

Risks

Although TAVI is a keyhole procedure, it is still a major procedure that carries risks. The risks vary between individuals. Your doctor will discuss the risks and how likely they are to occur in your case.

Some of the more common problems that can occur include:

- Bruising, bleeding and pain in the groin
- Damage to the blood vessels in the groin
- Irregular heart rhythms or need for a pacemaker
- Leaking of the valve after the procedure

Rarer problems include:

- Kidney damage
- Stroke
- Heart attack
- Death

The risk of death from a TAVI is much lower than the risk of untreated severe aortic stenosis.

Preparing for your procedure

You should try to be in the best health that you can be if you have heart valve disease or need a TAVI procedure, as this will give you the best chance of a good outcome and good recovery. If you smoke, we strongly advise you to try and stop. Your GP can suggest support for this. If you have diabetes or high blood pressure, please see your GP to ensure these conditions are well controlled. If you are overweight, please do your best to reduce your weight. Your GP may be able to refer you to weight loss services to help with this.

IMPORTANT: All patients with aortic stenosis should take special care that their teeth are in good condition. You should aim to visit your dentist every 6 months and make sure any dental infections are treated quickly. We won't be able to proceed with a TAVI if your teeth are not in good condition because this can increase the risk of serious infections after surgery. If you think your

teeth need professional attention, you should make an appointment with a dentist as soon as possible. If you do need any dental work (such as tooth extractions, fillings etc) this should be done before your heart valve surgery.

What preparation is needed?

If you are coming in to hospital for a TAVI procedure, your healthcare team will speak to you about what you need to do before your visit. You can find further information in another patient information leaflet from NW hearts Charity, "TAVI - your hospital stay".



Most people who have a TAVI have a good outcome. People who take steps to improve their general health beforehand and afterwards are more likely to have a good outcome. This field is growing rapidly, with constant breakthroughs in technology and techniques that benefit patients.

Any questions or comments?

If you have any comments about this leaflet (good or bad), then please contact office@nwhearts.org. NW Hearts Charity always welcomes feedback about how we are doing and how we might improve. Unfortunately, NW Hearts Charity can't answer questions about your own health situation.

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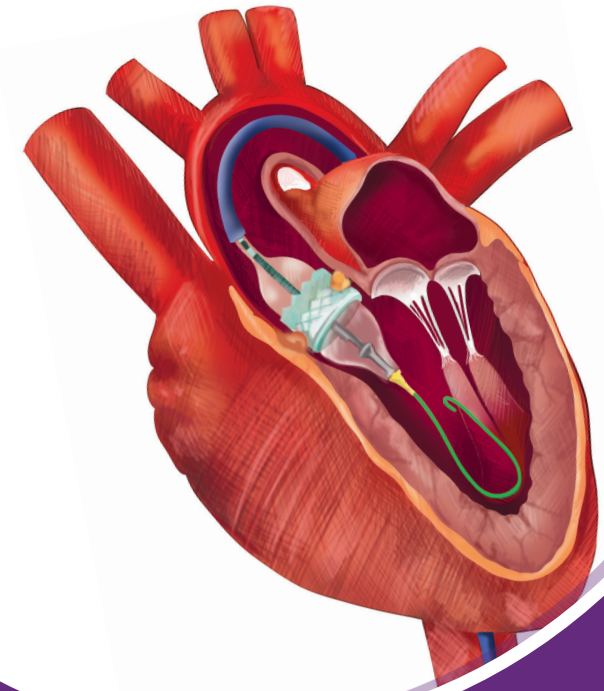
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Transcatheter Aortic Valve Implantation (TAVI)

Patient information leaflet



NW Hearts Charity

Your heart · Your charity

What is transcatheter aortic valve implantation (TAVI)?

Transcatheter aortic valve implantation (TAVI) is a keyhole procedure designed to treat a heart valve condition called aortic stenosis. Keyhole surgery uses smaller cuts to operate inside your body, leaving smaller scars and speeding up healing time.

What is aortic stenosis?

The aortic valve sits at the top of the heart and works like a one-way door. Its job is to make sure the blood exits the heart at the right time and in the right direction. Aortic stenosis is a condition when the aortic valve becomes thickened and stiff. These changes mean the valve can't move normally and the opening becomes narrowed (which healthcare workers call 'stenosis').

It is usually a condition of older people but can also sometimes affect younger people. Aortic stenosis can be a mild condition but can also be more serious.

Some people worry that they have done something wrong to develop aortic stenosis. This is not the case. Aortic stenosis is a "wear and tear" disease – a bit like the joints in your knee starting to wear out – and is not related to lifestyle factors such as smoking, high cholesterol or blood pressure. If you have aortic stenosis there is nothing you can do on your own to prevent it getting worse.

Symptoms of heart valve disease include:

- Chest pain
- Breathlessness
- Fatigue
- Dizziness or blackouts whilst exercising
- Swollen ankles or feet
- Rapid weight gain

What treatments are available for aortic stenosis?

If you have severe aortic stenosis and this is causing symptoms, it may be time for your faulty valve to be replaced. This can be done with either: (1) open-heart surgery or (2) a TAVI procedure, a form of keyhole surgery.

This leaflet will mainly discuss TAVI procedures.

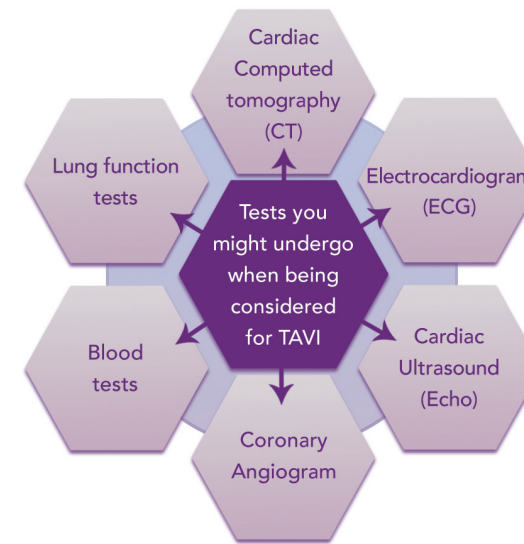
What is the best option for me?

It may be best for you to have a TAVI procedure, open-heart valve surgery or treatment with medication. The decision will be based on:

- The type of valve problem you have
- Your age
- Whether you have other heart problems (such as valve problems or heart artery problems)
- Your other medical problems
- Your personal preferences

Your assessment may include various tests (although not all patients will need all these tests):

- A chest x-ray - to look at your lungs
- An ECG - to check your heart rhythm
- Lung function tests - to see how well your lungs are working
- A transthoracic echocardiogram - an external ultrasound scan to look at your heart
- A trans-oesophageal echocardiogram - also known as a TOE, a more detailed look at your heart using ultrasound
- A CT scan - a special type of x-ray that looks at the larger blood vessels above the heart and in the middle section of your body
- A coronary angiogram - to look at the coronary arteries that supply blood to your heart.



Once all your tests have been done, the specialist healthcare team will discuss together what approach is likely to be best for you.

The healthcare team might decide that open heart surgery or a TAVI are not right for you. This is because the risks of the procedure would be greater than the benefits for your health. There are no medicines that will slow or stop aortic stenosis getting worse over time. However, there are medications that can effectively treat the symptoms of aortic stenosis and make you feel better.

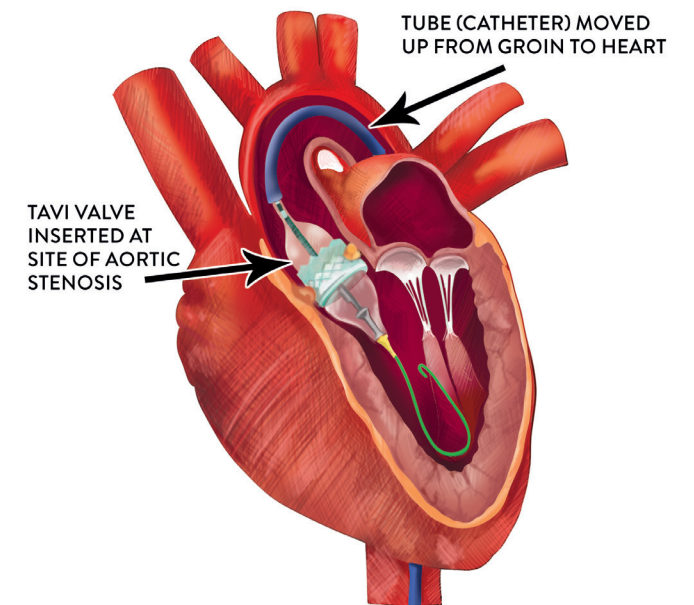
After the healthcare team has made a decision, your own doctor will discuss the meeting outcome with you and treatment options, if needed.

What does the TAVI procedure involve?

If TAVI is chosen for you, you will usually need to come in to hospital the night before the procedure. On the day of the procedure, you will go to the operating theatre (also known as the cath lab) and the team will give you a sedative to make you relaxed and slightly sleepy. They will give you an injection of local anaesthetic at the top

of both groins and place a plastic tube (sheath) in both of these places. Another tube (catheter) is placed within one of the sheaths and is moved up to the heart under x-ray guidance. This contains your new heart valve compressed into the catheter tube. Once the heart valve is placed in position, your new valve is expanded and the old valve is pushed out of the way. Once the doctor is happy that the valve is positioned correctly, the tube is removed and your valve will remain in place for the rest of your life.

In a small number of cases, it is better for the procedure to be performed under general anaesthetic and you will be asleep for the procedure. Your doctor will discuss this with you if this applies to you.



What are the benefits and risks of TAVI?

Benefits

A TAVI is designed to treat symptoms of severe aortic stenosis and corrects the valve narrowing. In most cases, after a successful TAVI procedure, you could live longer and have an improved quality of life.