Lung Transplantation in Acute Rehabilitation:

A Descriptive study

Nicolosi C,BS, Park A, MD, Wyrwa DO J, Forster J, PhD & Niehaus MD, W.

Introduction

- Patients who have undergone a lung transplant are at high risk for debility with a median survival less than 6 years. A subset of these patients cannot go home immediately after hospitalization.
- Of late, 30-day survival and one-year survival rates have increased due to pre/post transplant rehabilitation. ¹⁻⁴
- Predictive measures such as 6-minute walking distance, pre-transplantation factors, and acute hospitalization are some of the many factors leading to acute rehabilitation admission. ^{3,5}
- It is unclear what the functional gain of a lung transplant patient is during an inpatient rehabilitation stay.

Methods

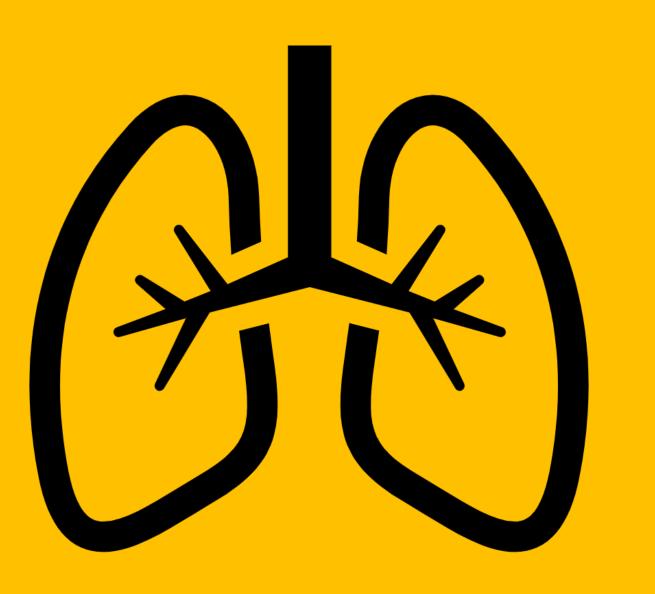
- A retrospective chart review was performed on 21 subjects who received a lung transplantation from January 2003- July 2018 and were admitted to acute rehabilitation.
- Functional Independence Measure(FIM)
 demographic data, disease specific information
 and acute hospitalization data were also
 collected.

Results.

- In the rehabilitation unit the median length of stay was 10 days and length of stay efficiency was 3.1. Median admission FIM scores were 72 with a total change of 34. The majority of the FIM score change was due to Motor FIM gains
- From acute rehabilitation, 80% of patients were discharged to a community setting.

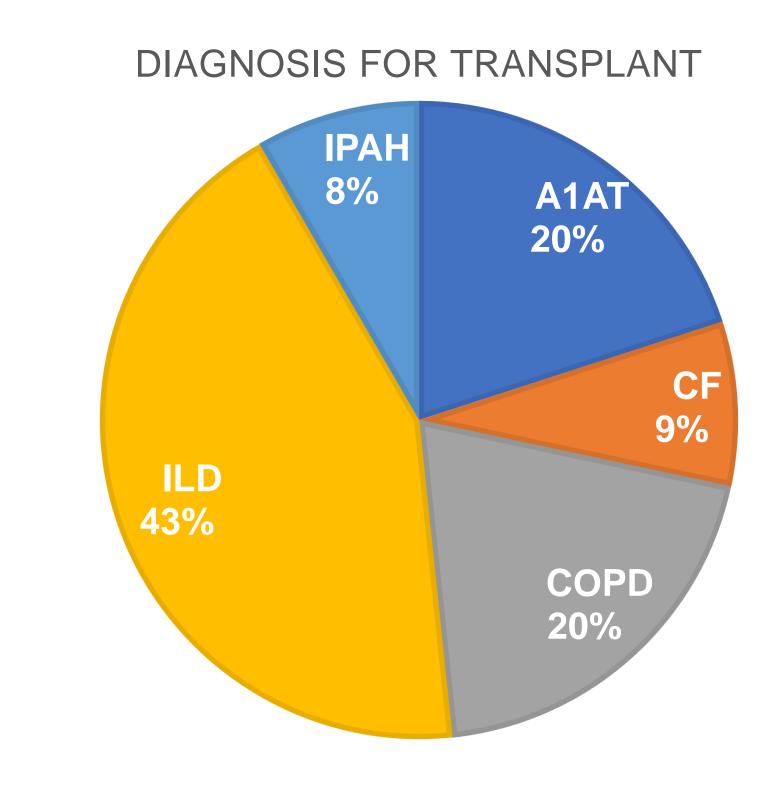
Discussion

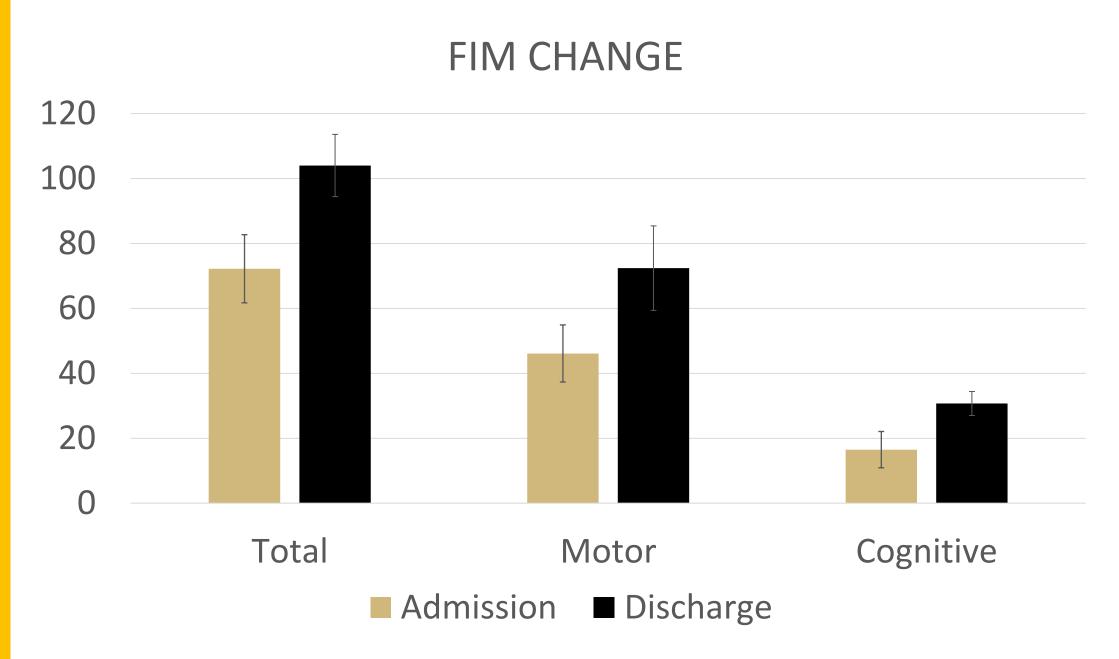
 A subset of patients with lung transplantations could be good candidates for acute rehabilitation since this group showed good motor improvement in a reasonable amount of time and were discharged to the community setting.



A group of patients recovering from lung transplantation improved their functional independence with acute inpatient rehabilitation and, most were discharged to the community.







References:

- 1. Yusen RD, Edwards LB, Kucheryavaya AY, Benden C, Dipchand AI, Goldfarb SB, et al. The Registry of the International Society for Heart and Lung Transplantation: Thirty-second Official Adult Lung and Heart-Lung Transplantation Report—2015; Focus Theme: Early Graft Failure. J Heart Lung Transplant. 2015 Oct;34(10):1264–77.
- Hatt K, Kinback NC, Shah A, Cruz E, Altschuler EL. A Review of Lung Transplantation and Its Implications for the Acute Inpatient Rehabilitation Team. PM R. 2017 Mar;9(3):294–305.
 Kelm DJ, Bonnes SL, Jensen MD, Eiken PW, Hathcock MA, Kremers WK, et al. Pre-transplant wasting (as measured by muscle index) is a novel prognostic indicator in lung transplantation. Clin Transplant. 2016;30(3):247–55.
- 4. Langer D. Rehabilitation in Patients before and after Lung Transplantation. Respiration. 2015;89(5):353–62.
- 5. Wickerson L, Rozenberg D, Janaudis-Ferreira T, Deliva R, Lo V, Beauchamp G, et al. Physical rehabilitation for lung transplant candidates and recipients: An evidence-informed clinical approach. World J Transplant. 2016 Sep 24;6(3):517–31.

For a complete list of our references, please scan the QR code to the left!





The authors of this study have nothing to disclose.