Transcatheter aortic valve replacement (TAVR): surgical approach

Patient discharge instructions

You have had an operation called a transcatheter aortic valve replacement (TAVR) – a procedure that replaces a diseased aortic valve. The aortic valve is a structure that helps control the flow of blood from the heart to the aorta and the rest of the body.

During the surgery, a catheter (a thin hollow tube) is placed through a small incision in the chest. It is threaded into the heart using x-ray guidance. The doctor threads the new valve through this catheter and places it within the diseased valve.

Please follow these instructions as you recover from your procedure.

Your medications

- Following TAVR, you will be taking blood-thinning medications as prescribed by your cardiologist. The medications could include aspirin, clopidrogel (Plavix), warfarin (Coumadin), or other blood thinners. A combination of blood-thinning medicine may be used. Please take the dose recommended by your cardiologist. Your cardiologist will let you know when you can stop taking the blood thinners. You should not stop these medications – even if another doctor or nurse tells you to – unless your cardiologist says it is safe for you.

- You may experience shortness of breath as you recover. Your doctor may adjust your water pills (diuretics) to improve your shortness of breath.

- You may take acetaminophen (Tylenol) every six hours as needed for pain at your incision. If pain is not relieved, please notify your doctor. Please note: It is not safe to take more than the recommended dose of

Call if you have problems or questions

Call 911 in an emergency such as:

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

Call BIDMC at 617-632-7577 to reach the BIDMC “HeartLine” (“heart-line”) as soon as you notice any of the following. You may call at any time, day or night, including weekends and holidays. Call for:

- fluid or drainage from your incision sites
- increasing swelling, redness, or warmth from your incisions sites
- pain at the incision sites that is not relieved by acetaminophen, or pain that is getting worse instead of better
- fever of 100.5 or more (be sure to check your temperature each night)
- weight gain of 3 pounds or more in 2 days or 5 or more pounds in 5 days
- worsening shortness of breath
- worsening swelling of the legs or feet
- black or bloody stools, or any uncontrolled bleeding
- you have any physical injury
- any other issue that concerns you
acetaminophen. Do not take more than what is recommended on the label. Check any other prescription and nonprescription medications you may be taking, such as pain relievers or cold medicines, to see if they also contain acetaminophen. Be sure you are not taking more than one product containing acetaminophen.

- Your doctor may also prescribe other medications. Before you leave the hospital, you will be given a list of all the medications you should take once you are home. Please be sure to ask any questions you have about medications. If something you normally take or might take is not on the list, please ask whether it is okay to take it. This includes all prescription medications, non-prescription medications, vitamins, herbs, and supplements.

**Your activity**

- While you are recovering, it is important that you do not do things that could stress either the incision site or your new valve.

- For 10 weeks following the procedure, you should not lift, push, pull, or carry anything heavier than 10 pounds. You should not do any exercise that causes you to hold your breath and bear down with your abdominal muscles. Take care not to put strain on your abdominal muscles when coughing, sneezing, or moving your bowels.

- You should not drive for one month following the procedure.

- When traveling by car, you should still wear your seatbelt. You may place a small pillow under the strap if you find it uncomfortable.

- If traveling for long periods during the month following the procedure, try to sit with your legs stretched out. Get up and walk every hour or so.

- Talk to your doctor about when you may resume your regular activities, including sexual activity and exercise.

**Incision care**

- You have several incisions. Your main chest incision is where the catheter was placed for your procedure. You also have another chest incision where your chest tube or drain was placed, and a small incision in your groin area that was needed for your procedure.

- If you have a dressing on any of the incisions, you may remove them one day after you are discharged.

- A skin sealant (Dermabond) has been put on your main chest incision. It will start to flake off on its own in 7-10 days. Do not pull it off.
- You should shower daily. Gently clean all your incision sites with mild soap and water. Do not apply powders, lotion, or ointments until the sites are completely healed.

- Please check your incisions daily. Call your surgeon if you notice fluid or drainage, increased redness or warmth, swelling, increased tenderness, or a fever of 100.5 or more. (Take your temperature every evening.)

- You should not take a bath or swim until all incisions are healed. Discuss this with your doctor at your follow-up appointment.

**Shortness of breath**

- You probably had shortness of breath before your procedure. It may take several months for your heart to fully recover. During this time, you may still continue to have shortness of breath. Your doctor will work with you to adjust your medicine and monitor your condition. Always call for help if your shortness of breath is getting worse.

- Weigh yourself daily at the same time each morning (after urinating and before eating). Call your doctor if you gain 3 or more pounds in 2 days, or 5 or more pounds in 5 days.

- Check your blood pressure once a day at the same time each day. Record the results for your doctor.

- Let your doctor know if you have worsening swelling of the legs or feet.

- Follow a low-salt, heart-healthy diet.

**Risk of bleeding**

- Because of the blood-thinning medication you are on, you are at an increased risk for bleeding. Some types of bleeding you can see (such as a nosebleed); other types are internal (such as bleeding that causes a stroke).

- Call your doctor if you are injured.

- Get help right away for any sign of bleeding, including:
  - sudden numbness or weakness of the face, arm, or leg, especially on one side of the body
  - sudden confusion, trouble speaking, or trouble understanding
  - sudden trouble seeing in one or both eyes
  - sudden trouble walking, dizziness, or loss of balance or coordination
  - sudden, severe headache with no known cause
  - any uncontrolled bleeding, such as a nosebleed that doesn’t stop
  - black or bloody stools
Follow-up care

- The hospital will arrange for a visiting nurse to come to your home during your recovery.
- You will be given an appointment to see your cardiologist and another appointment to see your surgeon.
- Please make an appointment to see your primary care physician within two weeks.

From now on

- If you need to get any dental work done, tell your cardiologist first. You may need to take antibiotics before your dental work. Also, be sure to tell your dentist that you have an artificial heart valve.
- If you need to have an MRI, tell your physician and the staff doing the MRI about your implanted transcatheter valve before you have the test.
- It is completely safe to have x-ray examinations with the implanted transcatheter valve.

Note: You underwent a procedure performed under fluoroscopic (x-ray) guidance. Fluoroscopy is a type of medical imaging that shows a series of x-ray images on a monitor, much like an x-ray movie. The amount of radiation used depended on many factors, including your body size and the level of complexity encountered during the procedure. Procedures involving a greater amount of radiation may result in some changes to the skin. Although most patients do not develop any problems, we want to remind you that this procedure may cause injury to the exposed skin and hair. These effects may be increased if you have had previous radiation exposure to the same skin area, particularly within the past twelve months. Radiation injury to the area of exposed skin can take many forms, including redness, blistering, loss of the hair over the skin, and breakdown of skin. These effects can appear after a few weeks or even after several months. Please remind your primary care provider to examine your skin periodically over the next 12 months for evidence of radiation injury, as skin changes may not appear immediately. If at any time you notice changes to your skin, please contact us 617-667-8800 to arrange further evaluation.