Animation of Minimally Invasive Robotic Mitral Valve Repair Surgery

To view the accompanying video of this transcript, go to: http://www.uchospitals.edu/specialties/heart/services/valve-disease/surgical.html

Featuring:
Valluvan Jeevanandam, MD
Professor and Chief, Section of Cardiac & Thoracic Surgery

Unlike traditional mitral valve repair surgery in which the sternum is cut and spread open, in a minimally invasive robotic mitral valve procedure, the surgeon manipulates a highly advanced robotic tool and makes only tiny incisions. The robotic arms are inserted through the side of the chest, which is even closer to the heart than if we opened the sternum. We make keyhole incisions for the surgical arms, camera and access tube. The tiny camera provides a view of the diseased valve.

We see that the valve is oversized, misshapen and doesn't close properly, which allows blood to leak backwards. We remove the misshapen portion of the valve, and reconstruct it with sutures. We insert an artificial ring to reduce its size. We sew the ring into place, and the valve now closes properly, so blood no longer leaks back. After the procedure, only a few dime-sized scars remain, instead of the six- to eight-inch scar in the middle of the chest associated with open-heart surgery.

To view more heart videos featuring University of Chicago physicians and patients, visit: http://www.uchospitals.edu/specialties/heart/video/index.html

To request an appointment with a University of Chicago Medical Center physician, visit our Web site at www.uchospitals.edu or call toll-free, 1-888-UCH-0200.