



Patient & Family Guide
2020

Thoracic Endovascular Aortic Repair (TEVAR)

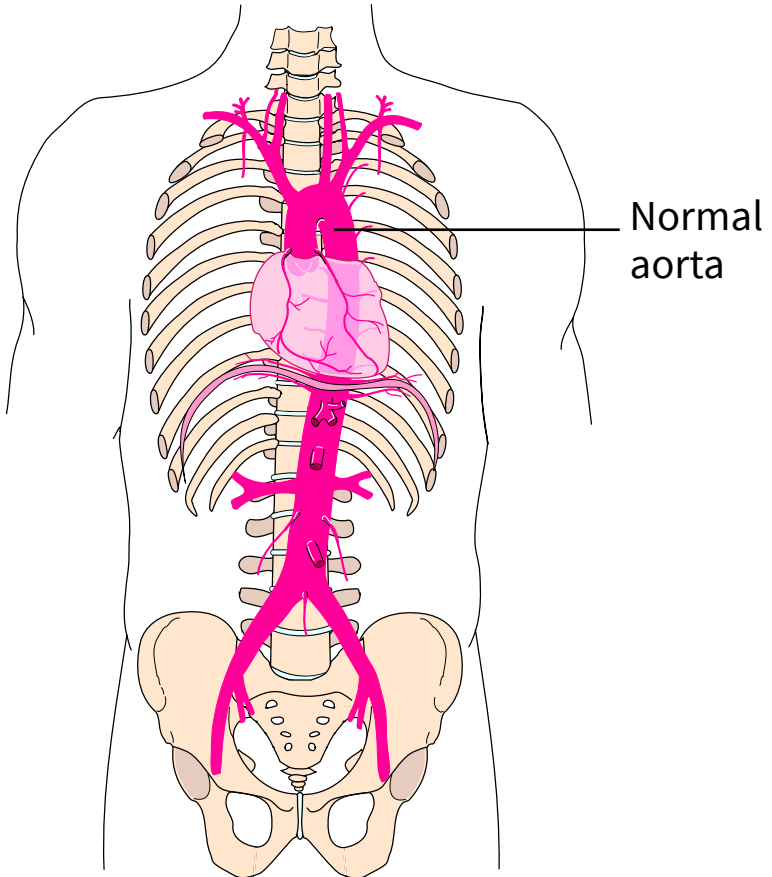


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Thoracic Endovascular Aortic Repair (TEVAR)

Your surgeon and you have decided that you need a thoracic endovascular aortic repair (TEVAR).

You will have surgery to put an endovascular stent graft in your aorta. The aorta is the biggest artery in your body. This artery helps your heart pump blood to all parts of your body.



Why does my aorta need to be repaired?

Different diseases may affect your aorta.

- › **Aneurysm:** weakening of the aorta wall or ballooning out of the aorta
- › **Dissection:** separation of one of the aorta's 3 layers
- › **Transection:** damage to the aorta from trauma or an accident
- › **Stenosis:** narrowing of the aorta

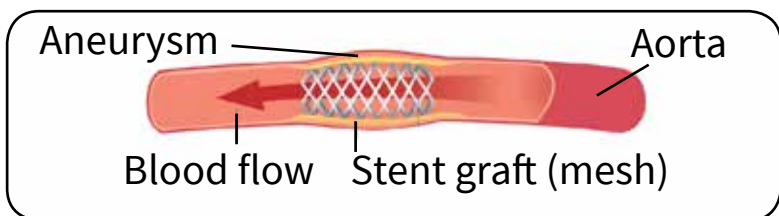
Your aorta needs to be repaired so it does not rupture (break) and cause severe (very bad) bleeding. This can lead to death.

How will my aorta be repaired?

There are 2 ways to repair your aorta:

1. TEVAR

The surgeon will place a device through a small puncture or incision (cut) in your groin. This device is called a stent graft. It is made of metal mesh covered in fabric. The stent graft lines the inside of your aorta. It acts as a new passage for blood to flow through.



2. Open repair

The surgeon will make a large incision through your breastbone or the side of your chest and potentially down to your abdomen (belly) depending on the extent of your aneurysm.

What are the benefits of TEVAR compared to open repair?

TEVAR:

- › is less invasive (uses a small puncture or incision instead of a longer one).
- › has fewer complications.
- › has a faster recovery time.
- › involves less time spent in hospital.
- › causes less pain due to smaller incisions or punctures.

What are the disadvantages of TEVAR?

- TEVAR is not right for everyone. Your surgeon will look at a number of things, such as your body, how well your kidneys work, and your aneurysm. Your surgeon will talk with you and decide if TEVAR is right for you.
- You will need long-term followup and tests (see page 5).
- A number of patients may need more surgery (such as another TEVAR or open repair) in the future.

What are the possible complications of TEVAR?

In addition to the usual risks of surgery, such as infection, bleeding, heart problems, and lung problems, the risks of TEVAR include:

- › The aneurysm could come back.
- › The graft could move and the aneurysm may continue to grow.
- › The graft could kink (bend) causing a loss of blood flow.
- › You may have bleeding around the graft (called an endovascular leak). If the leak does not go away, the aneurysm continues to grow and a second surgery may be needed.
- › The graft may become blocked causing a loss of blood flow.
- › Sometimes, your surgeon may need to do an open repair instead of TEVAR. This may be decided once you are already in surgery.
- › You may have stroke, weakness in the legs (paraparesis), or total loss of function in your legs (paraplegia).
- › If you are very sick, you may have a heart attack after major surgery.

Your surgeons will talk with you about the benefits and risks of TEVAR.

How do I get ready for surgery?

- You will be scheduled to have tests done before your surgery. These may include:
 - › Dye test (coronary angiogram): to look at coronary arteries
 - › CT scans: to give detailed pictures of bones and soft tissue
 - › Electrocardiogram (ECG): to look at your heart rhythm
 - › Pulmonary function tests: to look at your lung function
 - › Echocardiogram: to look at your heart function
 - › Blood tests
- **You cannot eat or drink anything after midnight the night before surgery.** You may take your regular medications with a sip of water, if your surgeon says it is OK.
- An intravenous (IV) will be put in your hand or arm the evening before or the morning of your surgery.
- You may have a drain inserted (put in) near your spinal cord the evening before or the morning of your surgery.

What will happen when I have my surgery?

You will be treated by a team of nurses and doctors. Your surgeon and interventional radiologist will put the graft in place. An interventional radiologist uses imaging (X-rays) to help the surgeon guide the graft into your aorta and make sure it is in the right place. The surgery will take about 1 to 2 hours. For complex surgeries, it can take 5 to 6 hours.

What will happen after surgery?

- You will wake up in 5.1 inpatient unit on the 5th floor of the Halifax Infirmary, Cardiovascular Surgery Intensive Care Unit.
- The nurses will check your blood pressure, the pulses in your feet, and the dressing covering your incision(s).
- You will be placed on a cardiac monitor to check your heart.
- You will have a small tube (lumbar drain) in your lower back for about 1 to 3 days to help maintain blood flow to your spinal cord.
- Once the drain is removed and your health care team is happy with your recovery, you will be moved to 7.1 inpatient unit on the 7th floor of the Halifax Infirmary.

Will I have pain?

- You will have some discomfort for a few weeks — this will go away over time.
- After your surgery, you will be given medication to help your pain and discomfort. Your nurse will check your pain often. It is important to take pain medication so that you are comfortable enough to do deep breathing and coughing exercises to help keep your lungs clear. Having less pain will help you to move around more.
- Although you may feel sleepy from the medication, you should be awake enough to follow directions and know your family.

When can I eat after surgery?

- You may eat when you feel ready. It may take a while for your appetite to go back to normal.
- Eating healthy meals will help you get your strength back and heal faster.

When will I be able to get up after surgery?

When you are able to get out of bed, the nurses will help you. **Do not get out of bed for the first time on your own.** You will slowly become more active as you are ready.

Care of your incisions

- You may have small incisions or punctures in your groin or neck. Staples or sutures are used to close the incisions. **Be sure to tell your nurse if you need help caring for your incisions at home.**
- Your surgeon or primary health care provider will remove the staples or sutures 7 to 14 days after surgery.
- Keep your incision(s) clean and dry.
- You may wash the incision(s) with soap and water. Make sure to dry it completely. Pat dry. **Do not rub.**
- Watch your incision(s) closely for infection. **If you have more pain, heat, redness, swelling, or drainage, call your primary health care provider.**
- It is normal to have some bruising. This will go away in a few weeks.
- As long as there is no drainage or infection, you may keep the incision(s) open to the air, or covered with a dry dressing.

How long will I be in hospital?

You may be able to go home 4 to 5 days after your surgery. Your surgeon will decide what is best for you.

When can I drive?

- It takes time for your concentration and reflexes to return to normal. You may drive in 2 to 3 weeks. Talk about this with your surgeon at your followup appointment.
- **Do not drive if you are taking pain pills.**

When can I go back to work?

When you go back to work will depend on your type of work, as well as your general health and recovery. Talk about this with your surgeon at your followup appointment.

When can I have sex?

You can have sex when you feel well enough. If you have concerns about this, talk with your surgeon or primary health care provider.

Can I eat and drink as usual?

Pain medications, less activity, and the food you eat can cause constipation (not being able to poop). Try to eat foods high in fibre, like bran cereals, whole wheat bread, fruit, and vegetables. Ask your primary health care provider about using laxatives (medication to help you poop) or stool softeners, if needed.

What medication(s) should I take?

Take medication(s) as prescribed by your surgeon. They will talk about this with you before you go home from the hospital. **Do not drink alcohol or drive while taking pain pills.**

Tips for a healthy lifestyle

A healthy lifestyle can help prevent complications before and after your surgery. It can also help to prevent more circulation problems.

Stop smoking.

- It is very important not to smoke. Smoking will cause more damage to your arteries. This may mean you will need more surgery.
- Smoking increases the chance of getting a chest infection, which may slow your recovery.
- If you want to stop smoking, talk with your nurse or primary health care provider.

Eat healthy foods.

- Choose foods low in fat to help prevent plaque buildup in your arteries.
- Ask to talk with a dietitian if you need help planning meals.
- Keep a healthy weight.

Be active.

- **Talk with your primary health care provider before surgery about what exercises are OK for you.**
- Exercise helps with weight loss.
- Exercise improves blood flow.
- Exercise helps to keep blood sugar and blood pressure under control.

Control diabetes (if you have it).

- Follow your meal plan.
- Check your blood sugar often.
- See your primary health care provider regularly.
- Take your pills or insulin as told by your primary health care provider.

Control your blood pressure.

- Have your blood pressure checked regularly.
- Talk with your primary health care provider about what blood pressure reading is best for you.
- Take your blood pressure medication as told by your primary health care provider. If you stop taking it, your blood pressure may go up again.
- Try to lower your stress (see next page).

Lower stress.

- Exercise every day.
- Get enough sleep.
- Talk with others about your problems.

Call your primary health care provider if:

- You have any sign of infection, such as more redness, swelling, drainage, or pain in the area of your incision(s).
- You have flu-like symptoms, such as aches, chills, or fever over 38° C/101° F, for more than 24 hours (1 day).
- The edges of the incision(s) come apart.
- You have more pain in your legs. Note if the pain happens when you are resting or with a small amount of activity.
- You have pain in your back or chest.
- Your foot or leg changes colour (looks pale or blue).
- Your feet and/or legs are unusually cold or warm.
- Your feet and/or legs are numb or weak.
- You have an injury that does not heal or gets infected.

Followup appointment

- You will get a followup appointment to see your surgeon.
- You will have a CT scan 1 to 3 months after surgery and once a year after that. The scan is used to check your graft.
- You will get a card with important information about your graft. **Carry this card with you at all times.**
- Be sure to tell your primary health care provider and dentist that you have a graft in your chest area. If you have dental work or major surgery, you will need antibiotics to prevent graft infection.

What are your questions?

Please ask. We are here to help you.

Notes:

Looking for more health information?

Find this pamphlet and all our patient resources here: <https://library.nshealth.ca/PatientEducation>

Contact your local public library for books, videos, magazines, and other resources.

For more information, go to <http://library.novascotia.ca>

Connect with a registered nurse in Nova Scotia any time: call 811 or visit <https://811.novascotia.ca>

Learn about other programs and services in your community: call 211 or visit <http://ns.211.ca>

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