If You Can’t Breathe, You Can’t Function: Integrating Cardiopulmonary and Postural Control Strategies in the Pediatric and Adult Populations

Thursday-Saturday, October 11-13, 2018
Nechama Karman, PT, MS, PCS/Massery PT Certified Faculty

Location
Children’s Healthcare of Atlanta Office Park
1680 Tullie Circle, Atlanta GA  30329

Agenda

**Thursday (7.5 Contact Hours)  Open Enrollment**

- 7:30 a.m.  Registration & Continental Breakfast
- 8:00 a.m.  Lecture: Breathing and posture: Part 1 - Pressure control (Soda pop model)
- 10:00 a.m.  Break
- 10:15 a.m.  Lecture: Breathing and posture: Part 2 - The diaphragm
- 11:30 a.m.  Lunch (on your own)
- 12:30 p.m.  Lecture: Breathing and posture: Part 3 - The vocal folds
- 1:30 p.m.  Lecture: Normal and abnormal chest wall development and function
- 2:00 p.m.  Break
- 2:15 p.m.  Mini-lab: Positioning strategies: What can you do in 90 Seconds or less that has a profound and lasting effect?
- 3:30 p.m.  Mini-lab: Ventilatory/movement strategies: Integrating neuromuscular, musculoskeletal, respiratory and sensory systems
- 5:00 p.m.  Adjourn

**Friday (7.5 Contact Hours)  Limited Enrollment**

- 7:30 a.m.  Continental Breakfast
- 8:00 a.m.  Lecture/Demonstration: Chest assessment: Focus on musculoskeletal alignment and breathing patterns
- 9:30 a.m.  Break
- 9:45 a.m.  Lab: Assessing breathing patterns and postural implications
- 11:30 a.m.  Lunch (on your own)
- 12:30 p.m.  Lab: Chest assessment (continued)
- 1:00 p.m.  Lab: Facilitating efficient breathing patterns and endurance training: Neuromotor techniques for diaphragm, chest and other breathing patterns
- 2:00 p.m.  Break
- 2:15 p.m.  Lab: Facilitating breathing patterns (continued)
- 4:15 p.m.  Patient demonstration
- 5:00 p.m.  Adjourn

**Saturday (5.5 Contact Hours)  Limited Enrollment**

- 7:00 a.m.  Continental Breakfast
- 8:00 a.m.  Lecture/Discussion: recap patient demo using “Find the Problem” Chart
- 9:00 a.m.  Lecture: Airway clearance: From Sherlock to solution
- 9:45 a.m.  Break
- 10:00 a.m.  Lab: Airway clearance: Focus on manual assistive cough techniques
- 11:30 a.m.  Lunch (on your own)
- 12:15 p.m.  Mini-lab: Brief intro to musculoskeletal restrictions of thoracic spine/rib cage that impair breathing mechanics
- 1:00 p.m.  Lab: Enhancing breath support for phonation
- 2:00 p.m.  Lab: Group problem solving: Putting it all together
- 2:30 p.m.  Adjourn
**Target audience**
This conference is intended for Physical Therapists/Physical Therapy Assistants, Occupational Therapists/Certified Occupational Therapy Assistants and Speech Language Pathologists.

**Registration**

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<tr>
<th>Attendee Type</th>
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<tr>
<td>3 Day Attendee</td>
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<td>3 Day Attendee (CHOA employee discount)</td>
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<td>1 Day Attendee (CHOA employee discount—Thursday only)</td>
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Space is limited, register today at [https://events.eply.com/Breathe2018](https://events.eply.com/Breathe2018)

Contact [michelle.moore@choa.org](mailto:michelle.moore@choa.org) with any questions.

**Course description**
This course will challenge the practitioner to make a paradigm shift: connecting breathing mechanics and postural control with management of trunk pressures. Through her model of postural control (Soda Pop Can Model), the speaker will link breathing mechanics with motor and physiologic behaviors (a multi-system perspective). She will present novel research demonstrating the role of vocal folds as postural stabilizers, extending the concept of “core stability” from the vocal folds on the top of the trunk to the pelvic floor on the bottom. Numerous interventions will be presented that use positioning and ventilatory strategies to optimize motor performance. Neuromotor breathing retraining techniques and manual assistive cough techniques will be the focus of treatment labs. Multiple patient cases will be presented throughout the course. The emphasis of the course will be on developing practical, quick clinical solutions for pediatric and adult patients in all practice settings.

**Continuing Education**
Continuing Education Credits have been applied for through the Physical Therapy Association of Georgia (PTAG) for 20.5 contact hours for Physical Therapists. These credits may apply toward licensure in other states.

Direct contact hours have been applied for through the Georgia Occupational Therapy Association (GOTA) for 20.5 contact hours for Occupational Therapists. These credits may apply toward licensure in other states.

This program is offered for 2.05 ASHA CEUs (Intermediate level; Professional area)

**Instructor Disclosure**
Nechama Karman, PT, MS, PCS—Financial: Receives an honorarium from CHOA; Non-Financial: none
Course objectives

At the conclusion of Day 1, participants should be able to:

• Describe how trunk pressures link breathing and postural control using the Soda Pop Can Model.
• Describe the multiple, simultaneous roles of the diaphragm as related to breathing, postural control, gastroesophageal reflux, constipation, and venous return.
• Demonstrate the role of the vocal folds in normal postural stability responses (balance) and make the case for using speaking valves for patients with tracheostomies.
• Contrast normal infant chest wall development to those with impaired breathing mechanics.
• Position patients for optimal physiological and biomechanical support of breathing with simple equipment (towels, pillows, etc.).
• Use a ventilatory strategy algorithm presented in class to optimally match breathing with movements from bed mobility to athletic endeavors.

At the conclusion of Days 2-3, participants should be able to:

• Perform a multi-system (physical and physiologic) evaluation of motor impairments.
• Identify the variations of “normal” breathing patterns and discuss the efficiencies/inefficiencies for individual patient conditions.
• Evaluate need for, and demonstrate, appropriate neuromotor retraining techniques for patients with ineffective breathing/postural control strategies (health or participation deficits).
• Participate in a live patient demonstration (if a patient is available) and suggest possible evaluation and treatment ideas based on the course material.
• Design a targeted airway clearance program using the principles of mobilization, expectoration and oral management.
• Demonstrate airway clearance techniques, with a heavy emphasis on manual assistive cough techniques, and apply an airway clearance algorithm to specific patients.
• Identify thoracic cage/spine restrictions as they pertain to breathing mechanics and postural control (a very brief introduction musculoskeletal issues).
• Evaluate need for, and demonstrate, neuromotor retraining techniques to improve breath support for voicing.
• Suggest means for incorporating the course material into therapy activities in your clinical setting immediately.

Instructor

Nechama Karman received her MSPT from Columbia University in 1994, her Advanced MS in orthopedic PT from Touro College in 1998, and has completed her Health Sciences PhD coursework at Seton Hall University. She has held academic appointments at both Hunter College and NYIT, and is also an APTA board-certified pediatric clinical specialist.

Nechama is chief clinical educator at Mobility Research, providing pediatric and adult trainings, introductory and advanced seminars, webinars, and clinical support for LiteGait in the USA and internationally. She is a primary instructor in LiteGait’s "train the trainer" program. She also owns a private practice in New York City focusing on treating patients with complex neurological conditions and/or complex pelvic conditions.

Nechama has been a teaching assistant for Mary’s courses for over a decade and completed a 2-year faculty apprenticeship in 2016, becoming Mary’s first certified faculty member! One of Nechama’s proudest “Mary Massery” moments occurred when she treated a man suffering from prostatectomy-related incontinence using Mary’s approach. She taught him to transfer without incontinence for the first time in 9 months - all in under 15 minutes! She is passionate about helping other therapists learn these important concepts.

All programs are intended to be accessible to all persons. If you have a disability and require assistance in order to fully participate in the conference activities, call the conference coordinator to discuss your specific needs.

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