primary studies - published, non RCT

Use of lung transplantation survival models to refine patient selection in cystic fibrosis.

Code: PM15695493 **Year:** 2005 **Date:** 2005 **Author:** Liou TG

Study design (if review, criteria of inclusion for studies)

Cystic Fibrosis Foundation Patient Registry, retrospective study

Participants

845 lung transplant recipients from 1991-2001, and 12,826 control patients from 1997.

Interventions

Lung transplantation

Outcome measures

Cox proportional hazards models to identify variables that influence post-transplantation survival. To estimate the survival benefit of transplantation for patients affected by identified variables, Kaplan-Meier survival curves of transplanted and control patients stratified by 5-year predicted survival.

Main results

Post-transplantation survival improved annually. Youth, Burkholderia cepacia, and cystic fibrosis-related arthropathy increased the post-transplantation hazard of death. Compared with control subjects, transplanted adults with a 5-year predicted survival of less than 50% without B. cepacia or arthropathy have improved survival. Transplanted adults with B. cepacia, arthropathy, or a 5-year predicted survival of greater than 50% have decreased survival. Transplantation never improves survivorship for pediatric patients. Patients with arthropathy, B. cepacia infection, or younger age derive no aggregate survival benefit and must appraise carefully the high risk of decreased post-transplantation survival. Adult patients with low 5-year predicted survival without B. cepacia infection should receive priority for lung transplantation.

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See also

Am J Respir Crit Care Med. 2005 May 1;171(9):1053-9. Epub 2005 Feb 1.

Keywords

Lung Transplantation; non pharmacological intervention - surg; Respiratory Insufficiency; Respiratory Tract Infections; transplantation; Infection; Respiratory Tract Diseases;