

The Beat Goes On



WORKING WITH YOU

The cardiovascular surgery team at Rush encourages the referral of complex medical and surgical cases requiring a comprehensive and coordinated care plan. We are committed to providing you ongoing, up-to-date information and to working closely with you to produce the highest level of care for your patients.

Robert S.D. Higgins

Robert S.D. Higgins, MD
Chairperson, Department of Cardiovascular-Thoracic Surgery

Successful Mitral Valve Repair

Specializing in Complex Cases

Here at Rush, we like the challenge of complex cases. We have highly trained specialists and the resources of a major academic medical center that enable us to treat your patients with complex needs, and then return them to your care.

Presentation:

Mr. O., a 24-year-old male with a history of renal failure and congestive heart failure, was referred to Rush University Medical Center for evaluation. He was unable to walk more than a half block without becoming short of breath. He needed kidney dialysis daily in order to keep his lungs clear enough to allow him to perform daily functions. His brother was willing to donate a kidney; however, prior to coming to Rush, Mr. O. was evaluated and told that because of his heart condition, he could not be considered for kidney transplantation.

Treatment:

Mr. O.'s nephrologist referred him to Rush, where he was found to have severely diminished heart function with an ejection fraction of 10 to 15 percent. His mitral valve was leaking severely. He was on the best available medical therapy to try to treat his heart failure. However, it was clear that Mr. O. could not get a kidney transplant or improve the quality of his life unless his valve could be repaired.

Because his heart function was so weak, Mr. O.'s underlying cardiac disease and his general medical condition were carefully considered by the comprehensive team of cardiologists, surgeons and renal failure specialists at Rush before deciding to repair the mitral valve. He underwent repair of the mitral valve by a team of cardiovascular specialists led by Robert Higgins, MD, chairperson of the Department of Cardiovascular-Thoracic Surgery, and James Calvin, MD, director of the Section of Cardiology. The valve repair, which involved a quadrangular resection with an annuloplasty ring, improved the function of the valve and subsequently the underlying function of his heart.

After the surgery, he required extensive medical therapy for several days until his heart recovered, including an intra-aortic balloon pump, inhaled nitric oxide, kidney dialysis and a variety of other supportive measures to improve the function of his cardiovascular system. Over the course of a week, Mr. O. demonstrated slow and steady improvement in his heart and lung function and was able to return home after discharge.

Conclusion:

Six months after his operation, Mr. O. resumed a normal, active lifestyle, though he still needs regular dialysis. Back in the care of his referring physician, Mr. O. is preparing for the kidney transplantation, with his brother standing by to donate one of his kidneys.



Drs. Higgins (middle) and Calvin (right) review echocardiography of complex patients with cardiology fellow David Chawla.



Quadrangular resection and annuloplasty ring in mitral valve repair.

Please call (312) 563-2762 for a consultation with a cardiovascular surgeon, an appointment or additional information.