

MEDICAL BREAKTHROUGHS **RESEARCH SUMMARY**

TOPIC: ROSS HEART PROCEDURE LETS RAJ SAVE RAJ!
REPORT: **MB #4940**

BACKGROUND: Open-heart surgery is any type of surgery where the chest is cut open and surgery is performed on the muscles, valves, or arteries of the heart. According to the National Heart, Lung, and Blood Institute, coronary artery bypass grafting is the most common type of heart surgery done on adults. During this surgery, a healthy artery or vein is grafted to a blocked coronary artery. This allows the grafted artery to “bypass” the blocked artery and bring fresh blood to the heart. Open-heart surgery is sometimes called traditional heart surgery. Today, many new heart procedures can be performed with only small incisions, not wide openings. Therefore, the term “open-heart surgery” can be misleading.

(Source: <https://www.healthline.com/health/open-heart-surgery#when-it's-needed>)

CURRENT TREATMENT: Thoracic endovascular aortic repair or TEVAR is a procedure to treat an aneurysm in the upper part of your aorta. The aorta is your body’s largest artery. An aneurysm is a weak, bulging area in the aorta wall. If it bursts it can be deadly. TEVAR is a minimally invasive surgery. That means it is done with a small cut. With TEVAR, a device called a stent graft is used to reinforce the aneurysm. A stent graft is a metal tube covered in fabric. It helps prevent the aneurysm from bursting. Ask your healthcare provider to tell you what you should do before TEVAR.

(Source: <https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/thoracic-endovascular-aortic-repair>)

NEW TECHNOLOGY: The Ross procedure is an operation that essentially is aimed at trying to restore patients' long-term survival and quality of life whenever they have disease of the aortic valve that requires replacement. The pulmonary valve is usually under less stress because the right pumping chamber doesn't need to generate as much force to push blood to the lungs. A replacement valve can be more likely to succeed in the pulmonary position because demand on this valve is less. Even after the pulmonary valve is moved into the aortic valve position, it can continue to grow normally in a child who is not fully grown. It also can handle the high volume of blood flow from the lower pumping chamber out to the body. There is generally no need for long-term medication either.

(Source: <https://www.heart.org/en/health-topics/heart-valve-problems-and-disease/understanding-your-heart-valve-treatment-options/ross-procedure>)

FOR MORE INFORMATION ON THIS REPORT, PLEASE CONTACT:

ILANA NIKRAVESH
347-852-3382
ILANA.NIKRAVESH@MOUNTSINAI.ORG

If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com