Heart Valve Replacement

What is a heart valve replacement?

A heart valve replacement is a surgical procedure for replacing a valve in your heart with an artificial valve. It is done when you have a valve that is not working well.

When is it used?

The operation is done when one or more of the valves in your heart does not open or close all the way. Valves that don't work right put extra strain on the heart. A valve may not be working well because it is scarred by disease or because it was abnormal at birth.

This surgery is done only when:
- Medicines are not helping.
- Opening up abnormal valves (balloon valvuloplasty) or repairing them (surgical valvuloplasty) will not work.

How do I prepare for this procedure?

Plan for your care and recovery after the operation. Allow for time to rest. Try to find other people to help you with your day-to-day duties.

If you need a minor pain reliever in the week before surgery, choose acetaminophen rather than aspirin, ibuprofen, or naproxen. This helps avoid extra bleeding during surgery. If you are taking daily aspirin for a medical condition, ask your provider if you need to stop taking it before your surgery.

Follow instructions provided by your healthcare provider. Shower and wash your hair with a special anti-infective soap the night before the procedure. You will not be allowed to eat or drink anything after midnight before the procedure. Follow your provider's instructions about not smoking before and after the procedure. Smokers heal more slowly after surgery. They are also more likely to have breathing problems after surgery. For this reason, if you are a smoker, you should quit at least 2 weeks before the procedure. It is best to quit 6 to 8 weeks before surgery.

What happens during the procedure?

You will be given a general anesthetic. The drug will relax your muscles, put you in a deep sleep, and keep you from feeling pain.
The surgeon will make a cut (incision) in your chest and divide the sternum (the flat bone in the center of the chest). You will be connected to a heart-lung machine, which will take over the work of the heart and lungs during the operation. The surgeon will stop your heart and make a cut in it to reach the valve. He or she will remove the valve and replace it with an artificial one. In some cases the valve may be left in, with the artificial valve placed inside it.

Your surgeon will then close the cut in your heart, restart your heart, disconnect the heart-lung machine, and close the incision in your chest. Some tubes will be left in your chest to drain blood and fluid, which normally gather there or in the sac around the heart.

What happens after the procedure?

You will be in the intensive care unit for a few days. You may then go to a regular hospital bed. Your entire stay in the hospital may last 2 to 8 days. You may need to take anticoagulants (blood thinners) the rest of your life to prevent blood clots from forming on the artificial valve and causing a stroke or other problems.

Ask your healthcare provider if you should take antibiotics before having dental work or procedures that involve the rectum, bladder, or vagina. Ask your provider what other steps you should take and when you should come back for a checkup.

What are the benefits of this procedure?

Your heart may be able to work well again.

What are the risks associated with this procedure?

- There are some risks when you have general anesthesia. Discuss these risks with your healthcare provider.
- The new valve in your heart may not work quite right.
- Your kidneys and lungs may need temporary help after the operation.
- You may have mild problems with memory or thinking. You could have a stroke during or soon after the operation.
- The sac around your heart may become inflamed after the surgery and cause pain. You may need drugs to control pain. This may mean it takes you longer to heal and recover.
- You may have infection or bleeding.

There is risk with every treatment or procedure. Talk to your healthcare provider for complete information about how the risks apply to you.

**When should I call my healthcare provider?**

Call your provider right away if:
- You have a fever.
- You have redness, swelling, pain, or drainage from your incision.
- You become short of breath or notice swelling in your legs or ankles.
- You have chest pain.
- You have problems speaking or with your vision.
- You notice arms or legs feel numb or you cannot move them.

Call during office hours if:
- You have questions about the procedure or its result.
- You want to make another appointment.

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