

Heart Valve Repair or Replacement Surgery

Jianping Xiang*

Department of Cardiology, Artery Flow Technology Co., Ltd., Qianmo Road, Hangzhou, China

Commentary

The heart is a muscular pump that pumps blood around the body. It has two upper chambers, known as atria, and two bottom chambers, known as ventricles. Blood flows forward through the heart thanks to valves that connect each of the heart's pumping chambers.

- **Tricuspid valve:** The tricuspid valve is a type of valve that is found in the heart. Between the right atrium and the right ventricle is the right atrium.
- **Valve in the lungs:** The pulmonary artery is situated between the right ventricle and the pulmonary artery.
- **Mitral valve:** Between the left atrium and the left ventricle is the left atrium.
- **Valve of the aorta:** Between the left ventricle and the aorta is the aorta.

Valves that are damaged or diseased and do not function properly may need to be fixed or replaced. Valve stenosis (stiffness) and valve regurgitation are two conditions that can cause heart valve malfunction (leaky valve).

When one (or more) of the heart's valves become stenotic (rigid), the heart has to work harder to pump blood through it. Infections (such as rheumatic fever or staph) and age can restrict and stiffen the valves. Blood leaks backwards when one or more valves become leaking, resulting in less blood being pumped in the right direction. Your healthcare provider may decide that the defective valve(s) needs to be surgically repaired or replaced based on your symptoms and the overall state of your heart.

Open-heart surgery has traditionally been performed to repair or replace heart valves. This entails making a big incision in the chest and stopping the heart for a period of time so the surgeon may repair or replace the valve (s). To replace or repair heart valves, newer, less intrusive procedures have been developed. Minimally invasive surgeries require fewer incisions, resulting in less pain and shorter hospital stays.

Why might I need heart valve repair or replacement surgery?

The issues caused by one or more damaged heart valves are treated through valve repair or replacement surgery.

You may experience the following symptoms if your heart valves become damaged or diseased:

- Dizziness
- Pain in the chest
- Having trouble breathing

***Address for Correspondence:** Jianping Xiang, Department of Cardiology, Artery Flow Technology Co., Ltd., Qianmo Road, Hangzhou, China, E-mail: xiangj@gmail.com

Copyright: © 2021 Xiang J. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received 05 October 2021; **Accepted** 19 October 2021; **Published** 26 October 2021

- Palpitations
- Edema (swelling) of the feet, ankles, or abdomen is a common ailment (belly)
- Fluid retention causes rapid weight gain.

Your healthcare professional may propose heart valve repair or replacement surgery for various reasons.

What are the dangers of heart valve replacement or repair?

The following are some of the potential dangers of heart valve repair or replacement surgery:

- Bleeding before, during, or after operation
- Heart attacks, strokes, and lung issues can all be caused by blood clots.
- Infection
- Pneumonia
- Pancreatitis
- Breathing difficulties
- Heart arrhythmias (abnormal heart rhythms)
- The valve that has been fixed or replaced does not function properly.
- Death

How do I get ready for heart valve repair or replacement surgery?

Your healthcare professional will go over the procedure with you and answer any questions you may have.

- You will be asked to sign a consent form giving permission for the surgery to take place. If anything is confusing, read the form carefully and ask questions.
- Your healthcare practitioner may perform a comprehensive physical exam in addition to a complete medical history to ensure that you are in otherwise good health prior to surgery. Blood testing or other diagnostic tests may be required.
- Before the procedure, you will be advised to fast (not eat or drink) for 8 hours, usually after midnight.
- Inform your healthcare practitioner if you are pregnant or suspect you might be.
- If you are sensitive to or allergic to any drugs, iodine, latex, tape, or anaesthetic agents, tell your healthcare professional (local and general).
- Make sure your doctor is aware of all medications (including prescription and over-the-counter), vitamins, herbs, and supplements you're taking.
- If you have a history of bleeding disorders or are using any anticoagulant (blood-thinning) medications, aspirin, or other blood-clotting medications, tell your doctor. Before surgery, you may be told to cease taking some of these medications.
- Before surgery, your healthcare practitioner may do a blood test to evaluate how long it takes your blood to clot.

How to cite this article: Xiang, Jianping. "Heart Valve Repair or Replacement Surgery." J Cardiovasc Dis Diagn 9 (2021): 484.