Transcatheter Aortic Valve Replacement (TAVR)

This handout explains what a Transcatheter Aortic Valve Replacement (TAVR) is and what to expect if you have one.

What is a Transcatheter Aortic Valve Replacement (TAVR)?
A TAVR is a procedure done to replace the aortic valve in your heart without needing open heart surgery.

Who can have a TAVR?
A TAVR is done for patients who have a narrow opening in their aortic valve (aortic stenosis), and an increased risk of problems during surgery. The valve is narrowed due to calcium build-up. When this happens, the valve does not open and close well. This makes the heart work harder.

To have a TAVR 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.
- Have a moderate risk for problems with open heart surgery.

How do I know if I can have a TAVR?
To find out if a TAVR is the best option for you there are a few steps.
1. If you have a narrow aortic valve, you will meet with two heart surgeons and a heart doctor (cardiologist). They will talk with you about your options.
2. Many tests will be done to help us learn more. These tests include:
   - CT Angiogram of the Chest, Abdomen and Pelvis.

Your doctor may wish to have this test done with or without IV contrast. This test is done to:
- Look at the size and shape of your blood vessels.
- Look for any blockage in the large blood vessels from your chest to your legs.
- Get precise measurements of your aortic valve.

- Cardiac Catheterization. This test helps your doctor get many more details about how your heart is working. You will get medicines to help you relax and go to sleep for the test. If a blockage is found, a stent may be placed.
- Pulmonary Function Testing. This is a test that measures how well your lungs work.
- Carotid Ultrasound. Sound waves are used to look at the blood vessels in your neck to check for any blockage.

3. The Dentist
You will need to be cleared by your dentist. An infection in your mouth could lead to an infection of your new valve. Your dentist needs to say that your mouth is free from infection to proceed.

4. Once we have all the information we need, we will discuss it at a weekly team meeting. At this time, we will determine our best recommendation for you. The nurse coordinator will call you with this plan and any further appointments that you may need.
The Day of the Procedure
On the day of your TAVR, you will go to the Cardiac Cath Lab (F6/3). Once there you will meet your nurse, doctor and other staff who will answer your questions and make sure you are comfortable.

During the Procedure
1. We will watch you closely. You will have:
   - Patches placed on your chest to show your heart rhythm.
   - A blood pressure cuff on your arm.
   - A plastic clip on your finger to check your heartbeat and oxygen levels.
2. You will get medicine to make you sleep during the procedure.
3. Once you are sleepy, the doctor will put small tubes in multiple arteries. There will be a temporary pacemaker wire placed to help your heart beat correctly during the procedure and one tube will go up to your heart.
4. A balloon is inflated in your narrow valve to open it. Then the new valve, seated around a new balloon is expanded over your current valve.
5. Your doctor checks to make sure the new valve works.
6. The tubes are taken out and the puncture site is closed.

After Your Procedure
You will spend the night at University Hospital. We will watch you closely and help control your pain. A team member from Cardiac Rehab will see you and help you get set up with rehab close to home. This will start 3-4 weeks after your valve is replaced.

You can go for a walk as soon as your nurse deems your groin site is stable. You will have an IV and heart monitor until you go home.

Healthy Eating After a TAVR
Eat a low salt, heart healthy diet.

Going Home
Before you leave the hospital, you will learn how to care for yourself when you get home. A family member or friend must drive you home and stay with you for the first day or two. It may help to have them be present the day you go home so they can hear the instructions. You will get prescriptions for medicines. Please bring your insurance card if you plan to fill your prescriptions at the UW Hospital Pharmacy.

Our nurse case manager will help to set up any other health care needs, such as home therapy or a rehab facility (if needed).

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

You will need to have a check-up with the heart doctor both 30 days and one year after your TAVR.

Always tell other doctors (including dentists and eye doctors) that you have a new heart valve before any future procedures. If you ever need an MRI (magnetic resonance imaging) test, always tell the doctor or technician that you have a new heart valve. The valve could get damaged if the doctor does not know about it.