeon will open up the blocked artery and clean out the plaque buildup.



The surgeon cleans out the plaque from your carotid artery so blood can flow more easily.

- The surgeon will close the cleaned artery. A "patch" graft may also be used.
- The surgeon will then close the incision in your neck.
- You will likely stay in the hospital for 1 or 2 days after the surgery.

#### What are the risks and benefits?

Talk with your doctor about the possible risks, benefits, and complications of carotid surgery. Other risks and benefits may apply to your unique medical situation. Talking with your doctor is the best way to learn about these risks and benefits. Be sure to ask any questions you might have.

Possible benefits	Risks and possible complications	Alternatives
Carotid surgery removes plaque from the carotid arteries. This can reduce the risk of a future stroke.	Like any surgery, carotid surgery has risks. Yet complications are rare. Risks and potential complications of carotid surgery include:  • Severe reaction to the anesthesia used during surgery  • Bleeding or infection at the surgery site  • Blood clots or bleeding in the brain  • Heart attack  • Injury to nerves, esophagus, or trachea (windpipe), which can lead to hoarseness or swallowing difficulty  • Plaque building up again in the arteries  • Stroke, seizures, or brain damage (rare)	Alternatives to carotid surgery may include:  • Medicine and diet changes to lower cholesterol or prevent clots.  • Carotid stenting. During this procedure, a catheter is threaded through a blood vessel to the area with build-up. A stent (tiny wire mesh tube) is put in place to hold the carotid artery open.

# How can I help lower my risk of stroke?

Even if the plaque has been cleaned out of your carotid arteries, it can build up again. To reduce your risk of a future stroke, follow these guidelines:

- If you use tobacco, stop now. Ask for a copy of Intermountain's handout <u>Quitting Tobacco:</u> <u>Your Journey to Freedom.</u>
- Monitor and manage your blood pressure.
   Exercise, eating a healthy diet, and prescription medicines can help control your blood pressure.
- Lower your cholesterol. Your doctor may prescribe medicine, exercise, and diet changes to control your cholesterol.
- If you have diabetes, keep it under control.

  Diabetes (high blood glucose) can damage your arteries and increase your risk of stroke.
- Take off extra weight. Eat a healthy diet and be active every day. Ask your doctor about Intermountain's weight loss solutions.

- Limit alcohol. A good rule is no more than 2 drinks a day for men and no more than 1 drink a day for women.
- Follow a healthy diet. These recommendations will help you lower your cholesterol, manage blood sugar, and control blood pressure:
  - Eat lots of fruit and vegetables for healthy fiber and nutrients.
  - Eat more whole grains for fiber and complex carbohydrates.
  - Choose unsaturated fats and oils.
  - Choose healthy proteins (like fish, beans, soy, and nuts) that protect your heart and blood vessels over time.
  - Limit sodium (salt) to lower your blood pressure and protect your arteries.
  - Limit sugar and sweets to maintain healthy blood glucose.

Questions for my doctor	

Intermountain Health complies with applicable federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. Se proveen servicios de interpretación gratis. Hable con un empleado para solicitarlo. 我們將根據您的需求提供免費的口譯服務。請找尋工作人員協助。

© 2011-2023 Intermountain Health. All rights reserved. The content presented here is for your information only. It is not a substitute for professional medical advice, and it should not be used to diagnose or treat a health problem or disease. Please consult your healthcare provider if you have any questions or concerns. FS158 - 06/23 (Last reviewed - 06/23) Also available in Spanish.