Departments of Physical and Occupational Therapy present

Rehabilitation Science Dissertation Defense

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Rehabilitation Science
Final Dissertation Defense

The decline in inspiratory muscles function in patients undergoing mechanical ventilation may extend their duration of mechanical ventilation use, predisposing them to increased rates of mortality and morbidity. Therefore, it is vital to assess the neuro-mechanics of inspiratory muscles during mechanical ventilation use to understand the pathophysiological mechanism underlying mechanical ventilation liberation failure.

In this dissertation, we described and explored the pathophysiological mechanism of respiratory neuro-mechanics under abnormal conditions. Our goal was to establish an understanding of how inspiratory muscles respond to ventilatory demand-supply imbalance. We found that reduced diaphragmatic efficiency is a predictor of mechanical ventilation liberation failure. Extra-diaphragmatic muscle efficiency did not distinguish between patients destined to succeed or fail MV liberation attempts in our cohort. These results introduce the use of neuro-mechanical indices which could provide helpful clinical guidance during the management of mechanical ventilation.

UAB SCHOOL OF HEALTH PROFESSIONS
The University of Alabama at Birmingham

EVENT DETAILS

Free to UAB students, faculty and clinicians.

DATE/TIME

Friday, July 2
9:00a-10:00a

LOCATION

SHPB 224
or
https://uab.zoom.us/j/93991998627

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For more information about the Rehabilitation Science Program please checkout our website: http://www.uab.edu/shp/home/graduate/doctoral/phd-rehabilitation-science