

# Thoracic Endovascular Aortic Repair

## *How to prepare and what to expect*

*This handout describes how to prepare for thoracic endovascular aortic repair and what to expect afterward.*

### What is thoracic endovascular aortic repair?

*Thoracic endovascular aortic repair (TEVAR) is a procedure to treat problems in the upper part of your aorta. The aorta is the main vessel that carries blood from your heart to the rest of your body.*

During TEVAR, your surgeon will place a *stent graft* inside your aorta. A stent graft is a fabric tube that contains a metal mesh. This tube will support your aorta wall.

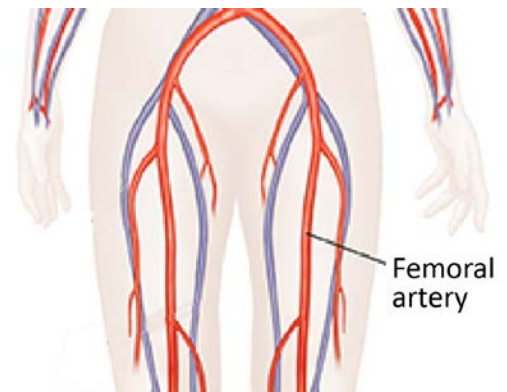
TEVAR is used to treat:

- An *aortic aneurysm* (a bulge in the aorta wall)
- An *aortic dissection* (a tear in the aorta wall)

TEVAR is a *minimally invasive surgery*. This means that it uses very small incisions.

### How is it done?

- A stent graft will be placed inside a small *catheter* (tube).
- Your surgeon will make a small cut into a *femoral artery* in your groin.
- Your surgeon will place the catheter and stent graft into your femoral artery and move it up into your aorta.
- Once the stent graft is in the right place, it will be released from the catheter. The catheter will then be removed from your body.



*The femoral artery carries blood from your heart to your groin and legs.*

## How do I prepare for surgery?

- **Medicines:**

- If you take aspirin, keep taking it unless your surgery team tells you not to.
- Starting 1 week before your surgery, **stop** taking any *nonsteroidal anti-inflammatory drugs* (NSAIDs) such as ibuprofen (Advil, Motrin) and naproxen (Aleve, Naprosyn).
- Ask your surgical team if you should stop taking medicines that affect blood clotting. These include warfarin (Coumadin), clopidogrel (Plavix), dabigatran etexilate (Pradaxa), and enoxaparin (Lovenox).
- If you take medicine for diabetes, talk with your surgery team. You may need to change your dose before surgery.

- **Shaving:** Do **not** shave any part of your body that you do not already shave every day. If you normally shave near your surgical site, do **not** shave that area for 2 days (48 hours) before your surgery.
- **Hospital stay:** You will stay in the hospital for 2 to 5 days after your surgery.

## Day Before Surgery

- **Shower:** Take a shower the night before your surgery:
  - Use the antibacterial soap your nurse gave you to wash your body. Do **not** use the antibacterial soap on your face and hair. (See directions that came with the soap.)
  - Use your own soap and shampoo on your face and hair.
  - Use clean towels to dry off, and put on clean clothes.
- **Arrival time:** A patient care coordinator (PCC) will call you by 5 p.m. the night before your surgery. If you are having surgery on a Monday, the PCC will call you the Friday before. If you do not receive this call by 5 p.m., please call **206.598.6541**.

## Day of Surgery

### At Home

- **Food and drink:** After midnight the night before surgery, do **not** eat any food or drink alcohol.

- **Clear liquids:** You may drink clear liquids until 2 hours before your scheduled arrival time. Clear liquids include water, clear juices (no pulp), carbonated drinks, clear tea, or coffee (no creamers or milk).
- **Shower:** Take another shower with the antibacterial soap. Follow the same steps as you did the night before.
- **Medicines:** Follow the instructions the nurse gave you about which medicines to take or not take. Remember to sip **only** enough water to swallow your pills.

### At the Hospital

- **Heating blanket:** To lower your risk of infection, we will cover you with a heating blanket while you wait to go into the operating room. This will warm your body and help prevent infection. Ask for a heating blanket if you do not receive one.

### After Your Surgery

You will wake up in the Recovery Room or the Intensive Care Unit (ICU). You will feel sleepy. You will have:

- An **intravenous (IV)** tube in a vein in your arm. We use this tube to give you medicine for pain and nausea.
- An **arterial line** inserted into your arm. We use this line to monitor your blood pressure.
- **Sequential compression devices (SCDs)** on your legs. These leg wraps inflate from time to time to help with blood flow. They help keep blood clots from forming while you are in bed.
- A **lumbar drain catheter** in your back to take fluid off of the spinal cord. This drain helps prevent paralysis after surgery.

Your nurses will check on you often. They will monitor your:

- Blood pressure
- Heart rate
- Breathing
- Pulses (in your feet)
- Strength in your legs lifting off the bed

## Activity

Moving your body helps prevent blood clots in your legs and *pneumonia* (lung infection). Your nurses will help you increase your activity each day as you recover.

## Self-care at Home

### Bathing

- You may shower every day.
- Do **not** take a bath, sit in a hot tub or sauna, or go swimming until your incision is fully healed. This will take **at least** 4 weeks.

### Pain Control

Use the pain medicine your doctor prescribed for you. Take acetaminophen (Tylenol) for mild to moderate pain. If needed for severe pain, take your *opioid* pain pills exactly as prescribed.

### Incision Care

- Your incisions will be small punctures on both sides of your groin.
- Check your incisions every day. **Call your doctor if you have any signs of infection** (see page 6).
- It is normal to have a small lump at the incision sites. These should go away in 2 to 3 days.
- If you have a lot of swelling, pain, or drainage at this site, call your doctor or nurse.

### Bowels

- It might be several days after surgery before you have a bowel movement. This is normal. Both surgery and opioids can cause *constipation* (hard stool).
- While you are taking opioids, take the laxative and stool softener your doctor prescribed. If you start having loose stools, stop taking these products.
- If you have watery diarrhea, nausea, vomiting, or constipation, call your nurse at 206.598.4477.

### Activity

- Your incisions will heal more quickly if they are not stressed. For **4 weeks** after your surgery:

- Do **not** lift anything that weighs more than 20 pounds (a gallon of water weighs almost 9 pounds).
- Avoid gardening, vacuuming, and any activity that increases your heart rate. Activities that do not cause pain should be safe.
- Walking every day will help speed your recovery. Slowly increase how far you walk.
- After 4 weeks, slowly add your usual activities back into your routine.
- You may resume sexual activity when it is comfortable and you want to do so. Some men may have problems having erections during their recovery period or longer. If you have any questions about sexual function, talk with your doctor.

### **Driving**

- Do **not** drive until your doctor says it is safe.
- Do **not** drive while taking opioid pain pills. This medicine affects how quickly you can react. This makes it unsafe to drive.

### **Follow-up Visits**

- Your first follow-up visit will be 4 to 6 weeks after your surgery. You will have a *computed tomography* (CT) scan before this visit. The scan will show us how the stent is working. Our office will contact you to set up these visits.
- You will have other follow-up visits at 12 months after your surgery. After that, you will need to return for yearly visits.

### **Return to Work**

How much time you take off work depends on what you do for a living. Most people take from 1 to 4 weeks off to recover. You may return to work as you feel able. Some patients start off with shorter days and then increase their hours as their energy improves.

### **When to Call**

Call a nurse or your doctor if you have:

- Chest pain or shortness of breath that is new or is getting worse
- Bleeding or drainage that soaks your dressing

- Fever higher than 100°F (38°C)
- Shaking or chills
- Any sign of infection in your incision:
  - Redness or swelling
  - Increased pain
  - Drainage that smells bad
  - Increase in the amount of drainage from your incision
- Nausea, vomiting, or both
- Changes in your legs:
  - Pain that you did not have before surgery
  - Skin color changes
  - Legs feeling either very warm or very cold
- Concerns that cannot wait until your follow-up visit

## Questions?

Weekdays from 8 a.m. to 4 p.m., call the Surgical Specialties Nurse Advice Line at 206.598.4477.

After hours and on weekends and holidays, call 206.598.6190 and ask to page the resident on call for Vascular Surgery.

Or, ask to page your surgeon:

Dr. \_\_\_\_\_