
Session Title: Transplanting Evidence into Practice - a Review of Evidence for PT in Heart and Lung Transplant

Session Description

While strong evidence exists for some aspects of physical therapy care in patients undergoing heart and lung transplantation (1, 8, 12), areas where evidence is lacking, or does not exist, remain. Most notably, these gaps exist for acute and critical care intervention including in the pre- and post-operative phases in this setting. Physical therapists are well suited to engage in the discussion of transplant candidacy and intervention, bringing a functional perspective to what is often a medically complex situation. This presentation will summarize the current evidence for physical therapy patients undergoing heart or lung transplant and utilize the discussion format in order to illustrate how to continue to provide specialist level care in situations where the evidence does not exist. We will present and discuss cases for heart transplant, bilateral lung transplant, and multi-organ transplant. This discussion will include specific impairments and challenges common with heart and lung transplantations; evidence-based interventions for those impairments; recommended outcome measures; and more.

Teaching Method

Lecture

Discussion

Case Studies

Objectives:

1. Attendees will be able to demonstrate understanding of, and applicability for, pre-transplant physical therapy assessment.
2. Attendees will be able to summarize and apply the latest research regarding evidence-based practice for physical therapy interventions in heart and lung transplant populations.
3. Attendees will be able to describe potential considerations for, and barriers to, communication with an interdisciplinary transplant management team with real world case examples in lung and heart transplant populations.
4. Attendees will participate in a discussion to enhance clinical reasoning in the setting of complex patient transplantation.

What will be the clinician/educator takeaways/skills that can be utilized immediately?

Attendees will have improved understanding of evidence based practice specific to heart and lung transplant patients. They will have the capacity to advocate for change in their respective clinical settings related to the physical therapy assessment and intervention of patients undergoing heart and lung transplant.

Advanced

Recommended Content Level

References:

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- Transplantation. *Curr Transplant Rep.* 2021;8(2):118-126. doi:10.1007/s40472-021-00326-1
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 11. Fuller LM, Poulsen M, Button B, Robinson R, Snell GI, Burge A. Urinary Incontinence - Incidence, Associations and Effect of Lung Transplant. *J Heart Lung Transplant.* 2020;39(4, Supplement):S492. doi:10.1016/j.healun.2020.01.070
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 13. Wickerson L, Rozenberg D, Helm D, Gottesman C, Mathur S, Singer LG. Short Physical Performance Battery Scores at Lung Transplant Assessment: Relationship to Early Transplant Outcomes and Response to Pre-Habilitation. *J Heart Lung Transplant.* 2020;39(4):S208-S209. doi:10.1016/j.healun.2020.01.828
 14. Macdonald P. Frailty of the Heart Recipient. *Transplantation.* 2021;105(11):2352-2361. doi:10.1097/TP.0000000000003692
 15. Jha SR, Hannu MK, Chang S, et al. The Prevalence and Prognostic Significance of Frailty in Patients With Advanced Heart Failure Referred for Heart Transplantation. *Transplantation.* 2016;100(2):429-436. doi:10.1097/TP.0000000000000991

Speaker Bios:

Ari Farnsworth, PT, DPT graduated with her Doctorate of Physical Therapy from the Ohio State University and completed a Cardiovascular and Pulmonary Physical Therapy Residency at the University of Utah. She is the Vice Chair of Visibility and Awareness for the APTA CVP Academy and the Cardiopulmonary Lab Manager for the University of Utah's DPT Program. Ari is passionate about early mobility with medically complex patients in the ICU with a particular interest in working with transplant patients and patients with simultaneous neurological and cardiovascular diagnoses. She has also presented at national and international conferences on topics of cardiovascular and pulmonary rehabilitation.

Bryan Lohse PT, DPT, Board-Certified Specialist in Cardiovascular and Pulmonary Physical Therapy is originally from Tucson, Arizona and received his undergraduate degree in Health Sciences from the University of Arizona before moving to Utah to complete his DPT program at the University of Utah. Since graduating, Bryan has worked at the University of Utah hospital and became one of the first ICU-dedicated therapists at the hospital. Bryan's time on the ICU has been spent advocating for the growing role of therapies on the ICU, specifically with the cardiac patient

population. He is the therapy service line MCS educator and advanced practice specialist. He participates in the ICU's interdisciplinary team, Heart Transplant/VAD selection weekly meeting. He has both presented nationally and been involved in multiple publications converging topics related to therapy practice and/or the cardiovascular and pulmonary patient populations.

Max Hunter PT, DPT, Board-Certified Specialist in Cardiovascular and Pulmonary Physical Therapy is originally from Salt Lake City, Utah and received his undergraduate degree in Kinesiology and Doctorate of Physical Therapy from the University of Utah. After graduating, Max completed the inaugural Acute Care Residency at the University of Utah and has worked at the University of Utah Hospital in the Cardiovascular ICU since. In addition to his time working within the ICU, Max has also taken on teaching roles as an adjunct instructor for the University of Utah in their entry level DPT program in multiple courses with an applied emphasis on Acute Care and Critical Care PT as well as Early Mobility. He is also a mentor in both the Acute Care and Cardiopulmonary Physical Therapy Residencies. Clinically, Max has taken on the role of therapy staff representative to the pulmonary transplant program and is also a contributing member to the University of Utah's Acute Care Research Consortium.