Royal Brompton and Harefield hospitals

NHS

Your transcatheter aortic valve implantation (TAVI)

Contents

This patient information leaflet is for people with aortic stenosis or aortic regurgitation who may be suitable for a transcatheter aortic valve implantation (TAVI) procedure. It does not replace personal advice from a healthcare professional. If you have any questions please ask your doctor

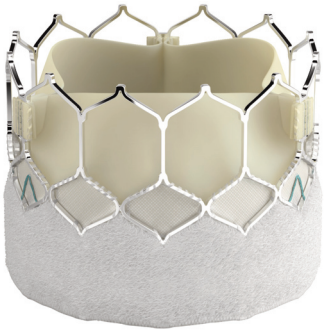
What is transcatheter aortic valve implantation (TAVI)?

A transcatheter aortic valve implantation (TAVI) involves fitting a valve to treat aortic valve diseases. The new valve is fitted on top of the old, damaged valve.

The new valve is made of natural tissue from the heart of a cow or pig (see below). Your doctor will talk to you about the best type of valve for you.

Pictured below are two brands of TAVI valve:

EvolutTM R valve. Image courtesy of Medtronic



Edwards SAPIEN 3 Ultra TM transcatheter heart valve. Image courtesy of Edwards Lifesciences Corporation

A TAVI takes 1 to 2 hours and is usually carried out under a local anaesthetic (you are awake but you do not feel pain). A TAVI can also be carried out under a general anaesthetic (being put to sleep), depending on what is best for you. Your doctor will discuss this with you.

Most people come into hospital the day before, or on the day of their TAVI, and stay for between 1 to 3 days.

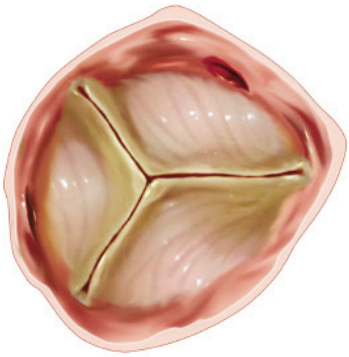
Aortic valve diseases

The aortic valve is one of four heart valves that control the flow of blood out of the heart. Conditions that affect the aortic valve are known as aortic valve diseases.

The two main aortic valve diseases are aortic stenosis and aortic regurgitation. Most of our procedures are carried out to treat people with aortic stenosis, however, in some cases, we are also able to treat aortic regurgitation.

Aortic stenosis – where the valve is narrowed, restricting blood flow. This happens because the leaflets (flaps) of the valve thicken, stiffen, or fuse together, so the valve cannot open properly. This is known as a stenotic valve (see pictures below).

Aortic regurgitation – where the valve allows blood to leak back into the heart. This happens because the leaflets of the aortic valve do not close tightly. So, instead some blood flows backwards into the heart rather than forwards into the aorta, the main blood vessel in the body.



Picture 1: Normal valve

Picture 2: Stenotic valve

If you have an aortic valve disease, your heart needs to work harder and blood flow is reduced, so there is less oxygen supplied to your body. This may make you feel breathless, faint, fatigued, or may give you heart palpitations or chest pain.

Benefits of a TAVI

A TAVI can reduce symptoms such as shortness of breath, chest pain or fainting, and reduce the risk of heart failure and death.

A TAVI is a non-surgical alternative to open heart surgery. Your doctor may refer you for a TAVI if open heart surgery involves too many risks because of your age or health.

Risks of a TAVI

Every procedure carries some risk and risks are different for each person. Your doctor will discuss the risks with you before you decide to go ahead with a TAVI.

The risks of having a TAVI include:

Irregular heart rhythm

5 to 10 in 100 people need a permanent pacemaker fitted to regulate their heart rhythm, because the heart rhythm does not return to normal after the TAVI.

Bleeding

5 to 10 in 100 people may have a build up of blood under the skin which forms a lump (haematoma). The lump gradually disappears and does not normally need any treatment.

5 in 100 people have major bleeding caused by damage to the artery. The artery may get damaged where a thin flexible tube, called a catheter is inserted or where the valve is implanted. Damage to the heart wall can cause blood to collect around the heart. The blood may need draining, using a small tube inserted below the breastbone, or with a separate procedure.

Femoral or iliac artery complications

4 to 5 in 100 people have major femoral or iliac artery complications. Damage to the femoral (groin) or iliac artery

may need to be repaired through a further keyhole procedure through the groin, or surgery.

Leaking of the aortic valve

Fewer than 5 in 100 people have moderate to severe leaking of the aortic valve (aortic regurgitation), allowing some blood to flow in the wrong direction. Severe leaks are repaired by stretching the valve with a small inflatable balloon, a second TAVI or open heart surgery while you are in hospital.

Kidney function damage

2 to 3 in 100 people have kidney function damage. This risk is higher if you have poor kidney function before your TAVI. Usually, kidneys get back to normal without treatment.

1 to 2 in 100 people who have kidney damage need haemodialysis, a procedure where a machine is used to do the kidneys' job of cleaning the blood.

Stroke

3 in 100 people have a stroke following a TAVI. The risks may be higher if you have other medical conditions. Strokes are usually treated with 'clot-busting' medicines.

Death

1 to 3 in 100 people die within 30 days of having a TAVI.

Emergency open heart surgery

Fewer than 1 in 100 people need open heart surgery while they are in hospital for complications such as:

- A tear (rupture) in the main artery leading out of the heart (aorta)
- perforations (holes) in the chambers of the heart
- displacement of the TAVI valve – after the valve has been

implanted, the valve then moves either upwards into the aorta, or downwards into the heart, so that it is no longer in the correct place. This may require open heart surgery to remove the TAVI valve, or an additional TAVI valve to be placed during the procedure

Heart attack

7 in 1,000 people have a heart attack during a TAVI. A heart attack can occur when an artery that supplies the heart (coronary artery) gets blocked. The doctor will try to open the blocked artery by stretching it with a small inflatable balloon. A small metal tube, called a stent, is put in place to keep the artery open. This is called coronary angioplasty.

Alternative treatments

A doctor or nurse will discuss alternative treatments with you before you decide whether to have a TAVI.

Alternative treatments include:

Aortic valve replacement

Aortic valve replacement is open heart surgery for aortic stenosis or aortic regurgitation, and is an effective, life-saving option for many people, but is not suitable for everyone.

Balloon valvuloplasty (BAV)

A balloon valvuloplasty (BAV) can temporarily open up the narrowed valve. In a BAV, a catheter with a balloon on the tip is guided to the diseased aortic valve. The balloon inflates to open up the valve. A BAV is not a long-term solution, as the valve can become narrowed again.

Medicine

Medicine may control your symptoms but cannot treat the narrowing or leaking of the aortic valve.

Palliative treatment

Sometimes a TAVI or other treatments are not suitable, or you may decide not to have treatment. In this case, your doctor may refer you to the palliative care team to help you manage your symptoms and maintain a good quality of life.

Imaging during a TAVI

Your doctor may use X-rays and fluoroscopy to fit the new valve correctly. Fluoroscopy is similar to a small X-ray film of your heart.

In rare cases, such as in an emergency, you may need a transoesophageal echocardiogram (TOE), an ultrasound scan in which a small tube is passed down your throat to look at your heart valve in more detail. You would be asleep under general anaesthetic for this.

Fewer than 1 in 10,000 people have complications from a TOE, such as damage to their teeth, throat, or gullet.

If you have any complications, you may need to stay on the intensive therapy unit (ITU). If you have any questions, please talk to your doctor.

Before your TAVI

If a TAVI may be right for you, your doctor will refer you to a consultant cardiologist. You may also have some tests to check if you are suitable for a TAVI procedure.

Tests you are likely to need before a TAVI include:

Blood tests

Blood tests check your general health. Your nurse can tell you what we are checking for.

Electrocardiogram (ECG)

For an electrocardiogram (ECG), electrodes (small sticky patches with leads) are put on your arms, legs and chest. The electrodes

are connected to a monitor that records the rhythm and electrical activity of your heart. The test takes about 10 minutes.

Echocardiogram (echo)

An echocardiogram uses sound waves to build up a moving picture of your heart. It is a type of scan that is carried out using an ultrasound probe on the outside of your chest that helps doctors learn more about the structure and function of your heart valves and heart chambers. An echocardiogram takes around 30 minutes.

Computed tomography (CT) scan

A computed tomography (CT) scan is an X-ray that produces three-dimensional images of your body. A radiographer will give you an injection containing a special dye so that your blood vessels and heart show clearly on the scan. A CT scan takes about an hour.

Coronary angiogram (cardiac catheterisation)

A coronary angiogram (also called angiography) is a procedure that uses a series of X-rays to allow doctors to look at the main arteries that supply your heart muscle – the coronary arteries. A catheter is guided through an artery in your groin or wrist to your heart. Then a special dye is injected through the catheter so your arteries show clearly. A coronary angiogram takes about 30 minutes.

In addition, some people may need to have the following tests:

Cardiac magnetic resonance (CMR) scan

A cardiac magnetic resonance (CMR) scan uses a magnetic field and radio waves to take pictures inside the body. The scan helps doctors see the structure of your heart and blood vessels, and how well they are working. A CMR scan takes about an hour.

Respiratory (lung) function test

A respiratory function test measures how well your lungs are working. You blow into a machine through a tube.

Walking test

A walking test helps doctors see how far you can walk in 6 minutes. We will only ask you to take this test if it is comfortable for you.

Carotid dopplers scan

This is a painless ultrasound scan of the blood vessels in your neck. The test takes about 15 to 30 minutes.

Test results

Your specialist healthcare team will discuss the test results and decide which treatment may be best for you.

The specialist team includes heart surgeons, cardiologists, radiologists (imaging specialists), anaesthetists and specialist nurses. If the team agrees that a TAVI is the right treatment for you, a member of the TAVI team will call you to discuss your treatment options and arrange a date for you to have the procedure.

Improving your health before your TAVI

We recommend you do some gentle exercises before and after having your TAVI to improve your movement, muscle strength and balance.

Follow the exercises shown on pages 21 to 25.

If you feel unwell or breathless before starting the exercises or find that you are struggling to do the exercises, then please do not push yourself.

Stop smoking

If you smoke, try to stop completely, several weeks before your TAVI. Stopping smoking reduces the risk of breathing problems and makes your procedure safer.

There is support to help you give up smoking. Talk to your GP,

pharmacist or call the free National Smokefree Helpline on **0300 123 1044**, or visit **www.nhs.uk/smokefree**.

Control your weight

If you are overweight, losing weight reduces the risk of complications during or after having a TAVI. Help to lose weight is available from your GP or practice nurse.

Visit your dentist

It is vital that you visit your dentist to make sure your teeth and gums are healthy before your TAVI procedure, to avoid damage and reduce the risk of infection.

Germs (bacteria) can enter the bloodstream from your teeth and gums, and get into the heart, causing an infection known as endocarditis. Endocarditis can damage the heart valves and cause other serious complications.

If your dentist has any concerns or would like advice, please give them the details of your TAVI team (see Useful contacts on page 28).

If you have loose teeth or crowns, dental treatment may reduce the risk of tooth damage if the anaesthetist inserts a tube to help you breathe. Please ask your TAVI nurse for advice.

Visit your GP

Ask your GP for a check-up if you have ongoing medical problems such as diabetes, asthma, bronchitis, thyroid problems, or high blood pressure. If your GP has any concerns or would like advice, please give them the details of your TAVI team (see Useful contacts on page 28).

Pre-admission appointment

Around 1 to 2 weeks before your admission to hospital, you have a pre-admission appointment. We check your general health and fitness, symptoms, allergies, and medicines.

Appointments at:

- **Royal Brompton Hospital** – are carried out by phone

- **Harefield Hospital** – are carried out by video using the Attend Anywhere secure web-based platform. You can view a video and find out more information about Attend Anywhere on the Trust's video consultations webpage:

www.rbht.nhs.uk/patientsvisitors/patients/outpatientinformation/videoconsultations

Do not worry if you are unable to access the video platform. If we do not see you on the video platform, we will automatically try to telephone you.

We try to keep to your appointment time as closely as possible. Please wait if your appointment is a little later than the arranged time.

If you do not speak fluent English, please have someone with you who will be able to translate.

Before the appointment, please make sure you have:

- an up-to-date prescription list as we will ask for the names and doses of any medicines you are taking

- details of your height and weight in metres and kgs

- a pen and paper ready to write down any extra information we give you

During the appointment, we give you:

- advice about any medicines you need to stop or start taking before coming into hospital

- information about the procedure and answer any questions you may have

You will also need to have some blood tests and a test for MRSA (methicillin resistant staphylococcus aureus). MRSA is a common infection. If you have MRSA, we need to treat it before your TAVI. If we need to delay your TAVI for any reason, we will explain what happens next.

Preparing to come into hospital

Medicines

We give advice about your medicines at your pre-admission appointment. Please bring all your medicines with you when you come into hospital for your TAVI. This includes any medicines you take for other conditions, such as inhalers.

On the day of your TAVI, take all of your usual morning medicines except for any medicines we have asked you to stop taking.

If you have any questions about your medicines, please ask your doctor or nurse.

Warfarin and other blood-thinning medicines

You may need to stop taking warfarin or other blood-thinning medicines before your TAVI. We will advise you about this at your pre-admission appointment.

Metformin

You may need to stop taking metformin before your TAVI. We will advise you about this at your pre-admission appointment.

Before coming to hospital

You will come into hospital either on the day or the day before your procedure. If you feel unwell before your TAVI, please call the TAVI clinical nurse specialists (see Useful contacts on page 28).

On the morning of your admission to hospital, please call the ward you are due to be admitted to before you leave home

to make sure that a bed is available (see Useful contacts on page 28). If there is not a bed available, we will explain what happens next.

Hygiene

When you attend for your blood tests, we will give you an antiseptic body wash to use the night before and the morning of your admission. Alternatively, it will be posted to you, or if you are admitted the day before your TAVI, then the wash will be given to you on the ward.

It is very important that you have a thorough shower or bath the night before, and the morning of your TAVI. Please pay special attention to washing under skin folds such as under the breasts, the groin and genital area.

Shaving

Please do not shave or remove hair from your chest, arms, legs, or groin before your TAVI. If needed, shaving is done in hospital just before your TAVI.

What to bring to hospital

Remember to bring:

- any forms we have asked you to complete
- all your medicines
- a dressing gown
- slippers that fit well and have good grip.
- your washbag with toiletries, such as a toothbrush and toothpaste
- something to read

Arriving at hospital

When you arrive at hospital at:

- **Royal Brompton Hospital**
  Go to the main reception where the receptionist will direct you to your ward.

- **Harefield Hospital**
  Go to the main reception and ask for the admissions office. An admissions officer will process your paperwork and direct you to the ward.

On the ward

When you get to the ward, a nurse will show you your bed. Male and female patients may share the same ward but will have separate bays and bathrooms. There are exceptions. For example, in intensive care and high-dependency areas, male and female patients may be cared for in the same bay.

We cannot guarantee a time that your TAVI will take place. Unfortunately, sometimes there are delays when other patients need to be seen in an emergency.

We will keep you informed of any changes. If you have any questions, please ask the nurse looking after you or the matron.

Before the procedure

Before the procedure you will see the anaesthetist, doctor or nurse responsible for your sedation during the procedure.

Your anaesthetist, doctor or nurse will discuss your general health, medicines that you take, any allergies you have and any past anaesthetics you have had.

Please let your anaesthetist, doctor or nurse know if you are taking:

- anticoagulants (medicines to prevent blood clots)

- diabetes medicine
- antidepressants

The anaesthetist, doctor or nurse will also plan your care for immediately after your TAVI, including pain relief and recovery.

If you have any questions, please ask the anaesthetist, doctor or nurse, or you can contact the TAVI clinical nurse specialist at the hospital.

Food and drink

Do not eat anything on the morning of your TAVI.

You can drink clear fluids, such as water, until 2 hours before your TAVI.

Medicines

Continue to take your medicines as usual unless your TAVI clinical nurse specialist or cardiologist has asked you not to.

Smoking

To reduce the risk of breathing problems during your procedure, do not smoke on the days leading up to your TAVI.

Pre-medication

Pre-medication (also called pre-meds) are medicines sometimes given before your anaesthetic. Some pre-meds prepare your body for the anaesthetic, and others help you to relax.

If you are very anxious about the procedure and feel you may need medicine to help you relax, please ask your anaesthetist, doctor or nurse.

Preparing for your TAVI

Remove all jewellery, dentures and hearing aids. You will need to undress and put on a hospital gown.

The anaesthetist or nurse will put a cannula (small plastic tube) in a vein in your hand.

You will have your TAVI in the cardiac catheterisation laboratory (cath lab). When you are ready for your TAVI, a member of staff will take you to the cath lab on a bed or chair.

Cath lab staff will check your identification and confirm your treatment. If you are having a general anaesthetic, you will have a ventilator (artificial breathing machine) to help you breathe.

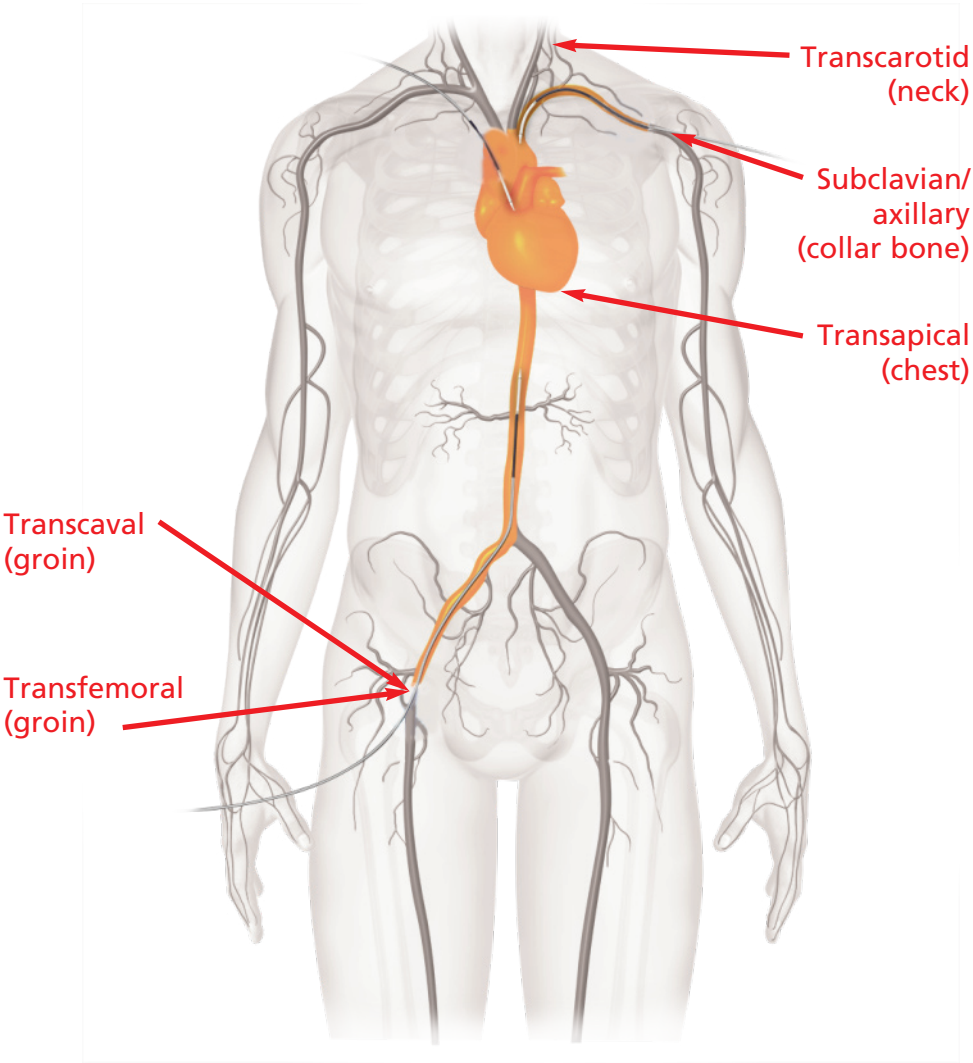
Machines will monitor your heart rate, blood pressure and oxygen levels during your TAVI.

A new TAVI valve can be placed into the heart using several access routes (blood vessels) in the body:

- Transfemoral – through a small cut (incision) in the femoral artery, the main artery in your groin which leads back to the heart (most common route).
- Subclavian/axillary – through a small incision under your collarbone to the artery leading back to the heart.
- Transcaval – through a small cut in your groin and then a more complex route through the main blood vessels in the body.
- Transapical – through a small cut on the left side of your chest to get to the apex (tip) of your heart.
- Transcarotid – through a small cut in the artery in your neck.

We will explain the access route we plan to use for your valve before you have your procedure.

Picture 3: One of the access routes (blood vessels) shown below will be used for your TAVI. Image courtesy of Medtronic.



Inserting the valve

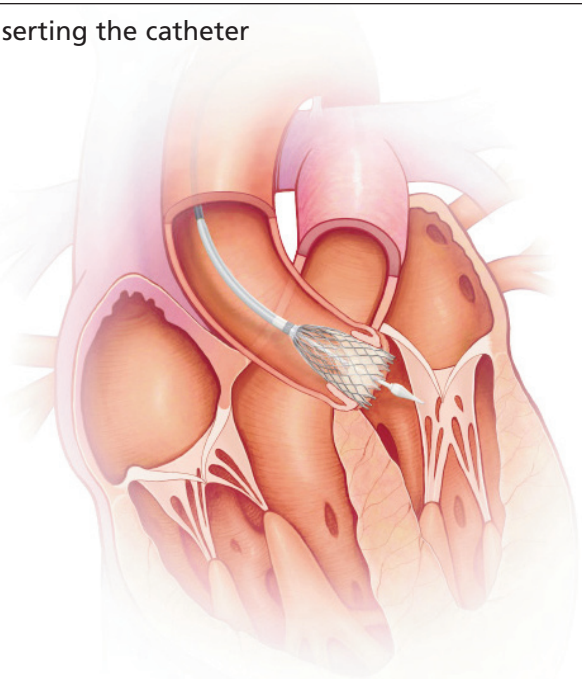
The doctors will make a small cut in your groin (Picture 3), under your collarbone or chest.

Thin flexible tubes (catheters) will be inserted in the blood vessel (access route) at the site of the cut. The tubes help the doctors see where to insert the new valve and allow them to access the heart. The tubes also provide a safe way for the doctors to give medicine during the procedure and allow a temporary pacemaker to be fitted, if needed.

Your new valve is put onto a catheter. The doctor then guides the catheter through the artery to your damaged aortic valve (Picture 4).

Once the catheter is in place, your new valve is expanded, and pushes your damaged valve out of the way.

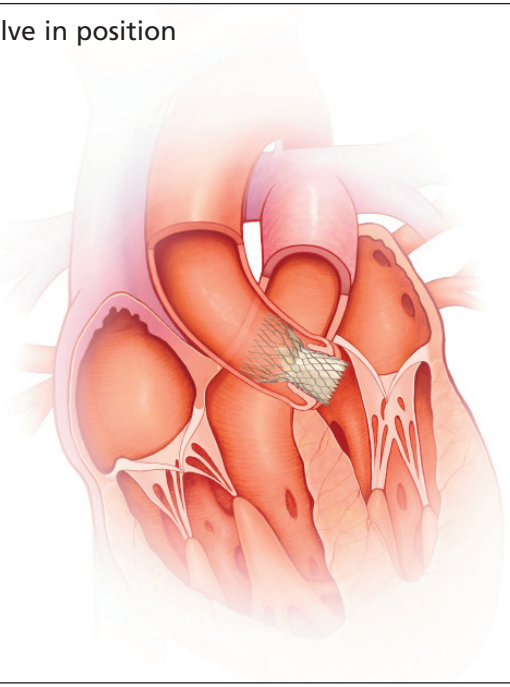
Picture 4: Inserting the catheter



The new valve (Picture 5) is stitched to a small expandable metal tube, called a stent, to hold it in place.

Your doctor will check that the new valve is working well, then remove the catheter and close the cut in your groin, chest or under your collarbone. The new valve and stent will stay in place for the rest of your life.

Picture 5: The valve in position



After your TAVI

After your TAVI you will go to the recovery unit for observation. You will have a drip (intravenous line) in your arm so you can have antibiotics and fluids. A heart monitor will continue to measure your heart rate and rhythm.

When you are well enough, we will transfer you to a ward. If you are not well enough to go to the ward, you may go to the intensive therapy unit or stay in the recovery unit.

You will have a dressing on the site where the catheter was inserted. You may have some bruising in the area, and it may feel a little tender. The dressing will be removed before you go home.

Visiting times

Please contact the ward that you are going to be admitted to for details of visiting times (see Useful contacts on page 28).

Going home after your TAVI

Most people go home 1 to 3 days after a TAVI. If there are any complications, you may need to stay in hospital a little longer. You will need to arrange for someone to take you home after your TAVI as you cannot drive for a month after the procedure.

When you leave hospital, you will be given a patient information leaflet called **Going home after transcatheter aortic valve implantation (TAVI)**. We will also give you an ID card with the name and type of your valve. You will need the ID card if you have an MRI (magnetic resonance imaging) scan in the future.

Follow-up care

If you feel unwell after your TAVI and think you need treatment urgently, contact your TAVI nurse or go to the nearest accident and emergency (A&E) department.

You will have a follow-up appointment after your TAVI as well as an echocardiogram to check how well your valve is working.

Remember: Royal Brompton and Harefield hospitals do not have accident and emergency (A&E) departments.

Improving your health

Exercises

We recommend that you do the following exercises both before and after having your TAVI procedure. Gradually increase the number of repetitions of each exercise to slowly build up your strength and balance.

1. Front-knee strengthener

You can do this activity while sitting watching TV or listening to the radio. Raise your leg straight out in front of you, then lift it 2.5cm (1in), hold for a slow count of 3, and then slowly lower it.

Repeat 5 times with each leg. Build up to 10 times per leg. If you want to test yourself further, try sitting away from the back of the chair, keeping a straight back.

2. Back-knee strengthener

Stand up straight in front of a bench or table. Bend one knee, bringing your foot slowly towards your bottom and hold for a slow count of 3. Keep the knee of your bent leg slightly behind the knee of the straight leg. Slowly return to starting position.

Repeat 5 times with each leg. Build up to 10 times with each leg.

Both of these knee exercises strengthen the large muscles in your thigh that help you stand up and sit down. Developing these muscles will help with walking and climbing stairs.

3. Sit to stand

Sit on the front third of a chair. Put your feet flat on the floor and then slide them back slightly. Lean forward over your knees, keeping your head and shoulders high, and push up through your heels into a standing position.

Try not to use your arms. Sit back down slowly.

Repeat 5 times, building to 10 times. This exercise will help you to get in and out of chairs more easily.

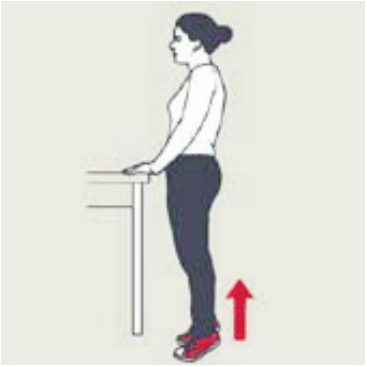
4. Knee bends

Facing a bench or table, place your feet shoulder width apart. Squat down about 10cm (4in) by slowly bending your knees. Return to starting position. Keep your back straight and do not push your knees out beyond your toes.

Again, repeat 5 times, building up to 10 times.

Hold each squat for longer as you become stronger. Knee bends strengthen muscles in your hips and thighs, improving balance. This will help you climb stairs, bend and walk.

5. Calf raises with support



Stand tall facing a bench or table with your feet hip-width apart. Slowly and with control, raise your heels off the ground. Hold for a slow count of 3, then lower your heels back to the ground.

Repeat 5 times, building to 10 times.

As your balance improves, try this exercise without holding onto the table. This exercise strengthens calf muscles and toe joints, making activities such as reaching high cupboards and hanging out washing easier.

6. Toe raises with support

Stand tall facing a bench or table with your feet hip width apart. Hold onto the bench and come back onto your heels, raising the front of your feet off the floor. Lower your toes back down. Keep your body as

straight as possible as you do this exercise.

Repeat 5 times, building to 10 times.

As your balance improves, try this exercise without holding onto the table. This exercise strengthens your lower leg muscles, making it easier for you to step backwards.

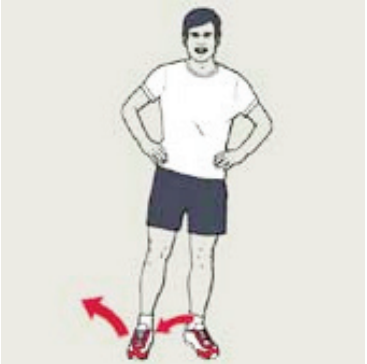
7. Side hip strengthener

Stand side-on to a bench or table. Place the nearest hand on the bench and slowly lift the opposite leg out to the side. Hold for a slow count of 3 and then return to starting position. Keep your body upright and only move your leg.

Repeat 5 times for each leg, eventually building to 10 times.

This strengthens hip muscles, helping with stepping up onto pavements and steps.

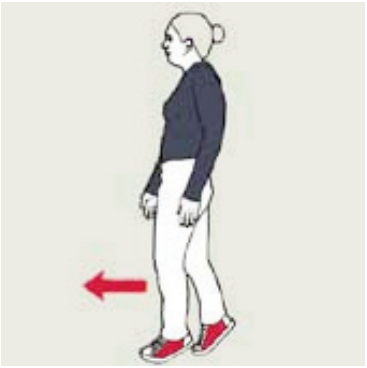
8. Sideways walking



Stand up tall with your hands on your hips. Take 10 steps to the right, pause, then take 10 steps to the left.

You can use a wall or railing to support yourself, if necessary. This activity will improve your sideways movements.

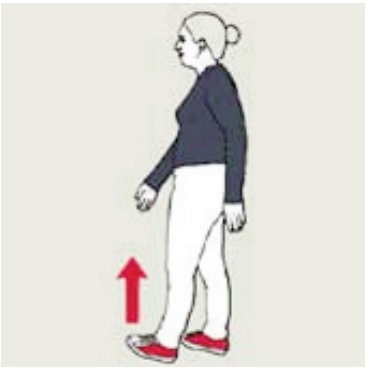
9. Toe walking



Please use a wall or railing to support yourself if necessary. Stand tall and look ahead. Slowly come up onto your toes. Walk 10 steps forward while up on your toes. Lower your heels and turn around. Stand up on your toes again and walk 10 more steps.

This exercise can improve balance, making tasks such as reaching high shelves easier.

10. Heel walking



Please use a wall or railing to support yourself if necessary.

Stand tall and look ahead. Come back onto your heels (as in exercise 6). Make sure your body stays straight and do not stick your bottom out. Slowly walk 10 steps on your heels. Lower your toes and turn around. Come back onto your heels and take 10 more steps.

Have a look at the British Heart Foundation's website for more information and a video of the above exercises.

www.bhf.org.uk/informationsupport/heart-matters-magazine/activity/strength-exercises

More information

If you have any questions, contact your TAVI clinical nurse specialist.

TAVI has been approved by the National Institute for Health and Care Excellence (NICE). You can find more details on the NICE website:
www.nice.org.uk/guidance/ipg421/informationforpublic.

General information on anaesthetics:
www.rcoa.ac.uk/node/3324

You can also watch a video online about having a TAVI procedure.

To access the video, scan the QR code (shown right) with your smartphone or tablet. Or use the web link shown below.
Web link to video:
www.explainmyprocedure.com/brompton/qr/tavi/

You then need to type in a password. The password appears in a printed version of this leaflet sent to patients having this procedure.

Useful contacts

Royal Brompton Hospital

TAVI clinical nurse specialists **020 7351 8110** or **020 7351 8371**
and ask for **bleep 1194** or **7344**
Monday to Friday, 8.30am to 4.30pm

South Parade visitor accommodation **020 7351 8044**

Outpatients **020 7351 8011**

York ward **020 7351 8592** (24 hours)

Paul Wood ward **020 7351 8598** (24 hours)

Harefield Hospital

TAVI clinical nurse specialists **01895 823 737** extension **85023**
Monday to Friday, 8.30am to 4.30pm

Parkwood House visitor accommodation **01895 828 823**

Outpatients **01895 828 695**

Oak ward **01895 828 667** or **01895 828 648**

Acorn ward **01895 828 121**

If you have any concerns about any aspect of the service you have received in hospital and feel unable to talk to those people responsible for your care, call Patient Advice and Liaison Service (PALS):

- Royal Brompton Hospital – 020 7349 7715
- Harefield Hospital – 01895 826 572

Or email gstt.rbhh-pals@nhs.net. This is a confidential service.

Royal Brompton Hospital
Sydney Street
London
SW3 6NP
Phone: 0330 12 88121

Harefield Hospital
Hill End Road
Harefield
Middlesex
UB9 6JH
Phone: 0330 12 88121

Website: www.rbht.nhs.uk

Royal Brompton and Harefield hospitals are part of Guy's and St Thomas' NHS Foundation Trust

إذا كنت ترغب في الحصول على ترجمة فورية لمضمون هذه الوثيقة إلى اللغة العربية، يرجى منك الاتصال بأحد مستخدمينا بجناح المصلحة التي يتم فيها استشفائك. أحد موظفينا سيسعى لترتيب إجراءات الترجمة وإتمامها في الوقت المناسب لك.

Brosurteki bilginin Turkçe tercumesi için tedavi goruyor oldugunuz bolume bas vurunuz. Bolum personeli tercumenin gerçeklesmesini en kisa zamanda ayarlacaktir.

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