Empowering your journey: A patient's guide to shared decision making in valve replacement surgery

Edwards

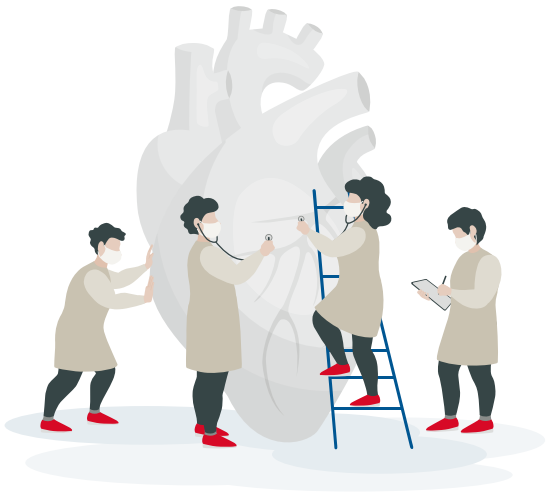
Why you are important in shared decision making

Your input in making decisions about your aortic valve treatment is **very important**.

- Sharing your goals and priorities in discussions helps you and your doctors find the best treatment plan that suits your individual situation
- The recent guidelines from experts **strongly recommend that doctors discuss** the different procedures and valve **options with their patients**[1]. It is important that you understand your options and get the chance to have a say in your treatment
- Your team of doctors will **explain the risks and benefits** of each option, **so that together you can decide on a treatment** that aligns with your values

What is valve replacement surgery, why is it necessary and who needs it?

Valve replacement surgery is a procedure whereby doctors replace a heart valve that is not working properly with a new one made of artificial materials or tissue. The goal of this surgery is to make sure that blood can flow smoothly through your heart again, just like it should and to improve your quality of life.



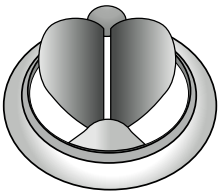
- **Valve replacement surgery** is necessary when a heart valve becomes severely damaged or diseased.[1] The surgery is performed to **allow blood to flow properly through the heart again, relieve symptoms and prevent further complications**
- If you have severe aortic stenosis, a condition where your aortic valve becomes very narrow and the blood flow through the valve is limited, **it is recommended that you have surgery to replace the valve**. This recommendation may apply to some patients who **do not experience symptoms** related to their condition[1]

We appreciate that you have been given a lot of information and may be feeling overwhelmed and worried. We are here to help you through this process, so please contact your doctor if you have any further questions.

What types of valves are used in valve replacement surgery?

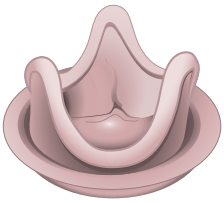
When it comes to valve replacement surgery, there are a few different options. The traditional method involves open-heart surgery, where a large incision is made. However, there is also the option of minimally invasive surgery with a smaller incision.

There are three main types of valves used in valve replacement surgery:



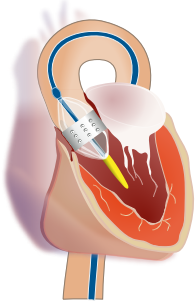
Mechanical valves (traditional open heart surgery, or minimally invasive surgery)

Mechanical valves, typically recommended for patients under 60, are constructed from durable materials like carbon or metal and can last a lifetime.[1] However, they carry a risk of blood clot formation. To mitigate this risk, lifelong use of blood-thinning medications is necessary. These medications minimise the likelihood of harmful blood clots on the new valve.[2]



Biological (tissue) valves (traditional open heart surgery, or minimally invasive surgery)

Biological valves, crafted from animal (often pigs or cows) or human tissue, have a lifespan of 15-20 years and may require replacement.[2] They are commonly advised for patients aged 65 and above.[1] Unlike mechanical valves, there is no necessity for long-term blood thinners.[2]



Transcatheter valves (no surgery)

Transcatheter valve replacement is an alternative for high-risk surgical cases. It involves inserting a thin, flexible tube called a catheter into an artery, typically in the upper leg, and guiding it to the heart to place a new tissue valve.[3] Transcatheter valves have a lifespan of up to 8 years and are commonly suggested for patients aged 75 and above.[1]

FAQs

What adjustments to my current lifestyle do I need to make?

This depends on which treatment you have. If you choose a mechanical valve, you may have to limit activities where there is a risk of bleeding because of the medication (blood thinners) you will have to take. Tissue valves do not require you to take blood thinners long-term.

Do I need to take daily medication for the rest of my life?

If you choose a mechanical valve, you will need to take blood thinners for the rest of your life. Tissue valves do not require lifelong blood thinners.

How quickly I can go back to work?

Depending on the type of work you do and which treatment you receive, this could be as soon as 6–8 weeks, or up to 3 months if your job is more strenuous.[4] For transcatheter valves the recovery is much faster (1–2 weeks) depending on the type of work.[2]

When can I engage in physical activities again?

Your doctor will give you specific advice after you have had your procedure, but you will need to take things easy at first and build up any activities gradually.

Can I go on holiday after TAVI?

After TAVI you won't be able to drive for at least 1 month and can only restart when your doctor tells you it is safe.[2]

If you are planning to fly you will need to check with your airline but it is usually safe to fly after about 10–14 days.[2]

Notes

References

1. Vahanian A, Beyersdorf F, Praz F *et al*. 2021 ESC/EACTS Guidelines for the management of valvular heart disease. *Eur Heart J*. 2022; **43:** 561–632.
2. British Heart Foundation. Heart valve surgery. 2022. Available at: https://www.bhf.org.uk/informationsupport/treatments/valve-heart-surgery.
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