**Head/Neck and Jaw Repositioning** – Great to do in bed before sleep. Perform in sequential order **Part 2** – **To Add To Part 1 (at the end)** 

**Beth Kais** 

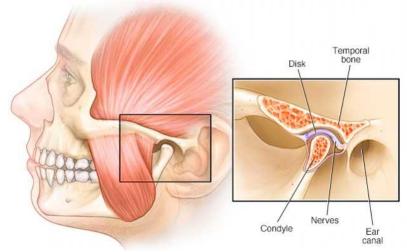
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## Reminders – From Part 1 Pre-tests (optional)

- Volume and quality of voice projection (may sing) looking for ease of expression and tone (not high and restricted)
- Ability to look down at the cheeks with the eyes (eye strain or difficulty looking down)
- Jaw movement forward and backward (restricted)
- Jaw movement forward and open/down (restricted, off to one side, movement from side to side or clicking)
- Jaw movement right and left

# **Proper Jaw Position**

- Place your index fingers in your ears. The finger tip should fit easily into the ear opening
- Slowly move your jaw forward and down. Take note if the ear opening space gets bigger
- Where the jaw is positioned when your fingertips fit in your ear opening is the proper jaw position

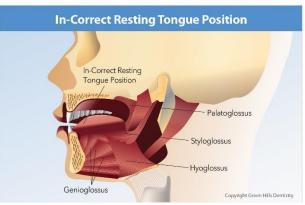


- Note the space between the condyle of the jaw and the ear canal

## **Proper Tongue Position**

The top of the tongue should sit on the roof of the mouth and between the molars with the tip of the tongue just above the front teeth resting on the ridge just above the front teeth with the lips closed





# Perform all exercises with the jaw and tongue in the proper resting position.

# **Body Positions**

- Place yourself in a comfortable, relaxing position. This may be
  - Lying down on your back with your neck supported by a cervical pillow or rolled towel
  - o Lying down with your torso elevated on pillows or a wedge
  - o Sitting comfortably in a chair with your feet flat on the floor and in line with your hips

# Lip Pucker

#### **Purpose**

- Strengthen the lip and facial muscles
- In your comfortable position
- Bring your lips together in a kiss position as tightly as you can
- Hold for 1 to 3 breaths
- Rest
- Perform 3 to 5 times

#### Shoulder Shrugs

#### Purpose

- Strengthen the muscle between the shoulder and the neck (levator scapula) to maintain optimal neck curve (cervical) and position
- In your comfortable position
- Align the tip of your shoulder with your ear
  - If you are on a pillow or elevated on pillows you may have to put a support under just your neck
- Inhale (nose 6 to 8 seconds)
- As you exhale (8 to 10 seconds)
  - o Lift your shoulders up toward your ears as high as you can
  - o If you do not complete the exhale when your shoulders stop moving hold the shoulders up until the exhale is complete
- Inhale and relax the shoulders down to the start position
  - o Check your alignment with the tip of the shoulder and the ear again
- Perform for 3 to 5 lifts

## **Rotated Side Bending**

#### Purpose

- Strengthen the side neck muscles (scalenes) to maintain proper neck curve and position
- In your comfortable position
- Turn your head to the right as far as is comfortable
- Inhale (nose 6 to 8 seconds)
- As you exhale (8 to 10 seconds)
  - o Move your right ear toward your sternum as far as is comfortable
  - This should be a strait line as you bend no turning the neck
  - o If you do not complete the exhale when your shoulders stop moving hold the shoulders up until the exhale is complete
- Inhale and return to the start position
- Perform for 3 to 5 bends on the right
- Then turn your head to the left and perform for 3 to 5 bends on the left

## **Additional Considerations**

- The body prioritizes air over everything
- Airway begins at the nasal passages and neck
- Muscles and (inflamed) organs move bones
- Fascia is designed to take stress off of muscles and transfer it through the fascia, tendons and bones
- To prevent wear and tear and to respond to compression the body will lay down
  - o Scar tissue/thickened fascia

- o Fluid
- Calcium (bone thickening)
- Abdominal/Organ Restrictions
- Any restriction in the intra-abdominal/organ fascia will also restrict the airway and structures of the neck/throat, jaw and cervical vertebrae
- Consider abdominal/visceral manipulation therapy if inflammation, injury/surgery or pregnancy has occurred
  - o <u>https://journals.lww.com/annals-of-medicine-and-surgery/fulltext/2017/03000/abdominal adhesions a practical review of an.2.aspx</u>
  - o <u>https://link.springer.com/article/10.1007/s00595-013-0591-8</u> incidence after surgery
  - https://academic.oup.com/bjs/article/90/5/533/6143230 inflammation and adhesions
  - https://www.hermanwallace.com/images/course images/vtus/Visceral-Mob R-C-Horton-2.pdf visceral manipulation
  - As previously stated, the visceral fascia extends from the base of the cranium down to the pelvic floor (Willard 2012b). There are a myriad of attachments to the MSK (Musculoskeletal System) system along this course, and some of the more significant structures involved are highlighted below.

In the most superior aspect, the visceral column lies directly anterior to the cervical spine, and its layers form the pre-tracheal, retropharyngeal and alar fascia. These compartmentalize the vascular, visceral and muscular structures of the neck, bridging between and attaching to these compartments. Moving inferiorly, the pleurovertebral and costopleural ligaments extend from the dome of the lung, and attach to the vertebrae and first rib, respectively. In the pleural cavity, the endothoracic fascia lines the entire structure, attaching to the internal surface of the ribs and intercostal muscles. Centrally, the mediastinum inserts into the anterior vertebral bodies, posterior sternum and superior aspect of the diaphragm (Paoletti 2006; Breul 2012; Bordoni & Zanier 2013).

Within the peritoneal cavity, the fascia of the oesophagus and aorta pass through the diaphragm, and continue into the midline of the abdominal cavity. The outer fibrous layer is now deemed to be the endoabdominal fascia posteriorly and the transversalis fascia anteriorly. This lining forms the outermost connection between the parietal peritoneum and the muscles, which include the psoas major, iliacus, quadratus lumborum and transversus abdominis. The midline visceral fascia forms a covering over all of the central digestive structures, giving rise to the visceral peritoneum, which divides the abdominal region into the intra- and retroperitoneal spaces. The visceral peritoneum covers the liver, and forms the fascial attachment that suspends the liver from the inferior asp pect of the diaphragm. Furthermore, it surrounds the small intestine, and forms the mesentery that attaches to the posterior aspect of the abdominal wall. The visceral peritoneum also serves as a covering for the colon, blending into the axial fascia at the anterior aspect of the quadratus lumborum and iliacus muscles (Fig. 4).

Posteriorly, the endoabdominal fascia thickens significantly, forming a substantial central network that is analogous to the mediastinum. This increase in density supports the great vessels and renal structures, and blends with the investing fascia of the psoas and quadratus lumborum muscles as well as the anterior vertebral bodies. The perirenal fascia is a connective tissue sheath with anterior and posterior layers that enclose the kidneys and adrenal glands. Superiorly, these layers reach as high as the diaphragm, forming a central bridge that covers the renal vessels, and fuse centrally, attaching to the crus. Inferiorly, the fascia encompasses the periurethral fascia to the level of the iliac fossa. The posterior renal fascia attaches to the fascia

of the diaphragm, and the quadratus lumborum and psoas major muscles (Fig. 5) (Standring 2005; Willard 2012a).

The endoabdominal fascia extends into the pelvic basin, and continues as the endopelvic fascia. The latter provides an outer layer that surrounds the pelvic cavity, and blends into the axial fascia of the levator ani, coccygeus, piriformis and obturator internus muscles. At the level of the sacral promontory, the visceral midline fascia once again, much like the mediastinum, creates a midline fold that surrounds the hypogastric plexus, pelvic vessels, rectum, reproductive organs and urinary bladder, attaching into the bony pelvis anteriorly and laterally. The uterosacral ligament is a component of this complex that supports the uterus and attaches vertically to the anterior body of the sacrum. The transverse cervical ligament is the lateral attachment of the uterus, and this attaches to the lateral pelvic basin. The pubovesical ligaments attach and support the body of the urinary bladder. These extend superiorly as the median and medial umbilical ligaments, and inferiorly, blend with the axial fascia of the pelvic dia phragm. The ischiorectal fossa is inferior to the pelvic diaphragm, and this space is packed with pannicular fascia and contains the anal canal (Barral & Mercier 1988; Barral 1993; Paoletti 2006; Otcenasek et al. 2008; Willard 2012a).

## - Gut Dysbiosis

- Vagus and gut bacteria
- o https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2018.00044/full

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