Transcatheter Aortic Valve Replacement (TAVR)

Transcatheter Aortic Valve Replacement (TAVR) is a procedure where the aortic valve in your heart is replaced without open heart surgery. It is for patients with a very narrow opening to their aortic valve, called aortic stenosis, who cannot have surgery. The valve is narrowed because of calcium build up. It does not open and close very well. This makes the heart work harder. The new valve covers up the old one.

To have the procedure you must:

- Have severe build-up of calcium on the valve
- Have a valve size that is not too big or too small
- Be able to take medicine to thin your blood after the procedure
- Be unable to have open heart surgery to replace the valve

Normal aortic valve (valve is open)  Narrow aortic valve (valve is open)
How do I know if I can have TAVR?

If you have a narrow aortic valve and might need a TAVR, you meet with a heart surgeon. The surgeon decides if you are able to have heart surgery to replace your valve. If surgery is not an option, you may still be able to have a TAVR.

You will also meet with a heart doctor (cardiologist). This doctor will talk about your options of your valve with you. Many tests will be done to help decide if TAVR is an option for you. These tests include:

- **CT Angiogram of the Chest, Abdomen and Pelvis:** This CT scan looks at the size and shape of your blood vessels. It is also looking for any blockages in the large blood vessels from your chest to your legs. You may or may not receive contrast through your vein for this test. Your heart doctor will decide if you need contrast.
- **Cardiac Catheterization:** In this test the doctor puts a tube (catheter) into an artery in your leg. You will be given medicines to help you relax and go to sleep for the test. The tube goes up to your heart through the artery. Contrast is used to check for any blockages in the arteries of your heart. If any blockages are found, a stent might be used to push back the blockage and open the artery.
- **Pulmonary Function Testing:** A group of testing that measures how well your lungs work.
- **Carotid Ultrasound:** Sound waves are used to look at the blood vessels in your neck.
Steps for Getting Ready

1. Before your procedure, your heart doctor will ask you to keep taking some medicines and stop taking some medicines. **Always** follow what your doctor says about stopping and starting your medicines.
   - Stop taking all vitamins, herbs, and diet supplements 7 days **before** and up to 7 days **after** your procedure.
   - Stop taking Coumadin® 4 days **before** your procedure. Do not restart this drug until told to do so by your doctor. If you take a blood thinning medication other than Coumadin, please speak to a member of the TAVR team about when you should stop taking this.
   - It is okay to use acetaminophen (Tylenol®).
   - Stop taking ibuprofen (Advil® or Motrin®) and any other non-steroidal anti-inflammatory drugs (such as Aleve®) 7 days before your procedure.
   - If you take aspirin and anti-platelet medicines, **do not stop taking these medicines**. Anti-platelet medications are called clopidogrel (Plavix®), prasugrel (Effient®) or ticagrelor (Brilinta®).

2. **After midnight on the day of the procedure do not eat or drink anything**. This includes water, ice chips, gum, candy, and chewing tobacco. This prevents stomach contents from getting into your lungs while you are asleep during the procedure.

3. **Stop** drinking alcohol 3 days before your procedure. When mixed with anesthesia, it can have serious effects on your body.

4. If you symptoms of a cold or any other illness before your procedure, please contact the TAVR Coordinator at **(608) 263-1530** as soon as possible.
5. Stop smoking or at least cut back to reduce your risk.

6. Please remove all make-up and fingernail polish. This includes clear nail polish.

If you have diabetes, you should have been given instructions about when to take your insulin or oral medicines during your pre-op visit. Please follow those instructions.

7. Take your morning medicines that you have been told to take with a small sip of water.

8. Please leave all jewelry, rings, large sums of money, credit cards and other valuable items at home.

9. Bring along any inhalers or CPAP equipment, eye glasses, eye drops, hearing aids, dentures, prostheses, or other equipment that you will need during recovery. Be sure these items are labeled with your name, if able.

10. You may bring pajamas, a robe, non-skid slippers, and other personal items. All rooms are private.

11. Bring a calling card or your cell phone if you wish to make long distance calls. You may bring and use your laptop while in the hospital. All of the rooms have wireless internet access. It may be easier for you to leave your personal items in your car until you have checked in. Once your room is ready, your family can bring your things to you. The hospital is not responsible for lost or stolen items.

When you leave the hospital, you will need to have someone drive you home and stay with you for at least the first 24 hours. It is helpful to plan ahead.

Questions about Getting Ready

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Important UW Hospital Phone Numbers

Admissions
To verify insurance..............................................(608) 263-8770
For Billing questions..............................................(608) 262-2221

UW Hospital Paging Operator................................ (608) 263-6400
Toll Free Number...................................................1-800-323-8942

Heart and Vascular Procedure Center.........................(608) 265-7094
Housing Accommodations.................................... (608) 263-0315

UW Hospital Information Desk.................................(608) 263-6400
UW Hospital Outpatient Pharmacy (E5/236)................(608) 263-1280
Cardiac Intensive Care Unit (F4M5)............................(608) 263-8715
General Cardiology Unit (F4/5)................................ (608) 262-4011
Cardiothoracic Surgery Intensive Care Unit (B4/5).........(608) 263-8720
UW Health Cardiovascular Medicine Clinic...................(608) 263-1530

The Day of the Procedure

You will go to the Cardiac Cath Lab the day of your procedure (F6/3). Your primary support
and family will be guided to the Cath Lab Waiting Area. Here, they will be given updates by
staff from the hybrid lab. They can also choose to leave a cell phone number if they would like
to leave the Cath Lab Waiting Area for a short time.

In the Hybrid Lab

Once you are in the Hybrid Lab, you meet your nurse and other staff who will answer your
questions and make sure you are comfortable.

There will be patches on your chest to show your heart rhythm and a blood pressure cuff on your
arm. A plastic clip on your finger will check your heartbeat and oxygen levels. The
anesthesiologist will ask you to breathe through a soft plastic mask and medicines are given in
your vein (IV). After you are asleep, a breathing tube is placed in your windpipe to breathe for
you. Other lines and monitors are added after you are asleep.
You will be sleepy during procedure. The doctor puts a tube in the artery or in your chest. This tube will go up to your heart. A balloon is inflated in your narrow valve to open it. Then the new valve is inflated over your current (native) valve. Your doctor checks to see the new valve is working. The tubes are taken out and the puncture site or incision is closed.

After the Procedure

Intensive Care Unit

You are admitted to the Intensive Care Unit (ICU) from the procedure room. When you get to the ICU, you will have lines, drains, and monitors. You can expect to wake up shortly after getting to the unit. Even though you feel drowsy, you may hear beeps and alarms. The nurses will check on you often and will ask you questions about how you feel.

Your primary support is updated during the procedure and told when you are going to the ICU. The ICU nurses need about 30 to 60 minutes to settle you into the ICU. Then, your primary support and family are brought in to see you, and may stay with you as long as you want. After 9 PM, your primary support will need to get a badge from your nurse.

Rest is important for healing. Getting up to walk also helps with the healing process. Often times, you are up for meals and even walking the same day as your procedure. Your nurse and physical therapist will walk in the halls with you at least three times a day.

You can expect to be in the ICU for 1-2 days. From there, you go to the general unit.

General Unit

You stay in this room until you are ready to go home. You will continue to be up walking 3-5 times a day. The physical therapist will see you to do strength exercises. We continue to monitor your progress and control your pain. Your nurses keep track of the fluids that you drink. You can expect to have an IV and heart monitor until you go home.
Healthy Eating after TAVR

After your TAVR procedure, you may feel sick to your stomach. This is due to the anesthesia. You will slowly go from drinking liquids to eating soft foods. Some people lose their appetite and find that they have a taste like metal in their mouths. Eating healthy foods is important in healing. Eating small meals more often can help when you are not as hungry as usual.

If you have a special diet, a dietician will talk with you about a plan for learning more about your diet.

Going Home

You can expect to stay in the hospital for a few days. Before you leave, you will learn how to care for yourself after discharge. Plan for a friend or family member to be present the day you go home to hear instructions. You will receive prescriptions for medicines. Please bring your insurance card if you plan to fill your prescriptions at the UW Hospital Pharmacy.

Plan to leave in the afternoon. A family member or friend needs to drive you home and stay with you for 24 hours. It may also be helpful to have someone stay with you for the first week or two after you go home. Our nurse case manager will help to arrange any other health related needs, such as home therapies or rehab facility (if needed).

Questions about Going Home

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Caring for Yourself after TAVR

Your TAVR Procedure on _________________________ was through the

RIGHT / LEFT femoral artery

OR

by transapical (TA) / transaortic (TAO) subclavian

If you have more questions after you are home, call the UW Health Heart and Vascular Clinic at (608) 263-1530. If this clinic is closed, your call will be answered by the hospital’s Paging & Messaging Center. If your procedure was done through your leg, ask for the Cardiology Fellow on Call. If your procedure was done through your chest, ask for the CT Surgery Provider on Call.
Care of the Site

If you have a poke (puncture) site, it is covered with a band-aid for 3 days. The bandage is changed once a day. Replace the band-aid daily after cleaning the site with mild soap and water. It is important to keep the site clean and dry. After 3 days, the site should be left open to air.

If you have an incision on your chest; you should clean the site daily with mild soap and water; pat gently to dry. Your incision may be left open to air unless you are told to put something over it. Keep the site clean and dry to prevent infection.

When you go home; check the site for bleeding, swelling or signs of infection such as redness, warmth or drainage. If you have any of these signs, call the UW Health Heart and Vascular Clinic at (608) 263-1530.

What to expect at the site of the puncture or incision:
- It may feel sore or tender at the site for 1 week
- A bruise at the site that may take 2-3 weeks to go away
- Itching as the site heals

Activity

By the time you go home, you are able to do basic things like walking and taking a shower. You should plan for extra time to rest. You may notice that you get tired more than before your procedure. This is normal. Your strength and energy level will increase as your body heals and your heart gets used to your new valve. It is good for you to walk and it is best to increase your walks slowly.

Here are some things to avoid in the first few weeks after you go home:
- Do not lift anything greater than 10 pounds for 2 weeks.
- Do not drive for 2 weeks or while on narcotic pain medication.
- Do not do contact sports or vigorous exercise.

Ask your doctor at your follow-up appointment when you may return to work and resume sexual activity.

Pain Control

It is normal to have some pain at your puncture site or incision. Your doctor may give you pain medicine for you to use at home. As your body heals, pain goes away and you will no longer need this pain medicine. Your pain may go away with an over-the-counter pain medicine such as acetaminophen. Do not take ibuprofen without talking to your heart doctor first.

Diet

Follow a low sodium, heart healthy diet after your procedure.
Medicines

You may be prescribed a medicine called Plavix® (clopidogrel), Effient® (prasugrel) or Brilinta® (ticagrelor) for some time after your procedure. Before you go home, make sure you have a prescription for one of these medicines. If you are not able to pay, tell your nurse or pharmacist. Do not stop taking this medicine without talking to your heart doctor first.

Follow the list of medicines and when to take them that you were given when you went home. Tell your doctor if you are having any side effects. Do not stop taking any medicine even if you feel better without talking to your doctor first.

When to Call for Help

Call 9-1-1 for emergency help if:
1. You experience bleeding or sudden swelling at your puncture site (leg). Apply direct pressure on the site. If the bleeding does not stop after 5 minutes of placing constant pressure on the site, call 9-1-1 for emergency help. Keep pressing until help comes.
2. Your leg becomes numb, cold, turns blue, or you have severe pain.
3. You have pain or pressure in your chest, arm, back or jaw.
4. You notice signs of a stroke. These are:
   o Sudden numbness or weakness of your face, arm or leg. This is often on one side of the body only.
   o Sudden trouble seeing. This could happen in one or both eyes or you may have double vision.
   o Not able to speak clearly or understand simple statements.
   o Sudden trouble walking. This can include dizziness, loss of balance or coordination.
   o Sudden severe headache with no known cause. “The worst headache of your life.”

Contact the UW Health Heart and Vascular Clinic at (608) 263-1530 if you have any one of these symptoms:
1. An increase in redness or warmth at your procedure site, or red streaks on your skin that extend from the site.
2. Bulging or swelling at the puncture or incision.
3. More swelling in your legs than you have had before, or if the swelling does not decrease after raising your legs over night.
4. New drainage or bleeding from the cut or open spots between the stitches where the skin is pulling apart.
5. A temperature of more than 101.5 F (38.5 C) by mouth for 2 readings taken 4 hours apart.
6. If you notice the skin along the cut is getting darker or turning black.
7. Numbness in your foot or leg.
8. Your leg or foot starts to feel cooler when you touch it.
9. A change in the color of your leg. It becomes grey/white or bluish/purple.
10. A feeling like your heart is racing or palpitations in your chest.
Appointments with Your Doctors

If you have staples, you will see your primary health care provider 10-14 days after the procedure to have them removed.

You will need to have a check-up with the heart doctor in about 30 days and at 1 year after your procedure. You should also call or see your doctor any time you do not feel well.

Always let other doctors including dentists and eye doctors know about your new heart valve before any future procedures. Before having a MRI (magnetic resonance imaging) test, always let the doctor or technician know that you have a new heart valve. The valve may be damaged if the doctor does not know about it.

Appointments (Date, time, location and doctor/provider)

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Other Questions

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Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 6/2015 University of Wisconsin Hospital and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HFFY#7405