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ONLINE CONTINUING EDUCATION FOR THE LIFE OF YOUR CAREER

Using Principles of Yoga to Benefit the Adult Patient

Lisa Mechler, MA, CCC-SLP, RYT200

Moderated by:
Amy Hansen, MA, CCC-SLP, Managing Editor, SpeechPathology.com

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Using Principles of Yoga to Benefit the Adult Patient

Lisa Mechler, CCC-SLP, RYT200, RPYT

July 30, 2020

- Presenter Disclosure: Financial: Lisa Mechler was paid an honorarium for presenting this course. Lisa is a registered yoga teacher with the Yoga Alliance and receives financial compensation for her teaching. Non-financial: No non-financial relationships to disclose.
- Content Disclosure: This learning event does not focus exclusively on any specific product or service.
- Sponsor Disclosure: This course is presented by SpeechPathology.com.

Learning Outcomes

After this course, participants will be able to:

- Describe 2 simple movements to help facilitate respiration in adult patients/clients.
- Describe 2 yogic breathing techniques that can be used with adult patients/clients.
- List contraindications for use of breathing techniques.

Agenda

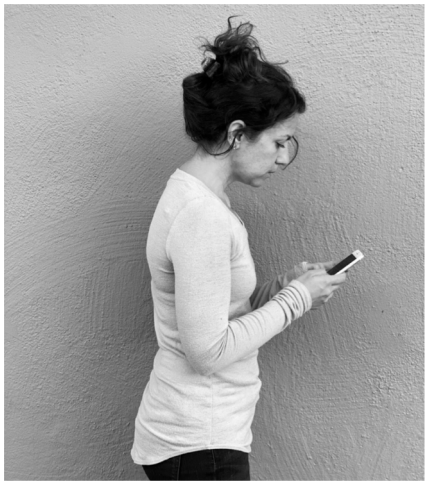
- Define Yoga
- Posture
- Pranayama
- Q&A

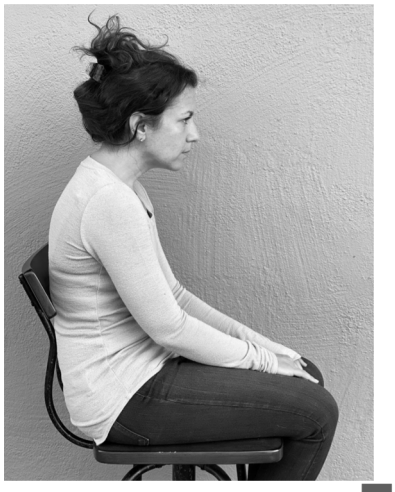
Yoga

- Sanskrit word for “union” or “reconnect”
- Strengthens the body-breath-mind connection
- Yoga is more than just poses
  - Pranayama
  - Asana
  - Meditation
- A fundamental principle of Yoga is breathwork

Posture

Head Forward Posture





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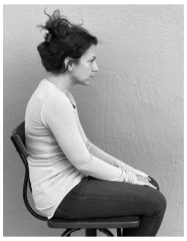
Head Forward Posture



- Head anterior to shoulders
- Shoulders rounded forward
- Results in decreased
  - Vital capacity
  - Forced expiratory volume at 1 sec
  - Anterior-posterior expansion of lower thorax during inhalation (abdominal breathing)
  - Use of accessory respiratory muscles (specifically sternocleidomastoid and pectoralis major)

Q1

CONTINUED

Ideal Posture

- Natural curvature of spine
- Ears over shoulders over hips
  - Ideal for breath support and abdominal breathing

Q2

Exercise

- Sit in a chair
  - Slouch forward, spine rounded, shoulders forward
- Take a few deep breaths
  - Try to expand chest and belly as much as you can
- Sit upright
  - Feet on floor, tip pelvis forward slightly
- Take a few deep breaths
  - Try to expand chest and belly as much as you can
- Notice the difference!

How to facilitate neutral posture

- Sitting up in chair or bed isn't automatically optimal position for breath support
  - Slight anterior tip of pelvis to facilitate neutral spine
  - Chair: elevate hips higher than knees
  - In bed: bend knees with support with bed or pillows
- Side stretches
- Chest openers
  - Encourage external rotation of shoulders to open chest

Q3

Demonstration

- Side stretches
- Chest openers

Pranayama

Pranayama

- Prana – "life force" or energy
- Ayama – to extend

- Exercises to control and/or extend the breath
- Many different pranayama exercises

Slowing the Breath

- Slowing breathing rate has been shown to:
  - Increase accuracy on working memory tasks
    - As compared to spontaneous breathing
  - Increase heart rate variability
    - Measure used to indicate stress levels
    - High heart rate variability indicates more resilience
  - Increase parasympathetic NS activity
  - Decrease perceived stress scales
- Research indicates 5.5 to 6 BPM at 1:1 ratio is ideal to attain physiologic benefits

Q4 Q5

Diaphragmatic Breathing

- Research indicates can be helpful for GERD
  - Improved subjective Quality of Life
  - Less belching
  - Decreased PPI use

Q9

Pranayama

- Fast and slow pranayama techniques have been shown to
  - Improve sustained attention
  - Improve working memory
  - Improve auditory and visual response times
  - Decrease perceived stress
- Slow Pranayama has been shown to
  - Decrease HR and systolic blood pressure in HTN patients

Q7

Slow Pranayama

- Utilizing the 3-part breath
  - Sukha pranayama
    - "easy" breath
    - 5 count inhale, 5 count exhale
  - Savitri pranayama
    - Rhythmic breath
    - 2:1:2:1
  - Pranava pranayama
    - Listening to the sacred sound of Om
  - Nadi Shodhana
    - Alternating nostril breathing

Nadi Shodhana

Alternating nostril breathing has been shown to:

- Lower systolic and diastolic blood pressures
- Improve forced vital capacity
- Improve forced expiratory volume at 1 second
- Improve peak expiratory flow rate

Q6

Demonstration

- Diaphragmatic breathing
- 3-part breath
- Nadi Shodhana

Q8

Contraindications

- Want to be cautious with our patients who are acutely ill
- Breath retention may lead to hypercapnia and/or hypoxia
  - Caution with patients with COPD
- Forced breathing (sometimes used in fast pranayama) should be used with caution if patient
  - Has high BP
  - Is at risk for bleeding (ie: hemorrhagic stroke)

Q10

Summary

- Head forward postures reduce breath parameters
- Want to encourage neutral spine for our patients
  - Movement through the shoulders, chest, mid-back and pelvis can facilitate this
- Slow pranayama exercises can have multiple physiologic and cognitive benefits
  - 1:1 inhale/exhale ratio at 5.5-6 BPM
  - Breath retention or forced breathing may be contraindicated

Thank You!

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