

Researchers shine light on common heart complication after lung transplantation

May 26 2016

Cardiac arrhythmia is a common complication following lung transplantation, and one that has a significant negative impact on long-term patient survival, reports a team of UPMC researchers in the largest study of its kind to date. The results, published online this week in the *Journal of Thoracic and Cardiovascular Surgery*, provide critical information that will hopefully lead to better care of transplant recipients.

Arrhythmia, a rapid and irregular heartbeat, can lead to chest pain, stroke and heart failure. In addition, the blood-thinning drugs often used to treat atrial fibrillation, the most common type of [arrhythmia](#), carry risks of heavy bleeding.

"Arrhythmias present a lot of challenges for both physicians and patients. After noticing this complication in many of our lung transplant recipients, we decided to investigate how often and when it was happening, as well as any risk factors," said lead researcher Jonathan D'Cunha, M.D., Ph.D., associate professor, Department of Cardiothoracic Surgery, University of Pittsburgh School of Medicine, and chief of Lung Transplantation, Department of Cardiothoracic Surgery, UPMC. "Now that we have a better understanding of these events, we can develop a standardized treatment plan, and better educate patients in advance."

Performing 70 to 100 lung transplants per year, UPMC is one of the leaders for this procedure in the nation. In the new study, researchers

examined the medical records of 652 UPMC patients who underwent a single or double lung transplant between 2008 and 2013.

They found that about 30 percent of patients developed arrhythmia, most often during the first week following surgery. Risk factors for a postoperative arrhythmia included being older and having had a previous heart surgery.

Researchers also found [transplant recipients](#) who developed an arrhythmia were 1.6 times more likely to die within 5 years than those who didn't, a finding Dr. D'Cunha attributed more to the potential complications of treating arrhythmia than the abnormal heart beats themselves.

"Our study suggests that we may need to treat patients with blood thinners only for a short amount of time—until they are out of the window of highest risk—which will hopefully improve long-term outcomes," Dr. D'Cunha explained.

In addition, because arrhythmia after [lung transplant](#) can be an anxiety-provoking experience for patients, the findings will allow surgeons to better prepare patients and families for what to expect.

"Most importantly, based on the results of this study, we can now predict, with a reasonable degree of certainty, when arrhythmia will happen," Dr. D'Cunha said. "This allows us to begin to standardize our treatment approach and improve patient care in the postoperative setting."

Provided by University of Pittsburgh Schools of the Health Sciences

Citation: Researchers shine light on common heart complication after lung transplantation (2016,

May 26) retrieved 25 April 2024 from <https://medicalxpress.com/news/2016-05-common-heart-complication-lung-transplantation.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.