OMT for Common Conditions
RVU 3rd and 4th year OMM Fellows
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Heart Disease
According to the American Heart Association 1/3 of adults over 20 have hypertension

Current guidelines suggest BP systolic should be less than 135 and Diastolic less than 85

Causes of Hypertension
Diet high in salt and saturated fats
Genetics
Obesity
Physical Inactivity
Tobacco and Alcohol
Co morbidities such as Diabetes
Stress
Sympathetics cause vasoconstriction.

Parasympathetics cause a decrease in heart rate which in affect can decrease blood pressure.

We want to bring a balance to the autonomic nervous system with the intention to modulate the blood pressure.

Hypertension and other cardiac conditions

Rib Raising to modulate autonomies

Thoracic Spine Muscle Energy to modulate viscerosomatic reflexes

Rib Raising
Rib Raising

Procedure:
1. Slide both hands underneath the patient's back at cervicothoracic junction and contact the rib angle with fingerpads, lateral to the costotransverse articulation.
2. Apply a gentle anterolateral pressure with fingerpads. This can be ergonomically efficient by bracing forearms on table and using them as a lever while leaning back with body.
3. Maintain this pressure until a release is palpated.
4. Reposition hands approximately 4-5 inches inferior and repeat process.
5. Continue moving inferiorly to the level of L2.
6. Repeat on the contralateral side.
7. Reassess.

Sympathetic Nervous System

ME is used to treat by moving the involved body region or segment into the position of restriction.

- The patient is instructed to move toward the position of ease while the physician provides an isometric counterforce for 3-5 seconds. The patient is then instructed to relax, causing the involved muscles to enter into a refractory period.
- During this period, the restrictive barrier is re-engaged in all planes, and the procedure is repeated until no further change is noted.
Procedure:
1. Place the index and middle fingers of the right hand posterior to the transverse processes of the dysfunctional segment in order to monitor motion.
2. Place the left hand on top of the patient’s head with a gentle contact, resting the left elbow on or in front of the patient’s left shoulder.
3. Using the patient’s head and neck, move the dysfunctional segment into the barrier in all three planes (flexion/extension, side-bending, rotation). Motion should be palpated in all planes at the dysfunctional segment to approximate the “feather edge” of the barrier.
4. Instruct the patient to gently attempt to return the head to neutral (toward the position of ease), but resist this motion by providing an isometric counterforce for 3-5 seconds.
5. Instruct the patient to relax.
6. After 1-2 seconds, re-engage the feather’s edge of the restrictive barrier in all planes.
7. Repeat steps 4-6 until no further change in the restrictive barrier is noted.
8. Return the head and neck to neutral.

Viscero somatic reflex
Treat Thoracic T1-T4

Asthma, COPD & Pneumonia

- Treat Viscerosomatic reflexes in the Thoracic Spine
  - Rib raising to modulate sympathetic tone
- Lymphatic Drainage techniques including the Diaphragm
- Anterior and Posterior Chapman points
  - Depicted at the end of this presentation

Viscero somatic reflex
Treat Thoracic T1-T4
2/22/2019

Thoracic Inlet Release

Procedure:
1. Anterior contact is made across sternoclavicular junction and 1st and 2nd ribs. Posterior contact is made with T1-2 and costovertebral junction. Therefore, the physician places hands on either side of the base of the patient’s neck with fingers overlying the thoracic inlet and clavicle, palms over the upper trapezius, and thumbs contacting the transverse process of T1.
2. Apply slight compression to engage the thoracic inlet fascia, including Sibson’s fascia.
3. Induce motion in anterior-posterior, medial-lateral, and rotational planes until the desired position is achieved.
4. Hold 20-60 seconds until tissue creep indicates a release of tissue tension.
5. Reassess.

Diaphragm Release
**Diaphragm Release**

Procedure:
1. Contact just posterior and inferior to the anterior and lateral costal margin using the full hand.
2. Apply a slight superiorly and medially directed compression to engage the costal margin and the diaphragmatic fascia.
3. Instruct the patient to take several slow and full breaths.
4. As the patient inhales, a gentle but firm compression is induced with a subcostal hand vector in the direction of the uppermost dome of the diaphragm.
5. As the patient inhales, the operator holds this compression, effectively restricting full inhalation.
6. This procedure is repeated for 2-3 breaths.
7. At the end of the last exhalation, just as the patient begins to inhale, the operator removes their hands quickly, effectively causing a rapid inhalation of air (patients will often gasp loudly).
8. Reassess diaphragmatic motion.

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**Lymphatic Drainage**

Procedure:
1. Place palms inferior to patient’s clavicles with fingers overlaying the anterior chest wall. For female patients, rotate the fingers laterally and minimize pressure over breast tissue by placing more of the pressure on the hypothenar eminence.
2. Instruct the patient to inhale and exhale deeply.
3. Introduce a rhythmic posterior/inferior motion at a rate of roughly 3 compressions per second. This rhythm is specific to each patient and should be comfortable for both the physician and patient.
4. Inducing rhythmic motion for 30sec-2min until a release is palpated.
5. Return patient to neutral.
6. Reassess.
Sinusitis and URI
Gallbreath Technique
Auricular Drainage
Facial Effleurage
Submandibular Release
Suboccipital Release

Galbreath Technique

Procedure:
1. With the finger pad of the thumb or index finger, contact the angle of the mandible.
2. (Alternative (classical) contact: contralateral hand contacts the angle of mandible with finger pads)
3. Apply gentle inferior and lateral pressure to engage the musculature of this area. Note the tissue texture changes of this area, including boggy or tense musculature.
4. Begin to rhythmically pull the musculature anteriorly, interiorly, and medially in the direction of the long axis of the mandible.
5. Continue this motion until a release is palpated.
Procedure:
1. Place each hand flat against side of the patient's head with fingers pointing superiorly with the patient's ear between the 3rd and 4th digit.
2. Make clockwise and counterclockwise circular motions moving underlying fascia and engaging the fascial barrier with each movement.
3. Continue for 30sec-2min or until improved tissue motion is palpated.
4. Return patient to neutral.
5. Reassess.
**Effleurage**

Facial Effleurage
1. Begin with thumbs over the midline at glabella and gently sweep laterally over eyebrows toward temple region. Repeat this several times.
2. Begin with thumbs on either side of the nose and gently sweep laterally over cheeks toward the ears. Repeat several times.
3. Begin with index finger over midline mandible and sweep laterally toward the TMJ. Repeat several times.

**Submandibular Release**

Procedure:
1. Place fingers inferior to the mandible and medially to contact the submandibular tissue.
2. Engage the submandibular tissue by superior force
3. Gently take up the slack as the muscles release.
4. When no more release is felt, gently return the head and cervical spine to neutral.
5. Reassess.
Suboccipital Muscle Release

Procedure:
1. Place finger pads over the suboccipital muscles, just inferior to the lower edge of the occiput, allowing the head to rest in the palms of the hands.
2. Engage the suboccipital muscles both laterally and longitudinally.
   a. To engage the muscles laterally, contact the medial surface of the muscles with the finger pads. Then, draw the elbows closer together, which will draw the finger pads laterally.
   b. To engage the muscles longitudinally, simply lean backwards away from the patient (superiorly).
3. Gently take up the slack as the muscles release.
4. When no more release is felt, gently return the head and cervical spine to neutral.
5. Reassess.

Cervical OMT Posterior Counterstrain
**GERD**

- 40% of the population have experienced symptoms of gastrointestinal reflux disease
- The proton pump inhibitors block the absorption of vital nutrients
- The microbiome can change with PPI or H2 blockers
- Treating with OMT works

**Anatomy – Esophagus**

Thoracic portion in posterior mediastinum
- Linked to trachea by connective tissue
- Deviates to left and attached to left bronchus
- In contact with pleura and pericardium
- In contact with thoracic spine to T4
- Separated from spine by aorta at level of T7-8
- Diaphragmatic part indents posterior aspect of liver, lies on top of left crus of diaphragm, lower left lung, T10-11
  R (S A) Vagus rides posteriorly

**Treatment Positions**

GASTROESOPHAGEAL JUNCTION