Being Assessed for Transcatheter Aortic Valve Implantation

What to expect

The Prince Charles Hospital Transcatheter Heart Valve Program Office 07 3139 5825



Introduction

Your doctor has asked the Prince Charles Hospital Transcatheter Heart Valve Team to see if having a special procedure called a Transcatheter Aortic Valve Implantation (TAVI) would help you.

Transcatheter aortic valve implantation is a new way of replacing the aortic valve in your heart. In the past, we could only replace the aortic valve by doing open heart surgery.

This booklet has a lot of information about TAVI as a possible option for treating your heart valve disease. We hope it helps you understand how we decide which option is the best option for you, and your part in that decision.

Take your time to read this important information, share it with your family, and write down any questions you may have.

What is a Transcatheter?

Transcatheter means a catheter (small,flexible and hollow tube) is used to place a new aortic valve in the heart. This is done by making a small opening in the artery in your groin, then threading the catheter and the new valve into the right position to replace the valve. Unlike open heart surgery, there is no need to open the chest for this procedure.

Useful contact information:

The Prince Charles Hospital TAVI Office: **07 3139 5825**



Why might you need your aortic valve replaced?

Your doctor has told us that you have a heart valve disease called aortic stenosis.

The aortic valve is one of four valves in your heart. These valves make sure blood flows through your heart in the right direction. When blood leaves the heart, it flows through your aortic valve.

Stenosis means a narrowing of the aortic valve opening. Aortic stenosis mostly happens as people age and over time the valve stiffens and cannot open fully. Severe narrowing of the valve causes restricted blood flow to the rest of the body which puts a strain on the heart causing you to feel short of breath, to have chest pain, or to feel faint or very tired.

Until now, the usual treatment for severe aortic stenosis has been open heart surgery and this remains the procedure of choice for most patients fit enough to undergo surgical aortic valve replacement.

Surgical aortic valve replacement may not be the best option if:

- You are not well enough for major surgery such as this and you have other diseases like kidney or lung disease.
- You have had one or more open heart surgeries in the past.
- You have had radiation to your chest.

Is TAVI the best option for you'?

We don't know yet. In order for us to decide whether TAVI would be the best option for you, we need a lot of information about you, your heart, and your general health.

Every person goes through a thorough review before we can decide if TAVI is an option. If you decide you want to know if TAVI is an option, you will need to come to the hospital for at least three visits (sometimes more). If you are from out of town, you will need to make your own travel and hotel arrangements for these days. You may be eligible for the Patient Travel Subsidy Scheme (PTSS). Regional patients will be admitted to hospital for assessment.

If we recommend TAVI for you, you then have to decide if you wish to continue

with this option. It is important to make your decision after we have given you information about your options.

You may decide to continue with your current treatment and not go ahead with this procedure.

The Review Process

- **Step 1:** We schedule you for an appointment for a TAVI Assessment.
- **Step 2:** You attend the hospital for your TAVI Assessment. This can take at least 3 hospital visits.
- **Step 3:** The team reviews the results of your TAVI assessment and recommends the best option for treating your aortic stenosis.
- Step 4: We notify your GP & local Cardiologist with our team's decision. If a TAVI is the option of choice and you agree to proceed, we will place you on the wait list to have your Aortic Valve replaced



Clinic Visit:

- We talk with you about what TAVI is, how TAVI is done, and what the risks and benefits are of this type of procedure.
- You have time to ask your questions.
- We give you information about how the team decides which treatment option is the best one for you.
- We arrange for you to have different heart tests.
- You answer questions about your everyday life, what you can and cannot do for yourself, your living situation, and your heart symptoms.
- You have a memory test.
- A doctor gives you a medical check-up and asks you questions about your heart and your health.
- We take pictures of you. This helps us when the team meets after your heart tests to discuss your options. The pictures are kept in your chart.

Heart tests to expect

We ask you to have a number of heart tests. These tests help us decide whether TAVI is the best option for you. You may have already had some of these tests done in the past. However, we do them again because the focus of the test this time is specific to TAVI.

Everyone who is being considered for a TAVI has these tests:

- An echocardiogram (also called an 'Echo') is an ultrasound test. This test allows us to look at the heart muscle, the valves of the heart, the blood vessels of the heart, and how blood flows through the heart. While you are lying down on a bed, we slide an ultrasound probe (special camera) across your chest with the help of clear gel. It takes about 30 to 60 minutes to complete this test.
- A cardiac angiogram (also called a 'cardiac cath') is a test to check the blood vessels around the heart and the blood pressure inside the heart. Your cardiologist inserts a long flexible catheter (a small hollow, flexible tube) into an artery in your groin through a small needle. Contrast (also called x-ray dye) is injected through the catheter so we can see your blood vessels better The test takes about one to two hours, but you stay in the hospital for about 4 to 6 hours after the test.
- Computed Tomography (also called a 'CT scan') is a special x-ray that takes many pictures of your heart and blood vessels in small "slices". The computer puts these pictures together to create a three- dimensional (3D) view of your heart and blood vessels. During the test, we give you contrast (special x-ray dye) to outline the heart and blood vessels so they can clearly be seen. We inject the contrast into your bloodstream intravenously. It takes about 30 minutes to complete this test.

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Some people may also have other tests such as:

- A transesophageal echocardiogram (also called a 'TOE') is done when the doctors need a more detailed look at your heart. It is similar to a regular echocardiogram, but the ultrasound probe is passed through your mouth and down your oesophagus. This test takes about 60 minutes and is usually done under anesthetic.
- Ultrasound of the carotid vessels is a test to check your blood vessels in your neck. We slide an ultrasound probe (special camera) over the sides of your neck with the help of a clear gel.



Deciding the best option – Is TAVI for you?

After your clinic visits, the TAVI team meets to review all the information we have about you, including your assessment and the results of your heart tests. From this information, the team determines which option would be the best choice for treating your aortic stenosis. Our goal is to recommend the treatment option that is best for you and is in keeping with your wishes and goals.

The best option could be:

Medical management:

This means your aortic stenosis is best managed without surgery for now. Your family GP or Cardiologist will continue to monitor and treat your aortic stenosis with medication. Your doctor may ask you to return to the TAVI Clinic in the future.

Surgical aortic valve replacement:

Surgical aortic valve replacement: This means open heart surgery is the best option for you to have your aortic valve replaced. A cardiac surgeon's office would contact you to discuss this with you.

Transcatheter Aortic Valve Implantation (TAVI):

This means TAVI is the best option for you to have your aortic valve replaced. This procedure can be done one of three ways. We would let you know which way we think would be best for you.

- Trans Femoral TAVI means inserting the catheter into the femoral artery in the groin
- Trans Aortic or Trans Apical TAVI means inserting the catheter through a small opening in your chest or between your ribs and into your heart.
- Sub Clavian TAVI means inserting the catheter into the subclavian artery through a small opening underneath your collar bone.

Palliative approach:

This means that even if you had a heart valve replacement, it would not help you feel a lot better or you would not benefit in terms of your quality or length of life. We will suggest that you be referred to a health care team that focuses on helping you with your symptoms with the goal of improving your quality of life.

When will you know?

We call you within 4 - 6 weeks following completion of all your heart tests to tell you what the team believes would be the best option. We also send your GP & local Cardiologist a letter.

Take time to talk further with your GP or cardiologist about what we recommend.



If we feel TAVI is the best option for you

Take some time to think about whether you want to go ahead with the procedure.

Think about whether you are willing to go on the TAVI wait list and go forward with the procedure should we call you sooner than your expected date. This means that you have to be willing to come into the hospital for the procedure when we call.

Call the TAVI office on 07 3139 5825 when you have decided how you want to proceed.

Three dates determine how long you can expect to wait:

- The date the medical team meets to review your case.
- The date you let us know you want to go ahead with the procedure.
- The openings available at the hospital to do the procedure.

If you tell us you wish to go ahead with the TAVI procedure:

- We send you an information booklet about preparing for the procedure, and what to expect while in the hospital.
- We ask that you continue to have your symptoms of aortic stenosis monitored and treated by your GP or local Cardiologist.

Call the TAVI office on 07 3139 5825 if:

- You have questions about TAVI.
- Your heart condition changes quite a bit from when you had your heart tests and before your scheduled date for your TAVI.
- If we are not able to speak to you when you call, we do our best to call you back as soon as we can. We may not be able to call you back for a couple of days.





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