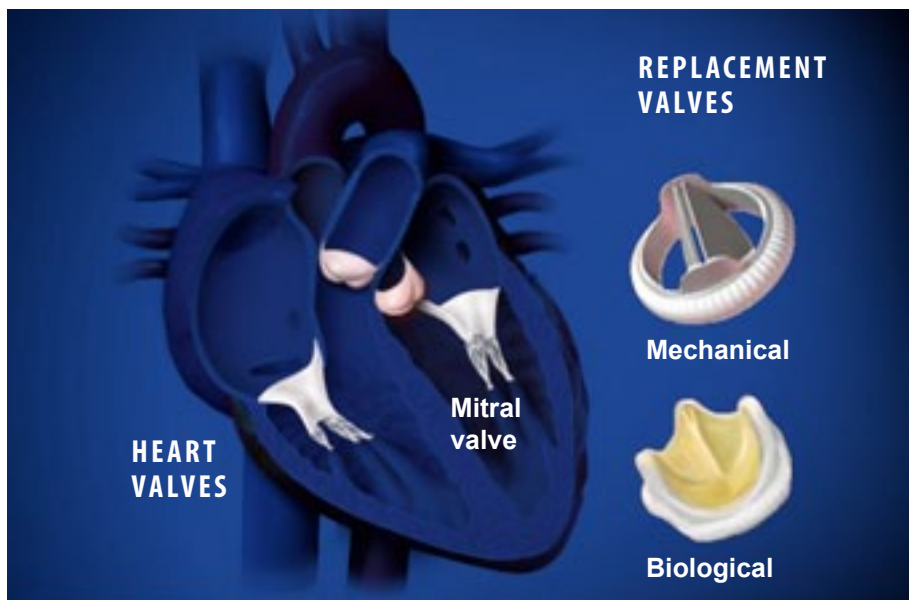


Port Access Valve Replacement Surgery



Overview

Heart valves regulate the flow of blood through the heart. If a poorly-functioning valve cannot be repaired, it may be replaced with a mechanical or biological valve. Any of the four heart valves can be damaged, but the mitral and aortic valves are the ones most frequently replaced. This animation will show the replacement of the mitral valve through a small opening in the patient's side.

Blood Flow Diverted

In preparation for the valve replacement, the surgeon diverts the patient's blood flow to a heart-lung bypass machine. The surgeon administers medication to stop the patient's heart. This will preserve the heart muscle during the surgery.

Replacing the Valve

The surgeon makes a small opening just below the armpit. The surgeon inserts a camera and surgical instruments through this opening and guides them to the mitral valve. The surgeon carefully detaches the valve and removes it from the heart. The surgeon sews the new valve into place.

End of Procedure

When the replacement is complete, the patient is taken off of the heart-lung machine. The small opening in the patient's side is bandaged.

After Care

After a valve replacement, the patient must take precautions to ensure the health of the heart. If a mechanical valve was implanted, the patient may need to take medication daily to prevent blood clots from forming on the new valve. Damaged valves, as well repaired valves, pose a lifelong risk of infection. Patients must inform their dentists and doctors about their history of heart valve disease and repair so appropriate steps can be taken to prevent valve infection.

