

World Congress on

Cardiology and Cardiac Surgery

May 16-17, 2018 | Montreal, Canada

Is previous heart surgery a risk factor for heart-lung-transplantation?

Lale Hakami, Christian Hagl, Nikolaus Haas, Anja Lehner, Sarah Ulrich, Robert Dalla Pozza and Anna Muehlbauer
Ludwig Maximilians University, Germany

Introduction: Since the 1980s, heart-lung transplantation has been an effective method for the treatment of cardio-pulmonary diseases. Heart-lung transplantation is often the last choice to prolong the life or improve the quality of life of patients with complex congenital heart disease (CCHD) with “Eisenmenger-reaction” and pulmonary arterial hypertension. Especially in patients with CCHD, who underwent previous operations (group-A) and without any previous operation in group-B and were in end stage cardiopulmonary failure.

Methods: The study examined 51 patients, who were heart-lung transplanted in our hospital. We compared the patients into two groups: Group I in children younger than 18 years and Group II in adults older than 18 years. Particular postoperative parameters were collected by the inspection of files. Using the Chi-square test the significance of the results was shown. Survival is shown in Kaplan Meier curves and checked with the Log-Rank test.

Results: Among the 51 patients, there are 17 children and 34 adults. In the adult population, the incidence of congenital heart disease is dominant. In the children sample, there are also patients with pulmonary arterial hypertension. Fifteen with CCHD were in group-A, (4 children and 11 adults). The overall survival of the patients with a previous operation was 0.16 years in the median. The survival of group-B was in the median 8.03 years (p-value: 0.027). Six of the 15 group-A died within the first 30 years. In the group-B, four out of 36 died (p-value: 0.018).

Discussion: In the Chi-square test, a significantly higher 30-day mortality rate for the patients with previous operation. On the one hand, this could be caused by complicated anatomy and strong adhesions. On the other hand, there is a significantly higher rate of postoperative bleeding and early complications after heart-lung transplantation in the patients group with a previous operation, which could also be a cause for the higher 30-day mortality. In addition, the sample shows a clear advantage of the patient group with no previous operation in relation to the overall survival.

Biography

Lale Hakami has her expertise in Pediatric Cardiac Surgery in infants and newborn. She is a German-Board-Certified Cardiac Surgeon with a sub specialization in Pediatric Cardiac Surgery. From 2006-2008, she was the Junior Consultant of the Congenital Heart Surgery at the University Hospital Erlangen/Germany. From 2008-2009, she was Research Fellow at the Children's Hospital Boston, USA. From 2009 to 2011, she was the Director of Pediatric Cardiac Surgery in Mainz, Germany. From 2011-2014, she was the Senior Consultant in Children Heart Center in Linz, Austria. From 2014, she has been the Senior Consultant at the University Hospital Munich, Germany and University Lecturer of Pediatric Cardiac Surgery at Ludwig Maximilians University (LMU) Munich, Germany. Her particular experience is in single ventricle physiology and heart transplantation in infants and newborn.

lale.hakami@med.uni-muenchen.de

Notes: