

Aortic Stenosis

Valves of the heart open when the heart pumps to allow blood flow. The Aortic Valve controls the flow of blood as it exits the heart to be pumped around the rest of the body.



Normal aorta

Calcified aorta

Aortic Stenosis (AS) occurs when the valve does not open as it should. This can occur with: Age, Calcium build-up that narrows the aortic valve, Radiation therapy or Infection.

Left untreated, severe AS can lead to heart failure or sudden death.

What are the signs of AS?

The onset of symptoms may be gradual or abrupt and may include:

- breathlessness
- breathing problems worsened by physical activity
- coughing at night when lying down in bed
- fainting
- heart palpitations
- angina
- fatigue
- visual problems.

Complications can include:

- pulmonary oedema
- cardiomegaly
- heart failure
- heart arrhythmia

Who is affected by AS?

Around four in every 1,000 people are thought to have aortic stenosis. A build-up of calcium can stiffen the aortic valve and interfere with its proper functioning. This is the most common cause of aortic stenosis in people aged 70 years and over.

How is AS diagnosed?

- physical examination
- chest x-ray
- electrocardiogram (ECG)
- echocardiogram (ultrasound scan)
- cardiac catheterisation
- coronary angiogram

What is the treatment?

Surgical aortic valve replacement (SAVR) remains the gold standard for the treatment of severe AS. Until recently there were very limited options for those patients with severe AS and with a high risk for surgery. The Transcatheter Aortic Valve Implantation (TAVI) procedure is a viable option for these patients.

Transcatheter Aortic Valve Implantation (TAVI)

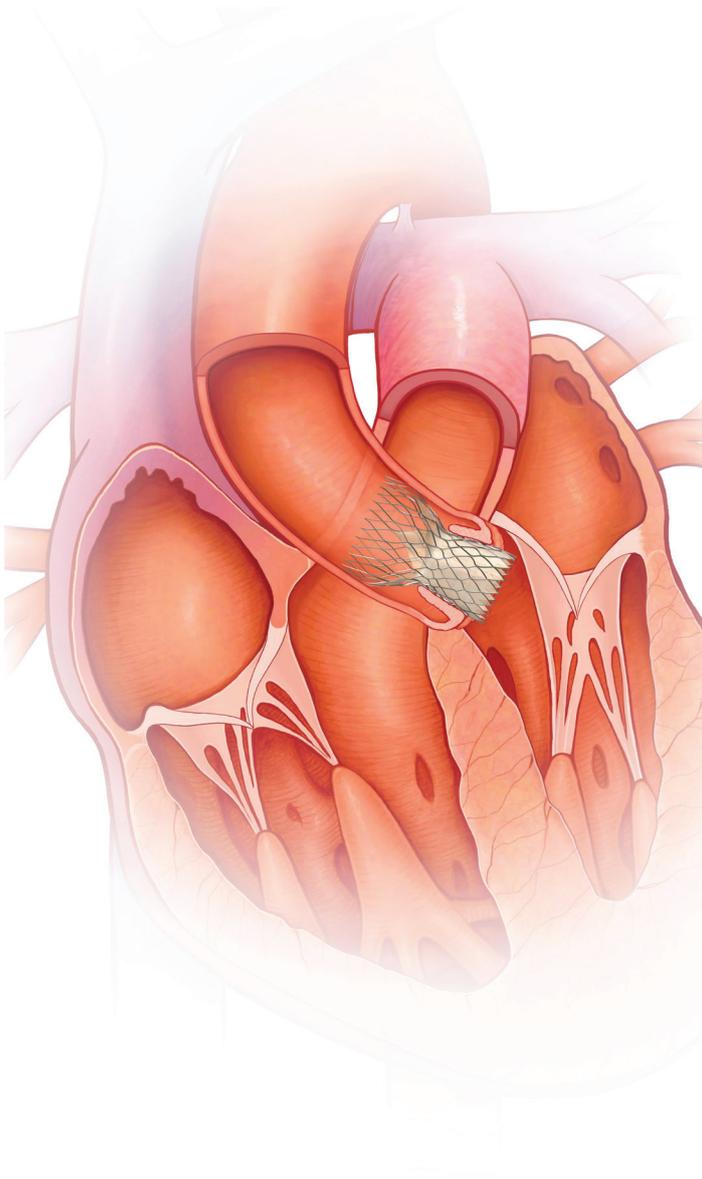
TAVI is an innovative way to treat severe AS. It is minimally invasive and is performed in our Cardiac Catheter Lab. It is most suitable for older patients at too high surgical risk for SAVR. It also allows patients to recover post operatively more quickly, with less pain and a shorter hospital stay.

In the TAVI procedure, the valve is squeezed down onto a balloon, inserted into the body via a catheter, and tracked to the heart for implantation. This can be done without opening the chest or using the heart-lung pump. The catheter may be inserted through the femoral artery or through a small incision in the chest over the heart. When the valve is positioned inside the faulty aortic valve, the balloon is inflated and the new valve is precisely positioned.

Our TAVI program commenced in 2011 and North Shore Private is one of only a few facilities that is credentialed to perform TAVI procedures. Our wealth of experience with this procedure is established, and we have completed over 200 TAVIs to date.

Continued overleaf...

Transcatheter Aortic Valve Implantation (TAVI)



How do I refer?

Call our Structural Heart Co-Ordinator on (02) 8425 3006. They will then make the necessary assessments and organise the TAVI workup process if appropriate.

Or referrals for potential TAVI patients can be made directly to our interventional cardiologists or cardiothoracic surgeons.



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