

# Transcatheter Aortic Valve Implantation (TAVI)

## Why do you need this procedure?

Aortic stenosis is a progressive thickening and hardening of the leaflets (heart valve flaps), so they are unable to open properly when the heart ejects blood.

This in turn causes thickening of the heart muscle and decreases the flow of blood to the body and to the coronary arteries which supply blood to the heart muscle.

The valve is replaced to:

- Relieve the burden on your heart
- Improve your blood supply
- Help you feel better

## What is TAVI?

Trans-catheter aortic valve implantation (TAVI) is a less invasive way of implanting the valve prosthesis. It does not require open heart surgery. It is usually done through a small incision in the groin. The procedure is usually performed under conscious sedation.

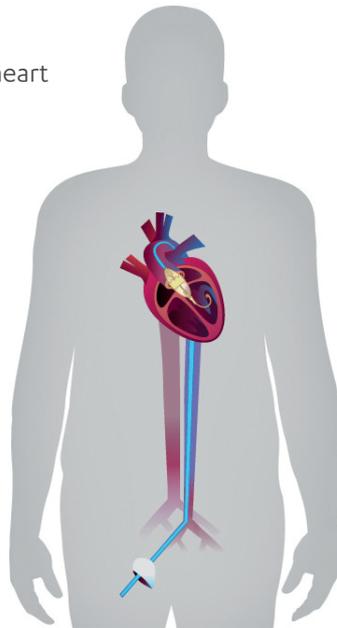
A plastic tube (sheath) will be inserted into a large blood vessel in your groin (femoral artery). This will allow catheters, or thin tubes, to pass through your arteries to your heart.

A catheter, with a balloon attached, will be placed into the narrowed aortic valve and inflated to open the narrowed leaflets. This will then be deflated and removed.

The new heart valve is attached to another balloon catheter which will also be passed through the femoral artery in your groin and placed in your newly opened aortic valve.

As that second balloon is inflated, the valve prosthesis will be expanded to fit inside the diseased valve. The balloon catheter is then deflated and removed, leaving the new valve in place. The old valve remains and the new valve will start to function immediately.

Usually, you will stay in hospital for three to four days after the procedure.



## What to do before coming to hospital

You will be contacted by your doctor's rooms and advised of your admission time.

We will send you all necessary information regarding admission to hospital well before the admission date.

## Medications

Please bring all your current medications with you. Once you are in the hospital, you should take **only** the medication given to you by your nurse.

Before coming to hospital, continue to take all your normal medications **except** for the following:

### Diabetic medication

- On the day of your admission to hospital, please do not take the diabetic tablets called Metformin, also known as Diabex, Diaformin, Format or Glucomet
- Do take all other oral diabetic medication
- Continue with any insulin if you are admitted to hospital the day before your procedure as it will be adjusted by the doctor once you are admitted.

### Blood thinning medication

If you are currently prescribed anti-platelet medication, your doctor may ask you to stop taking the following medication:

- Warfarin (Coumadin, Marevan, Dindevan)
- Dabigatran (Pradaxa)
- Rivaroxaban (Xarelto)
- Apixaban (Eliquis)

You may require an injection to replace the Warfarin, but this will be decided and arranged by your doctor.

Warfarin will be recommenced in the hospital following the procedure.

If you are taking Aspirin or Clopidogrel, please continue to take these medications.

If you have any concerns about your medications please contact your doctor.

### What to bring into hospital

Except for the first night after your procedure, you will be able to walk around as you would normally, so bring your normal bedtime clothes and slippers, and street clothes and shoes to wear home.

Please also bring your toiletries and other personal items such as your reading glasses and books. You are likely to stay in hospital up to seven days.

Please do not bring any valuables or large amounts of money.

### Admission to the hospital

You will be asked to present for admission on the day before your procedure generally around midday. On arrival please go to main reception desk on the ground floor of the hospital for patient registration.

Once your admission is complete, you will be escorted to your room in the Acute Cardiac Unit, on Level 1 in Area A.

Your doctor and your anaesthetist will visit you that evening.

Although most of your tests or procedures required for the procedure will have been completed before your admission, a few remaining tests may be necessary on the day you arrive for the procedure.

### Fasting

You can continue with your normal diet before coming into the hospital. The nurses will advise you when to stop eating and drinking, usually around midnight before your procedure.

### Your TAVI procedure

Your procedure will be performed in Cabrini's hybrid theatre. While you will be awake for some of the preparation, an anaesthetist will administer a medication which will help you relax or put you to sleep if general anaesthetic is required.

Once the procedure is finished you will be taken either to the recovery bay for a short while or directly to the Intensive Care Unit (ICU).

In the ICU you will be completely awake, but you will stay in bed until later that day or the next morning.

During your stay in the ICU, you will be connected to a heart rate and blood pressure monitor and there will be a small tube in a vein in the side of your neck. Similarly there will also be a tube in your groin, so you will need to lie flat until it is removed shortly after your arrival in the ICU. A few hours later you will be able to sit up in bed.

The day after your procedure, you will be transferred into the Acute Cardiac Unit and if appropriate, complete some short walks with the help of the nursing staff.

Your doctor will order another echocardiogram to check your new valve. This will be coordinated by the Acute Cardiac Unit before you go home.

### Cardiac 'passport'

Before leaving hospital, you will be given a cardiac 'passport' which includes your personal details, current medication list, procedure information, name of your treating physician and general practitioner, and a baseline ECG. We recommend you keep the passport in your wallet or purse and produce it in the event of an emergency, visit to your general practitioner or readmission to hospital.

### Going home after your procedure

Depending on your requirements, different levels of support, such as inpatient rehabilitation or home care visits can be arranged. Please let the nursing staff know of any concerns you may have about going home, so that appropriate arrangements can be made for your discharge.

Groin care dressing: You may remove the waterproof dressing after your return home. Shower normally, but make sure you gently dry the area after your shower. If water does get underneath the dressing, remove the dressing and pat dry.

Do not have a bath or swim for at least five days after your return home, or until the wound has completely healed.

Inspect the site daily for signs of infection such as redness, pain and swelling at the site, fever or chills.

You may have some bruising and a small lump at the operation site in your groin, but this is normal and should get better in a few weeks. However, if the area begins to suddenly swell and become painful we recommend that you

- lie down
- consult your doctor. Explain you have had a medical procedure through the femoral artery (18 French catheter)
- if concerned, attend hospital as soon as possible
- do not drive yourself to hospital

### Activity

Do not lift or move heavy objects for at least two weeks after your procedure.

You can return to your normal activities of daily living when you get home, but you should avoid strenuous exercise or long walks for the next month.

If at any time, you have symptoms such as light-headedness, faintness or you become short of breath, call an ambulance on 000 or have someone drive you to an emergency department.

Please present your cardiac passport if you require emergency treatment as this is a helpful record of your procedure.

### Driving

To allow the groin wound to heal completely, consult your doctor about when it is safe to drive after your procedure.

### Medications

At your departure from hospital, your doctor will prescribe all the necessary medication and your nurse will explain your medications before you leave.

You will be given a cardiac passport that will contain your details, your doctor's details, a copy of your ECG, a list of your medications and the details of your procedure.

As part of the treatment for the TAVI procedure, you will be prescribed Clopidogrel (Plavix) and Aspirin. Aspirin is an important part of your treatment, so if you have had any problems taking Aspirin in the past, please notify your doctor.

Do not stop taking either of these tablets unless instructed by your doctor. It is normal to have minor skin bruising with this medication, however if you have any actual bleeding, or if your bowel motions become black in colour, please see your doctor immediately.

### Follow-up after the procedure

You will be given a follow-up appointment with your doctor approximately four weeks after your procedure. The doctor may arrange for you to have another echocardiogram before this visit, and again in 12 months' time. These results may be added to a national registry.

### Dental work

If you need any dental procedures, be sure to inform your dentist that you have had a percutaneous heart valve implantation.

You should talk to your doctor or dentist about taking antibiotics before any dental procedures.

*Disclaimer: This sheet is provided for general information purposes only. This sheet does not provide you with specific personal, professional or medical advice. It is not intended to be a substitute for professional or medical advice and should not be relied upon as such. You should obtain advice from your treating doctor or healthcare professional about your individual circumstances.*

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