



EMORY
UNIVERSITY
SCHOOL OF
MEDICINE

DIVISION OF
PHYSICAL THERAPY
OFFICE OF CONTINUING EDUCATION

***Beyond wake and walking –
Active rehabilitation in patients requiring advanced
mechanical circulatory support and ECMO***

Presented by:

Katelyn Whitlock, PT, DPT

2 Continuing Competency Hours

Presented live and recorded:

Saturday October 22, 2022

10:30 am – 12:30 pm

Course Description

Physical therapy for patients requiring advanced mechanical circulatory support (MCS) and Extracorporeal Membrane Oxygenation (ECMO) is a rapidly growing area of practice for ICU physical therapists. In addition to progressing ICU and advanced support practice for both cardiac and pulmonary conditions, the COVID-19 pandemic has necessitated increased utilization and longer durations of ECMO support in patients with COVID-related respiratory failure. While safe mobilization of patients on MCS and ECMO support has been documented, evidence-based guidelines for MCS and ECMO rehabilitation remain sparse. The speaker will review relevant lab values, sedation considerations, and potential challenges that physical therapists may be faced with while working with this population and provide tools to advocate for improved mobility practice. Experiences will be shared regarding initiating a program, gaining physician and surgeon buy-in, up-training therapy staff, and progressing the program with support from all ICU teams including medical, nursing, respiratory therapy, perfusion, and rehabilitation therapy teams. Case studies will be reviewed and patient outcomes discussed to provide examples of rehabilitation interventions to progress beyond “early mobility” with lessons and considerations for PTs in all areas of practice.

Objectives

By the end of the course the learner will be able to:

1. Understand basic principles of ECMO and advanced mechanical circulatory support, including the circuit and cannulation strategy, for the physiology of the patient.
2. Describe general considerations for mobilizing the MCS/ECMO patient including safety with the support system as well as ICU environmental considerations
3. Integrate the foundational physiology of MCS/ECMO and the underlying patient disease process with the principles of exercise and rehabilitation
4. Describe the ideal team and role delineation for safely mobilizing and rehabilitating an ECMO patient and review patient case examples

Instructor Biography

Katelyn Whitlock is a Board-Certified Cardiovascular and Pulmonary Clinical Specialist currently serving as one of the ICU physical therapists on the Heart Transplant, Lung Transplant, LVAD and ECMO team at Emory University Hospital. She graduated from Emory University's Doctor of Physical Therapy Program in May of 2018. Following her DPT she completed the Emory Acute Care Residency in 2019. Prior to her DPT she earned her bachelor's and master's degrees in Exercise Physiology from the University of Virginia. Recently she has joined the faculty at Brenau University teaching in the Doctor of Physical Therapy Program and has ongoing research and has presented locally and nationally in the areas of ICU Physical Therapy, ECMO and advanced mechanical support and COVID-19.