Cystic Fibrosis Research News

Title:
LONG-TERM WORK PARTICIPATION AMONG CYSTIC FIBROSIS PATIENTS UNDERGOING LUNG TRANSPLANTATION

Authors:
Katelyn Krivchenia, MD; Don Hayes, Jr., MD, MS; Joseph D. Tobias, MD; Dmitry Tumin, PhD

Affiliations:
The Ohio State University College of Medicine, 370 W. 9th Ave, Columbus, OH 43210, United States:

- Department of Pediatrics
- Anesthesiology & Pain Medicine
- Internal Medicine and Surgery

Nationwide Children’s Hospital, 700 Children’s Drive, Columbus, OH 43205, United States:

- Center for the Epidemiological Study of Organ Failure and Transplantation
- Department of Anesthesiology & Pain Medicine and Section of Pulmonary Medicine

What was your research question?
Which people with cystic fibrosis are more likely to return to work after a lung transplant?

Why is this important?
Lung transplant treats severe lung disease in people with cystic fibrosis. People who return to work after a lung transplant report feeling healthier and having a better quality life compared with people who do not return to work. It is important to understand the barriers to work after lung transplant which may exist.

What did you do?
We used the United States organ transplant registry to investigate work participation among people with cystic fibrosis who received a lung transplant and lived 5 or more years. We tested how lung function, body mass index (weight), need for oxygen, age, work history before transplant, education level, insurance status, and health problems after transplantation were related to the chances of working 5 years after transplant.
What did you find?
Almost half of the people in the study were working 5 years after their lung transplant. People who had private health insurance and people who had a job before their transplant were more likely to be working 5 years after transplant. Generally, younger age males, and better lung function after the transplant were the key indicators related to a better chance of employment after transplant.

What does this mean and reasons for caution?
Receiving a lung transplant treats the lung disease in cystic fibrosis. After lung transplant, people no longer need chest therapies, most inhaled medications, or hospital stays for intravenous antibiotics. Despite treating the lung disease, however, half of the people studied were not working 5 years after transplant. Use of public health insurance and unemployment before transplant may make it harder to find work afterwards. In the United States, patients making too much money may be at risk of losing their public insurance benefits. We should be cautious about this conclusion because this study was not designed to analyse this effect. We are not able to see which patients were looking for work but who were still unemployed. Also, not every barrier to working after transplant may apply to each individual undergoing this procedure.

What’s next?
Education and social support are important for people with cystic fibrosis who are planning to have a lung transplant. Recent insurance reforms in the United States provide an opportunity to improve the quality of public health insurance and protect more comprehensive insurance coverage for people going back to work after a transplant.

Original manuscript citation in PubMed