

COVID-19 - Manual Therapy Steps That Can Be Used to Lessen the Effects During or After a Respiratory Infection: A Practitioner's Guide

- During, and especially after the COVID-19 virus has been controlled enough to allow us to resume our normal lives, we may see a slew of patients that present with aching and/or restriction in the upper trunk, neck, and head. These symptoms may result from irritation in the respiratory system causing viscerosomatic dysfunctions.
- While treating the musculoskeletal system may temporarily ease the complaints, they may not fully go away until the underlying respiratory irritation is removed.
- Remember that inflammation stemming from infection creates the environment that leads to fascial restrictions being formed.
- Our goal of treatment needs to be focused on changing the microenvironment around the cells of the respiratory system to allowing healing to occur. Treatment should therefore include multiple aspects, including:
 1. Removing musculoskeletal dysfunctions to increase lymphatic drainage from the upper thorax, neck, and head.
 2. Improve autonomic nervous system balance.
 3. Remove fascial restrictions surrounding the respiratory tree.
 4. Removing existing specific Chapman's Neurolymphatic Reflexes that are present in respiratory system structures.
- This guide will highlight areas that are important to consider and offer evaluation and treatment suggestions for them. Please realize that this guide will not consider every aspect of the problem that needs to be addressed as volumes could be written on this subject. This guide is just trying to hit the highlights.
- When describing the areas that need to be treated, use whatever techniques you know how to do to achieve these goals.

Main Goal:

- The **FIRST** thing that needs to be considered is whether you are dealing with an acute infection or the aftermath of an infection that has cleared as the treatment approach will be different in many ways. While the overall philosophy will be similar, the emphasis will not be the same.
- In mild cases of the COVID-19 infection the areas most involved are the nose and throat. In more severe cases, and especially the potentially fatal ones, the lungs get involved. Distinguishing between them will tell you what areas you need to emphasize treating.
- In ACUTE cases, the goal is to prevent the body from getting overwhelmed so it can maintain its ability to clear out the inflammation and cellular damage that is occurring in the respiratory system, and **especially** the lungs.
- In more severe ACUTE cases, the emphasis should be on maximizing the ability of the lungs to breathe, the lymphatic cells to clear out the rapidly accumulating fluids and debris and help control the immune response, decrease sympathetic nervous system flow in order to maximize lung blood flow, and restore autonomic nervous system balance.
- Likely for most of us, we will be seeing patients with aches stemming from the aftermath after the COVID-19 viral infection has ended. Thus the whole respiratory system should be evaluated and treated. Treatment should emphasize removing the somatic dysfunctions - musculoskeletal and visceral - that are creating an aberrant physiology that impedes healing. Removing these obstacles will help the body normalize functions and return to a state of dynamic equilibrium.

Rationale for Treatment During an Acute Infection:

- Death from a coronavirus infection usually occurs from respiratory and multi-organ failure. The body succumbs when the lungs gets overwhelmed and the immune system can no longer do its job to fight the infection in them. What makes this virus so lethal is that the lungs fail because of 2 main reasons - the rapidly replicating virus and the strong immune response to it.
 1. In lethal cases, the COVID-19 virus invades not only the nose and throat as it does in mild case, but it also attacks the lungs. As lung cells die, they fill the airway with fluids and debris while the virus continues to replicate. This makes breathing difficult to do.
 2. This rapidly expanding infection and lung damage triggers a strong immune reaction that acts to kill the virus and repair the damage. However, in some cases - particularly those with compromised immune systems - the immune response is not as well controlled as it should be. This poor control can healthy cells to die as well. A flood of signaling chemicals from the immune system (cytokines) can occur called a **cytokine storm**, that can damage the lungs and cause respiratory failure that can lead to multi-organ failure.
- Minimizing this cytokine storm is the key to preventing fatality.

Evaluation

- While evaluation should include scan tests that look at the entire body, only those related to the respiratory system will be discussed.
- Ignore the rest of the body only at your own peril - and perhaps your patient's as well. The only way to keep changes in the upper trunk, neck, and head intact is to ensure that the feet can make the ground even, the pelvis is level, and the respiratory and pelvic diaphragms and thoracic cage can expand and contract.

Scan Tests

1. Standing Manubrial Scan Test

PURPOSE: This test is a scan for dysfunction in the cervical spine, clavicles, and upper ribs.

PROCEDURE:

1. Place your thumbs on the manubrium close to the S-C joint.
2. Have the patient flex and extend their neck and see if your thumb position changes. Movement of your thumb on one side indicates cervical spine dysfunction on the side that moves.
3. Have the patient take a deep breath and see if your thumb position changes. Asymmetrical motion indicates upper rib dysfunction on the side that moves.
4. Have the patient shrug and see if your thumb position changes. Asymmetrical finishing position indicates clavicular dysfunction on the side that moves.

If this test is positive:

- a. Place your thumbs on anterior surface of the medial clavicles. Have the patient raise their arms overhead. If 1 clavicle stays elevated and does not glide inferiorly, then it is superiorly subluxed.
- b. Place your thumbs on anterior surface of the medial clavicles. Have the patient flex their shoulders to 90° and then reach forward. If 1 clavicle does not glide posteriorly, then it is anteriorly subluxed.

NOTES:

The above tests may be positive on both sides so pay close attention to whether your thumbs do not move or both move.

A common pattern is for the right clavicle to be superiorly subluxed and for the left clavicle to be anteriorly subluxed.

2. Sternal And Manubrial Motion Tests

PURPOSE:

This test is a scan test to see if dysfunction may be present in the manubrium, sternum, and/or upper thoracic cage.

PROCEDURES:

Manubriosternal Joint Motion

1. Stand besides the patient with your dominant eye over the chest.
2. Place a flat palm vertically on the sternum.
3. Place the opposite hand horizontally on the manubrium touching the opposite hand perpendicularly.
4. Have the patient inhale and see if the hands come apart and without rotation.

Manubrial vs. Sternal Motion

1. Stand besides the patient with your dominant eye over the chest.
2. Place the thumb and index finger of top hand over the manubrium just above Rib 2, 1 finger on the right and the other on the left.
3. Place the thumb and index finger of the bottom hand over the sternum just above Rib 4, 1 finger on the right and the other on the left.
4. Have the patient take a breath and observe the relative motion of the 2 sets of fingers.

KEYS TO REMEMBER:

- Make sure you explain the purpose of the test and your hand positions to the patient and get permission to perform it.
- A positive Manubriosternal Joint Motion test indicates a primary dysfunction at the manubriosternal joint.
- A positive Manubrial vs. Sternal Motion test indicates that sternochondral or costochondral dysfunctions or chest muscle tightness may be the primary dysfunction affecting manubrial or sternal motion.

3. Motion of the Respiratory Diaphragms with Respiration

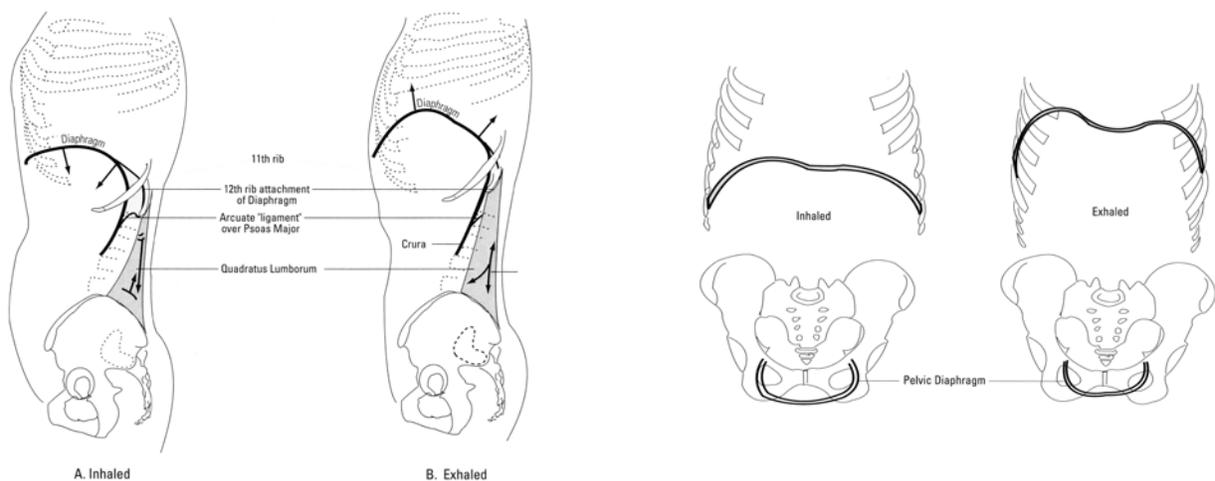
PURPOSE: To assess the ability of the respiratory and pelvic diaphragms to fully descend and ascend with respiration.

PROCEDURE:

1. Place the patient in supine and have them bend their knees with their feet apart and their knees together.
2. Stand on the side of the table of your dominant eye facing cephalad.

Respiratory Diaphragm

3. Place your hands on the abdomen in the central subcostal margin just beneath the xiphoid process with your fingers pointing towards the patient's head.
4. Have the patient take a breath and see if the central portion of the respiratory diaphragm fully descends bilaterally with inhalation and fully ascends bilaterally with exhalation.
5. Repeat step 4 with your hands now placed in the subcostal margin halfway towards the lateral edge.
6. Repeat step 4 with your hands now placed in the subcostal margin on the lateral edge.



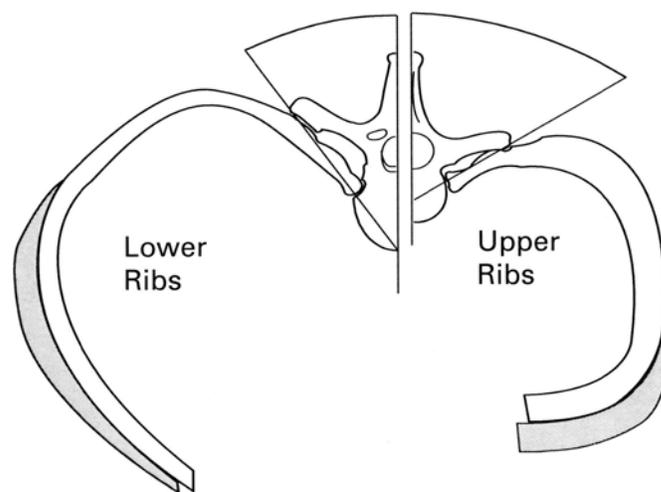
- The respiratory diaphragm develops embryologically from 4 sources:
 - The septum transversum, which forms the central tendon.
 - The dorsal esophageal mesentery.
 - The pleuroperitoneal membranes.
 - The body wall.
- The hand placements for the respiratory diaphragm scan looks at each these sources.

4. Respiratory Scan of the Thoracic Cage

PURPOSE: This scan is a way to quickly see where further testing is indicated in the thoracic cage.

PROCEDURE:

1. The patient lies supine.
2. Stand to one side of the table.
3. Place your hands along the lateral rib cage on both sides and press in with each hand to perform a **Rib Spring** along the lateral rib margins.
4. Repeat along the entire rib cage.
5. If the Rib Spring is positive (stiff) in any area in the rib cage, do the following:
 - If +, pay close attention when checking the pump handle, bucket handle, and caliper motions below.
 - If +, also do a layer palpation to help determine if the limitation is biomechanical or visceral.
6. Next, again place your hands along the lateral rib margin.
7. Beginning in the inferior margin over ribs 11 and 12, have the patient take a series of breaths while you palpate the thorax for smooth motion and symmetry. The palpation is done bilaterally to be able to compare one side's motion to the other.



4. Respiratory Scan of the Thoracic Cage cont.

8. Next repeat step 7, but now move your hands farther up the rib cage until you have tested from bottom to top. This hand position is used to test the bucket handle motion of the ribs. Move your hands to the anterior rib cage to test the pump handle motion of the ribs.
9. Repeat until all of the following areas have been tested in inhalation and exhalation:
 - Caliper motion of floating ribs 11-12
 - Bucket handle and pump handle of false ribs 8-10
 - Bucket handle and pump handle of true ribs 1-7
10. Place the fingers of each hand on the superior aspect of both 1st ribs in the supraclavicular space. Assess if 1 or both of these ribs is more stiff and/or held in a position that is more superior than it should be. Have the patient take a deep breath to see the 1st ribs can elevate with inhalation and descend with exhalation.

KEYS TO REMEMBER:

- It is more common to see bucket handle dysfunctions in the lower rib cage and pump handle dysfunctions in the upper rib cage, but either dysfunction can be seen throughout the rib cage.
- The most common dysfunctions seen in the 1st ribs are superior subluxations and posterior subluxations.

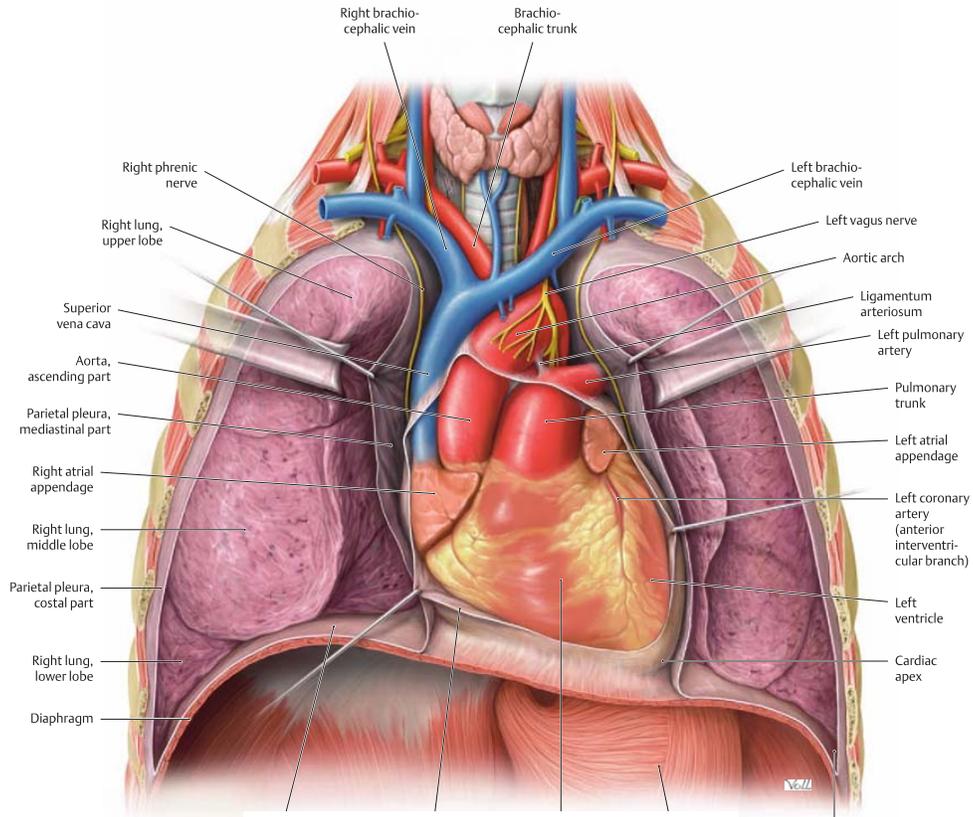
5. General Principles of Layer Palpation and Treatment

Evaluation

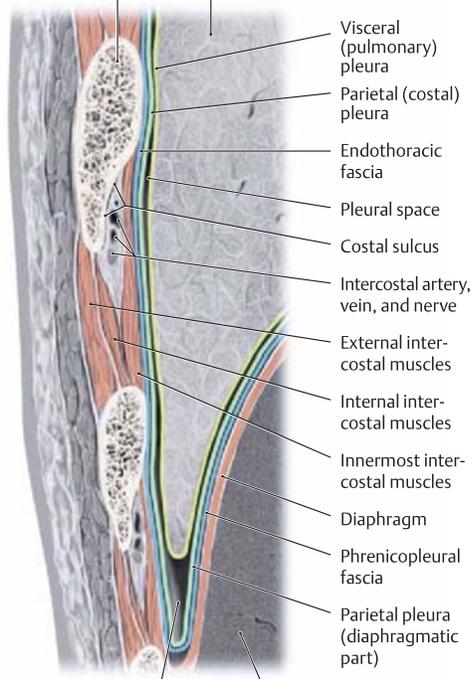
1. Engage the tissue with palm of your hand and your fingertips.
2. Keep these parts quiet when feeling the tissue as they are the most sensitive parts of the hand.
3. When palpating deeper layers, apply pressure with the arm, shoulder, or shifting your body weight, but ALWAYS keep your hands and fingers relaxed.
4. Do not squeeze the tissue with the thumbs and fingers beyond the point of engaging the desired tissues. Increasing pressure will lessen the sensitivity of your touch and greatly increase the strain within your hands.
5. The nail beds of your fingertips should never change from pink to white. If they do, you are pressing too hard.
6. Keep the palm of your hand flat and do not curl your fingers more than a few degrees.
7. Whenever possible, use both hands to palpate the desired area in a way that will allow you get a 3D image of the tissue underneath. (Stereognosis)
8. When possible, place your hands on opposite sides of the area being examined to allow you to engage the tissue in all directions. At times your hand placement may be above and below, or on both sides, it is important to be able engage the desired tissue in all directions.
9. *Slowly* compress the tissues as you go through the various tissue layers - skin, superficial fascia, muscle-tendon, bone-ligament, and viscera.
10. At each layer stop and test the mobility of the tissue in all directions using both hands, although 1 hand may be engaging the tissue to a greater degree.

Treatment

11. If you feel a restriction in the tissue, slowly move your hands and test all directions in order to find the position in which the tissue begins to soften.
12. Feel for a pulse to return in the restricted tissue.
13. When you feel the pulse, apply a slight shear stress across the restriction until you feel an increase in the electrical activity of the tissue. The tissue will more alive.
14. At this point hold your hands until you feel the tissue release.



P
dia] Rib Lung Costodiaphragmatic recess



c Costodiaphragmatic recess Liver recess

Treatment Concepts

- While the order of treatment will vary with each patient depending on your evaluation findings, a common approach is listed below. Note that treatment of all of these areas will not be discussed here so you should use whatever techniques you know to fix somatic dysfunctions in these regions.
- Remember that with treatment you should not ask the body to change more than it is capable of doing - especially if it is in a weakened state. How much you should try to accomplish in each session will depend on the patient's current state of health. Error on the side of caution.
 1. Treat any clavicular and 1st rib dysfunctions to ensure the thoracic duct is open so lymphatic drainage from the body, neck, and head will be increased.
 2. Treat any sternal, manubrial, sternochondral, and costochondral dysfunctions to make sure the chest can move well to maximize respiratory system circulation, lymphatic drainage, and sympathetic facilitation.
 3. Treat foot and ankle dysfunctions, especially those of the talus and midfoot, that could be causing compensations up into the thorax, neck, and head.
 4. Treat pelvic and hip dysfunctions that could be causing compensations into the thorax, neck, and head as well.
 5. Treat thoracic cage dysfunctions.
 6. Treat abdominal visceral dysfunctions that are impeding proper motion of the respiratory and pelvic diaphragms.
 7. Treat respiratory visceral dysfunctions using the layer palpation techniques described above. Remember to check for any pleural restrictions between the thoracic cage and the lung as well those between the lobes of the lung.
 8. Treat cervical joint dysfunctions so C6-7 can keep the thoracic inlet open, C3-5 (phrenic nerve) can help keep the respiratory diaphragm moving properly, and C1-2 to keep the cranial base level.
 9. Treat myofascial restrictions in the anterior neck, including the trachea.
 10. Treat cranial dysfunctions involving the skull to re-establish cranial rhythm and maximize lymphatic drainage out of the head.
 11. Treat cranial dysfunctions involving the face to re-establish cranial rhythm and maximize lymphatic drainage out of the nose and sinuses.
 12. Treat autonomic nervous system imbalances that are present.
 13. Treat pertinent Chapman's Neurolymphatic reflexes.

Treatment of the Thoracic Cage and Thoracic Inlet

Superior Clavicular Subluxation at the SC Joint

PROCEDURE:

1. Place patient in the supine position.
2. Sit on the side of the table as the dysfunctional clavicle.
3. Use with your hand that is closest to the head so you can monitor the loose pack position of the SC joint.
4. Use your other hand to flex, adduct-abduct, and IR-ER the dysfunctional shoulder until you find the barriers in each plane.
5. Have the patient horizontally adduct their shoulder into your hand.
6. Do 3 contractions using the principles of MET.

Anterior Clavicular Subluxation at the SC Joint

PROCEDURE:

1. Place patient in the supine position.
2. Sit at the head of the table.
3. Place your hand on the dysfunctional SC joint and use it to monitor the loose pack position.
4. Place your other hand under the occiput and extend the head, sidebend it away, and rotate it toward the dysfunctional clavicle.
5. Do 3 contractions using the principles of MET.

Note: Either of the techniques above can be used to treat the other dysfunction.

Rib 1 Superior Subluxation - Supine (Can also be used to treat Rib 1 Anterior or Posterior Subluxations with modifications)

PURPOSE: To correct a superior subluxation of Rib 1

PROCEDURE:

1. Have the patient lie supine on the treatment table.
2. Sit at the head of the table.
3. Palpate the first rib to be treated by curving their fingers so that the index and middle fingers are on the shaft through the space between the posterior scalene and levator scapulae and the thumb is on the rib head that lies under the levator scapulae and upper trapezius. This will be used to add any appropriate force needed to glide the rib in the desired direction and to monitor the tension on the scalene muscles on the side of the dysfunction.
4. Place the first rib in a loose pack position by:
 - a. Sidebending the patient's trunk towards the side of the first rib that is to be treated.
 - b. Rotating the patient's neck to the left and right.
 - c. Sidebend the patient's neck toward the subluxed rib.
5. Place your other hand under the patient's head and slightly on the opposite side of the subluxed rib and have the patient produce a light cervical sidebending force away from the subluxed rib at an angle that causes the tension in the most restricted scalene muscle to subside.
6. While maintaining the cervical sidebending force, use the hand that is on the first rib to glide the rib laterally.
7. As the decreased tension in the scalene muscles allow, glide the subluxed first rib in an anterior and inferior direction until the subluxation is corrected.
8. Repeat 3 times using the principles of MET.

NOTE: When using this technique to correct an anterior or posterior Rib 1 subluxation, the clinician should not glide the rib laterally, but instead glide it in a posterior or anterior direction depending on the desired result.

Drive The Bus Technique (Treatment)

PURPOSE:

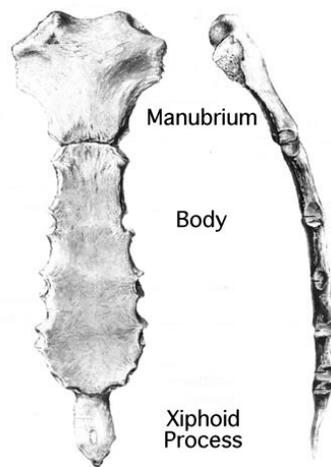
This test is used as a scan test for possible clavicular, lower cervical, and upper thoracic cage dysfunctions. This position can also be used as a treatment position.

PROCEDURES:

1. Place patient in the supine position.
2. Sit at the head of the table.
3. Place both hands on either side of the base of the neck with your thumbs on either side of the spinous process of T1, your index fingers on the supraclavicular space, your middle fingers on the clavicles, and your ring and little fingers on the 1st and 2nd ribs and manubrium.
4. Use your hands to assess motion of this entire complex in all directions.
5. Once the barriers of motion have been determined, use a direct or indirect MFR technique to free up the barriers.

NOTE: Restrictions around the subclavian vessels and thoracic ducts should be removed to maximize venous and lymphatic drainage from the head and neck.

Manubriosternal Drawbridge Dysfunction



PURPOSE: Used to treat a somatic dysfunction where the drawbridge motion at the manubriosternal joint is decreased with inspiration as found by the earlier test.

PROCEDURE:

1. Place patient in the supine position.
2. Stand besides the patient with your dominant eye over the chest.
3. Place a flat palm vertically on the sternum.
4. Place the opposite hand horizontally on manubrium touching the opposite hand perpendicularly.
5. Have the patient slowly inhale and exhale a little deeper than normal while maintaining pressure on both the manubrium and sternum that encourages more drawbridge motion and without rotation.
6. Continue until proper motion is restored.

NOTE: Make sure you explain the purpose of the test and your hand positions to the patient and get permission to perform it.

Sternochondral Dysfunctions

PURPOSE: Used to treat sternocondral dysfunctions that were possibly indicated by an earlier positive Manubrial vs. Sternal Test.

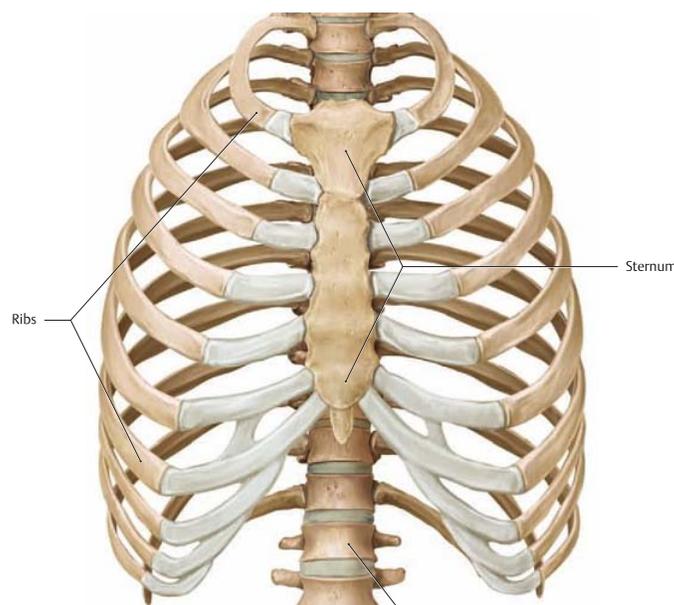
PROCEDURE:

1. Place patient in the supine position.
2. Sit at the head of the patient if you want to assess both sides simultaneously or on 1 side of the table if you want to assess each side individually.
3. Place your hand(s) on the sternocondral joint(s) of ribs 1-6 or the conjoined cartilage of ribs 7-10 that you want to assess.
4. Feel for tenderness and/or stiffness in the sternocondral joint. You may want to do a light spring test of the joint to assess stiffness.
5. Once you have determined if a sternocondral joint is dysfunctional, then place 1 hand on the sternum and the other hand on the cartilage.
6. Have the patient slowly inhale and exhale a little deeper than normal while applying a light traction to both sternum and cartilage.
7. Continue until proper motion is restored at the sternocondral joint.

NOTE:

Make sure you explain the purpose of the test and your hand positions to the patient and get permission to perform it.

It is normal for the rib to be stiffer than that cartilage.



Costochondral Dysfunctions

PURPOSE: Used to treat costochondral dysfunctions that were possibly indicated by an earlier positive Manubrial vs. Sternal Test.

PROCEDURE:

1. Place patient in the supine position.
2. Sit at the head of the patient if you want to assess both sides simultaneously or on 1 side of the table if you want to assess each side individually.
3. Place your hand(s) on the costochondral joint(s) of ribs 1-10. Remember that the location of this joint is more lateral the more inferior you go.
4. Feel for tenderness and/or stiffness in the costochondral joint. You may want to do a light spring test of the joint to assess stiffness.
5. Once you have determined if a costochondral joint is dysfunctional, then place 1 hand on the rib and the other hand on the cartilage.
6. Have the patient slowly inhale and exhale a little deeper than normal while applying a light traction to both rib and cartilage. It is common for one of these structures to slide under the other one.
7. Continue until proper motion is restored at the costochondral joint.

NOTE:

Make sure you explain the purpose of the test and your hand positions to the patient and get permission to perform it.

It is normal for the rib to be stiffer than that cartilage.

Costovertebral Dysfunctions

- Treat all pump handle and bucket handle dysfunctions that you have discovered in the previous evaluation.

Lung Pleural Glides

PURPOSE: To remove pleural and mediastinal restrictions that may be compromising rib cage and lung function and may be contributing to postural asymmetries. This technique may be applied to any or all of the structures below:

Right Upper Lobe

Right Middle Lobe

Right Lower Lobe

Left Upper Lobe

Left Lower Lobe

Substernal-Hilum-Lung Ligament-Interpleural Ligament

PROCEDURE:

1. Place patient in the supine position.
2. Sit at the side or the head of the table depending on which of the above structures is being treated.
3. Determine which of the above structures is to be treated based on the results of the Scan Tests above.
4. Place your 1 hand on the anterior surface and the other hand on the posterior surface of the lung structure to be treated. Your hand placement may need to be adjusted to a more central or lateral position depending when the specific visceral restriction you are trying to treat is located.
5. Perform a layer palpation until your hands have engaged the pleural or mediastinal restriction that is being treated.
6. Release the restriction using an indirect or direct technique. This release can be augmented further, if needed, by having the patient actively engage the barrier with inhalation or exhalation.
7. Repeat the above the steps at needed to release additional visceral restrictions in the same or other structures.
8. Repeat the Scan Tests necessary to determine if they are now negative.

NOTE:

- The goal of this treatment is to re-establish the ability of the lungs, pleura, mediastinum, and thoracic cage to slide easily on each other.

Lung Pleural Glides to the Lung Fissures

PURPOSE: To remove visceral pleural restrictions in the lung fissure that may be limiting the ability of the lobes of the lung to slide on each other, which may be compromising rib cage and lung function.

PROCEDURE:

1. Place patient in supine or in sidelying with the lung to be treated facing up.
2. Sit or stand at the side of the table of the lung being treated.
3. Determine which of the lobes is to be treated based on the results of the Scan Tests and any remaining restrictions after performing the Lung Pleural Glides above.
4. Place the index finger and thumb of 1 hand along on the lateral aspect of the desired rib and the index finger and thumb of the other hand along on the lateral aspect of the rib below it.
5. Perform a layer palpation until your hands have engaged the pleural restriction that is being treated.
6. Rotate your hands in opposite directions until you have fine-tuned your engagement of the restriction that you want to treat.
7. Release the restriction using an indirect or direct technique. This release can be augmented further, if needed, by having the patient actively engage the barrier with inhalation or exhalation.
8. Repeat the above the steps at needed to release additional visceral restrictions in the same or other structures.
9. Repeat the Scan Tests necessary to determine if they are now negative.

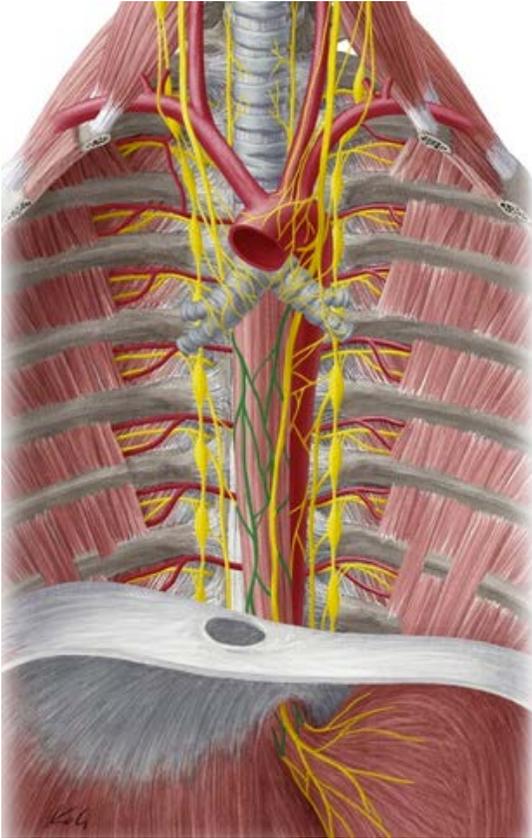
NOTE:

- Generally your hands will be placed on the ribs as listed below, but this may need to be adjusted due to the obliquity of the lung fissures.
- Place your hands on ribs 2 and 3 to release the fissure between the right upper and middle lobes.
- Place your hands on ribs 5 and 6 to release the fissure between the right middle and lower lobes.
- Place your hands on ribs 5 and 6 to release the fissure between the left upper and lower lobes.

Treatment of Autonomic Nervous System Imbalance

- Restoring autonomic nervous system balance in the area that is/was infected is needed to restore physiological function. Principally the sympathetic nervous system needs to be dampened as facilitation occurred as a result of the infection. Sympathetic nervous system facilitation will decrease blood flow to the regions supplied by the involved vertebral segmental level.
- The sympathetic nervous system also needs to be balanced with the parasympathetic nervous system to ensure healing. In a simplistic example, the sympathetic nervous system is needed to fight the storm and the parasympathetic nervous system is needed to clean up after the storm. Both are needed.
- Some handles to use to balance the sympathetic nervous system are the sympathetic chain ganglia anterior to the head of the ribs, the superior cervical ganglia anterior to the C1-4 transverse processes, the middle cervical ganglia anterior to the C5-6 transverse processes, and the inferior cervical ganglia (or stellate ganglia if C7-T1 ganglia are fused) anterior to the C7-T1 transverse processes. Good parasympathetic nervous system handles are the occipitomastoid sutures for the vagus nerves and the supraorbital, infraorbital, and mental ganglia for the trigeminal nerves.

Sympathetic Nervous Handles



Superior Cervical Ganglion

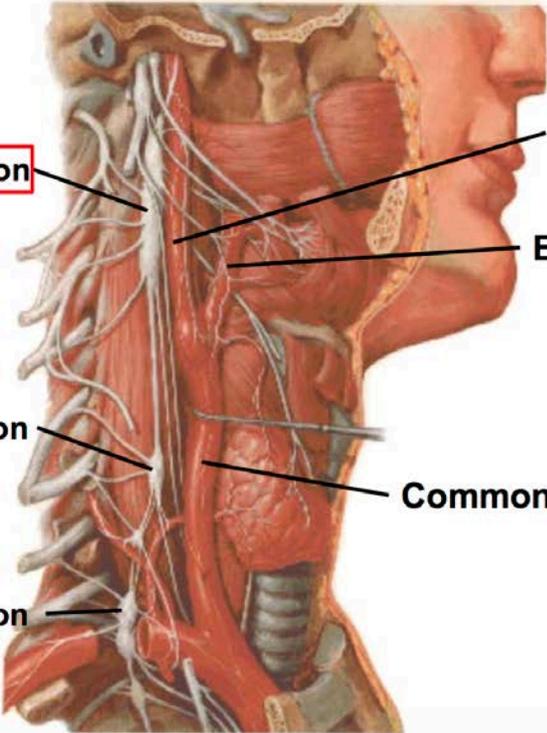
Internal Carotid a.

External Carotid a.

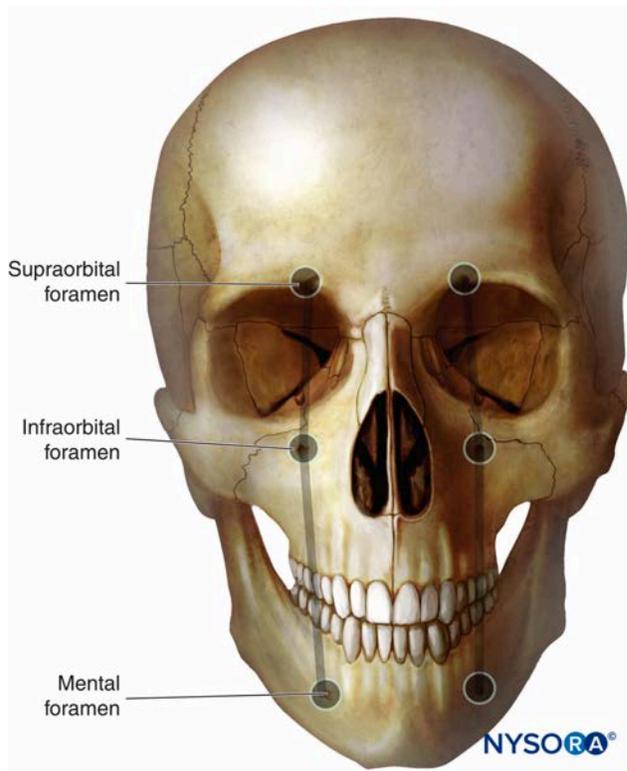
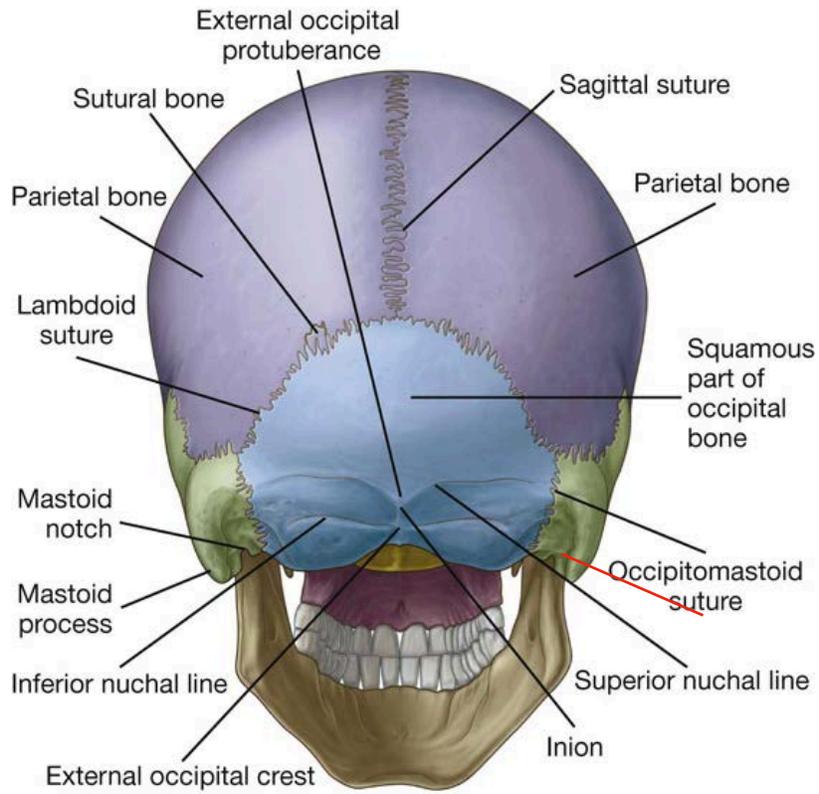
Middle Cervical Ganglion

Common Carotid a.

Inferior Cervical Ganglion



Parasympathetic Nervous Handles



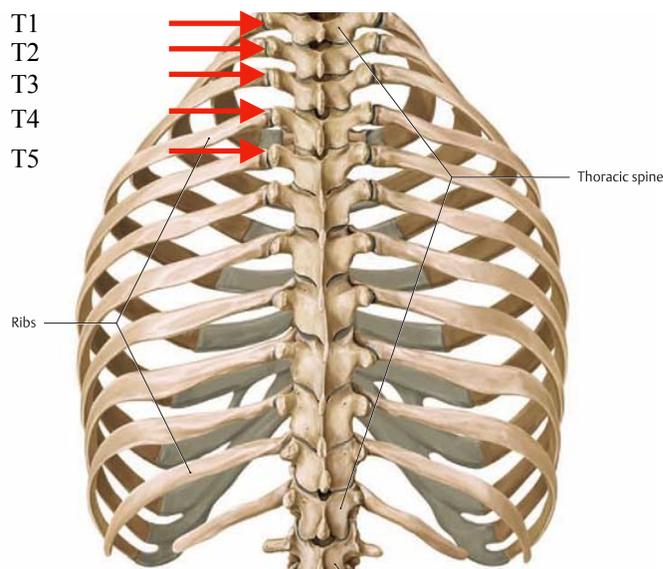
Techniques to Balance the Autonomic Nervous System

Rib Raising - Multiple ipsilateral (same side) segments

- To increase the ability of the lungs to breathe and to decrease the sympathetic nervous system response that will increase arterial blood flow to the respiratory system and lymphatic and venous drainage from it. The key to remember is the sympathetic feed to the respiratory system is from T1-5 segmental levels. This why pressure needs to be placed into the rib heads as the sympathetic chain sits directly in front of it. Deep pressure into this area will dampen the sympathetic response. **In acute cases, especially in people with vulnerable conditions, this technique can be used frequently throughout the day!**

PROCEDURE:

1. Have the patient in a supine position.
2. Sit on the side of the patient's body that is to be treated.
3. With your arms resting on the treatment table or on your knees, place both hands with palms up under the patients's posterior thorax.
4. Flex the fingers to contact the rib heads of the segment(s) to be treated.
5. Pull your fingers slightly way from the middle of the body.
6. While maintaining contact with your fingers, drop your elbows, lift your knees, and/or lower your trunk to raise the ribs as your hands move upward.
7. Maintain pressure until you feel the rib head and surrounding tissues relax. This normally takes less than 1 minute.
8. You should be able to treat more than 1 segment simultaneously.
9. Once the tissues relaxes, move your hands to the next area to be treated.
10. Repeat the steps on the opposite side of the body.

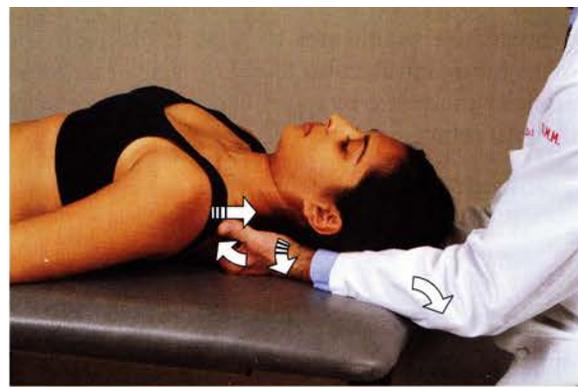
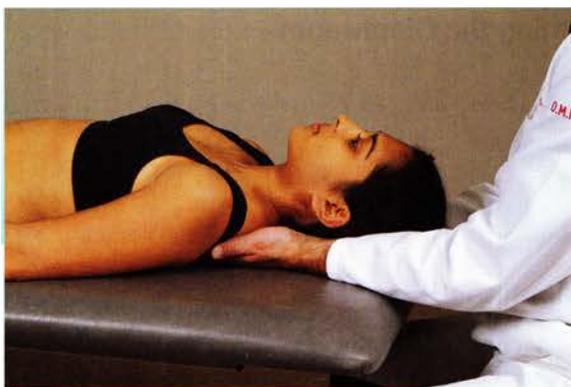


Rib Raising - Single bilateral (both sides) segments

PURPOSE: Generally used to help decrease regional sympathetic efferent flow from organs related to specific spinal segments. Initially and when done with light pressure, sympathetic efferent flow will increase, but deep and sustained pressure will quickly decrease sympathetic activity at that segmental level resulting in muscle relaxation, better rib head motion, and improved lymphatic drainage at the levels treated.

PROCEDURE:

1. Have the patient in a sitting, straight-legged position length-wise on the table.
2. Sit on the head of the table with both feet on the floor.
3. Reach forward with your arms along the table so that when the patient lies down in supine your fingers will be under the T5 segment (or the segment to be treated). If your fingers are below the bottom of the shoulder blade, then you are too far down.
4. With your arms resting on the treatment table, place both hands with palms up under the patients's posterior thorax.
5. Flex the fingers to contact the rib heads of the segment(s) to be treated.
6. Pull your fingers slightly way from the middle of the body.
7. While maintaining contact with your fingers, drop your elbows and/or lower your trunk in order to raise the ribs as your hands move upward. You should not have to bend your wrists as any or all of this movements will create the fulcrum needed to raise the ribs up.
8. Maintain pressure until you feel the rib head and surrounding tissues relax. This normally takes less than 1 minute.
9. Once the tissues relaxes, move your hands to the next area to be treated.
10. This can be used to treat the T1-T5 segmental levels.



Autonomic Nervous System Balancing Protocol

General Technique

1. Have the patient in supine.
 2. Place the fingers of 1 of your hands on 1 of the contact points and the fingers of your other hand on the other contact point.
 3. Gently begin to apply equal pressure to each of the points simultaneously and gradually increase the pressure until you feel your fingers connect and the 2 points beginning to talk to each other. Usually the tissues under your fingers begin to soften.
 4. Maintain your pressure until the tissues fully relax.
- **Perform the above Autonomic Nervous System Balancing Protocol to the following places as indicated:**

Sympathetic Nervous System Balancing

1. Between the T1-5 segment and the cervical ganglia
 - With the patient in supine, slide your fingers under the upper thoracic spine and palpate the lateral side of the spinous processes of T1-T5 on each side. Determine how many of these spinous processes are stiff and/or tender as these will become your contact points. These segments will often be unilateral as only 1 side of the respiratory system is involved (where the infection sets up), but not always.
 - Using the index and middle fingers of the other hand check the superior, middle, and inferior ganglia - that lie anterior to the transverse processes - on each side for increased tissue tension or tenderness that will reflect the degree of irritation in the respiratory viscera. Remember that the sympathetic nervous in the cervical ganglia originate in the upper thoracic region and go first to the SCG before filtering down to the M/ICG.
 - SCG: C1-4
 - MCG: C5-6
 - ICG: C7-T1 (which commonly merge forming the stellate ganglion.)

Note: The cervical ganglia are lateral to the carotid arteries so if you feel a strong pulse under your fingers, you are in the wrong spot!

- With the fingers of 1 hand on the lateral aspect of the spinous processes of the upper thoracic segments, balance them with the involved cervical ganglia.

Sympathetic-Parasympathetic Nervous System Balancing

2. Between the T1-5 segments and the parasympathetic nervous system - vagus nerves via the occipitomastoid suture.
 - With the patient in supine, slide your fingers under the upper thoracic spine and palpate the lateral side of the spinous processes of T1-T5 on each side. Determine how many of these spinous processes are stiff and/or tender as these will become your contact points. These segments will often be unilateral as only 1 side of the respiratory system is involved (where the infection sets up), but not always.
 - Using the index and middle fingers of the other hand check the bilateral occipitomastoid sutures (innervated by vagus) in the posterior cranium for increased tissue tension or tenderness that will reflect the degree of irritation in the respiratory viscera.

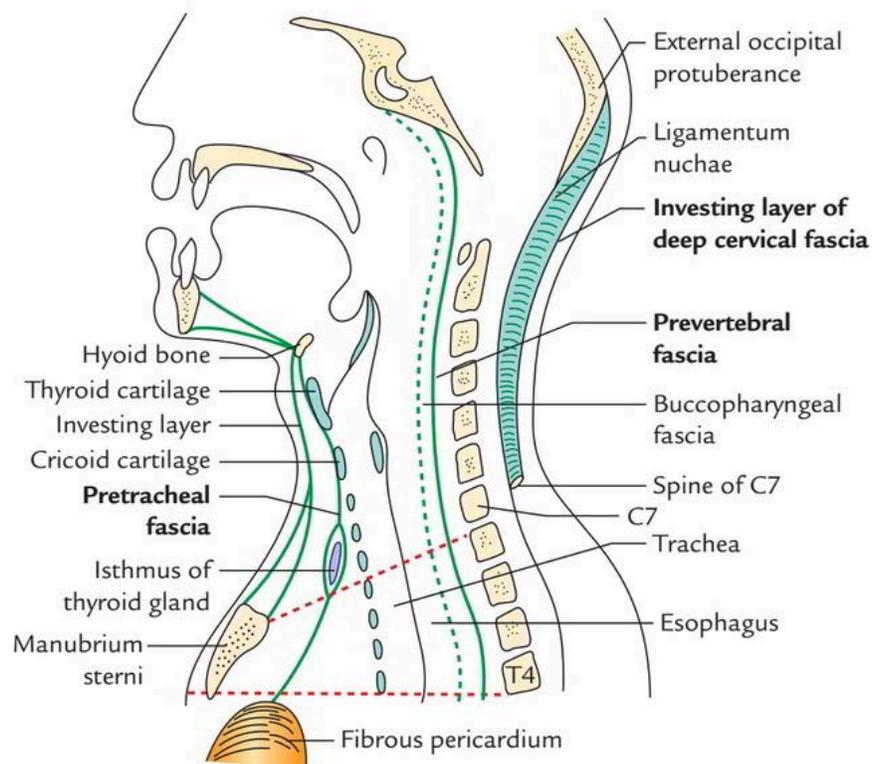
3. Between the T1-5 segments and the parasympathetic nervous system - trigeminal nerves via the supraorbital (ophthalmic branch), infraorbital (maxillary branch), and mental foramina (mandibular branch).
 - With the patient in supine, slide your fingers under the upper thoracic spine and palpate the lateral side of the spinous processes of T1-T5 on each side. Determine how many of these spinous processes are stiff and/or tender as these will become your contact points. These segments will often be unilateral as only 1 side of the respiratory system is involved (where the infection sets up), but not always.
 - Using the index and middle fingers of the other hand check the involved bilateral trigeminal ganglia in the face.

VISCEROSOMATIC REFLEXES

System/Organ	Sympathetic	Parasympathetic
Pulmonary		
lung	T ₁ -T ₄	occiput, C ₁ , C ₂
bronchomotor reflex	T ₁ -T ₃	occiput, C ₁ , C ₂
“asthma reflex,”	T ₂ left	occiput, C ₁ , C ₂
bronchial mucosa reflex	T ₂ -T ₃	occiput, C ₁ , C ₂
lung parenchyma reflex	T ₃ -T ₄	occiput, C ₁ , C ₂
pariatal pleura	T ₁ -T ₁₂	occiput, C ₁ , C ₂

Myofascial Treatment to the Trachea-Cervical Restrictions in the Anterior Neck

- Place patient in the supine position.
- Sit at the side of the table.
- Lightly grasp the trachea between your thumb and index finger.
- Place your other hand under the posterior cervical spine at the same level as the tracheal restriction.
- Use a layer palpation technique to find the barrier between your hands.
- Once the barrier of motion has been determined, use a direct or indirect MFR technique to free up the barriers.

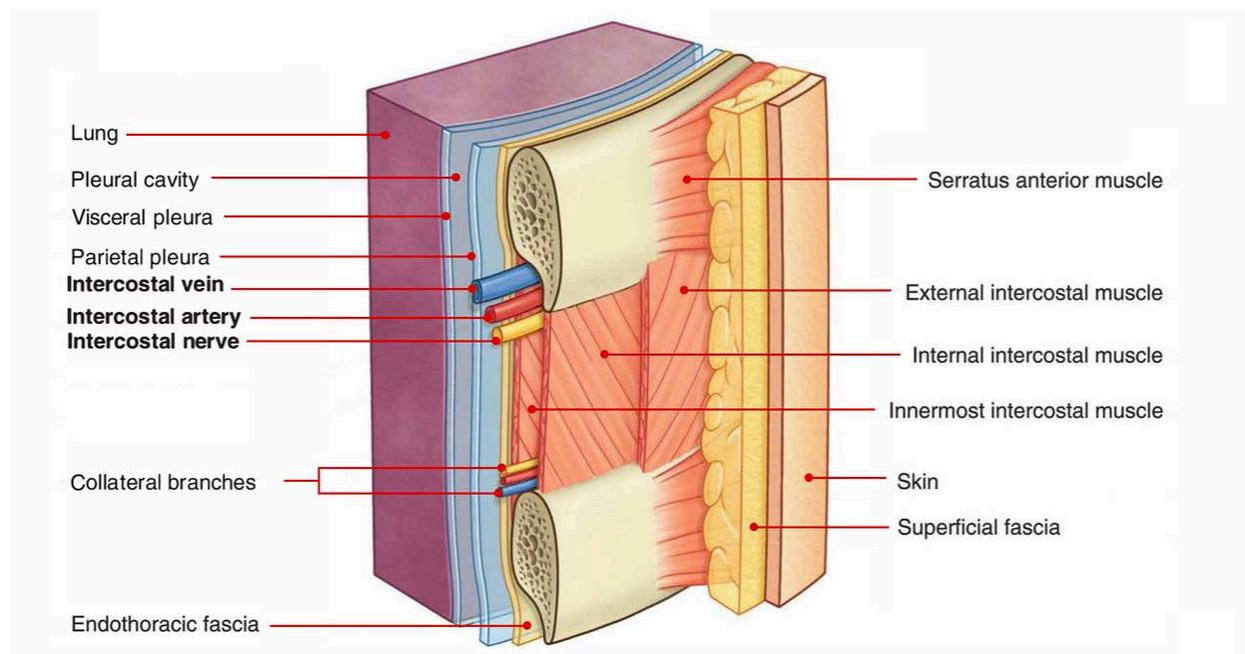


Chapman's Neurolymphatic Reflexes

These reflex points can be used to help improve lymphatic congestion in specific regions of the body. They form as a result of viscerosomatic reflexes from irritated viscera. Here we will only focus on the respiratory system and the infectious group of points. **Treatment of the infectious group and the lungs are quite important in the acute cases, especially in people with vulnerable conditions. This technique can be used frequently throughout the day in this group!**

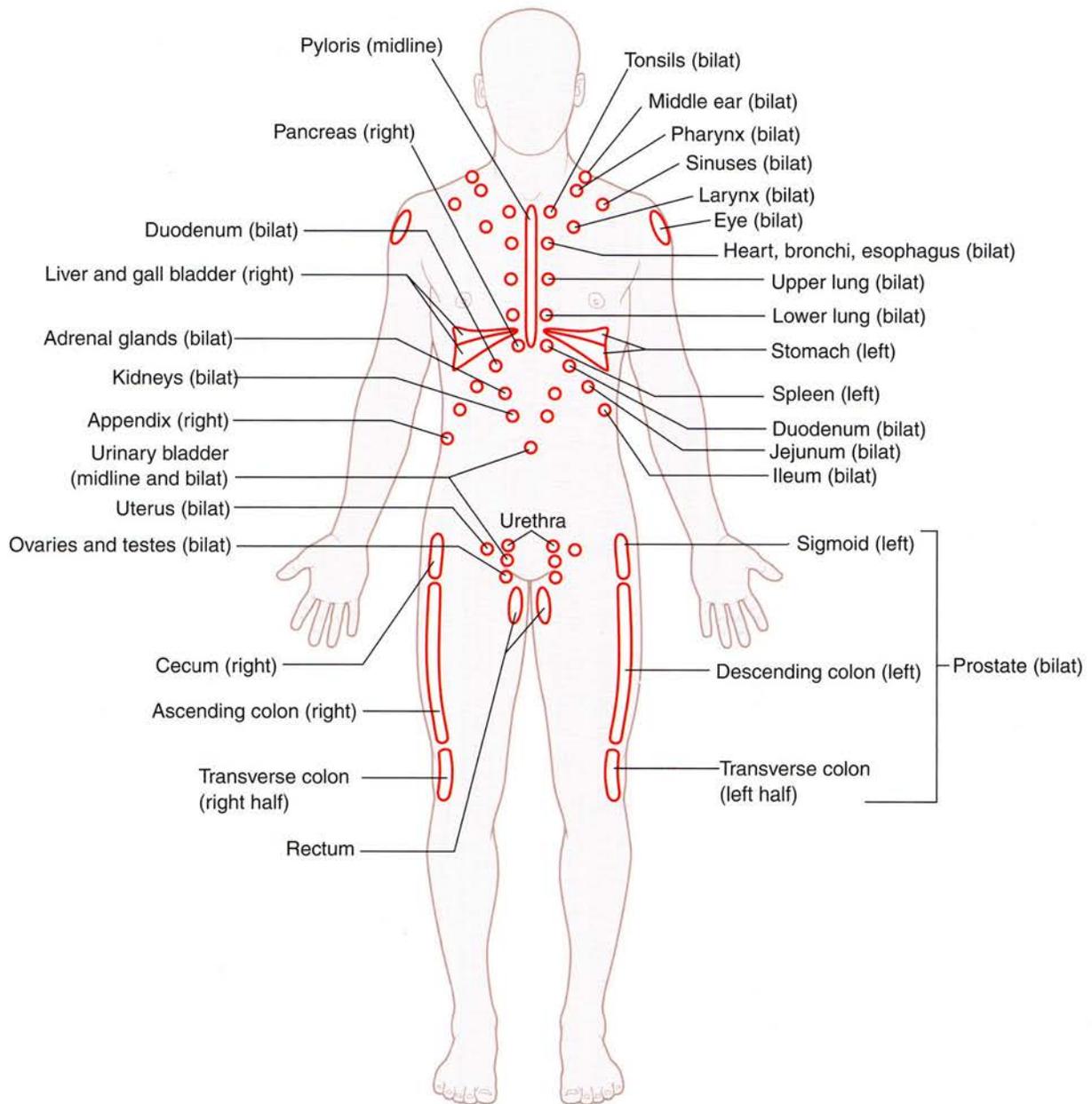
Key Points for Using Chapman's Neurolymphatic Reflexes

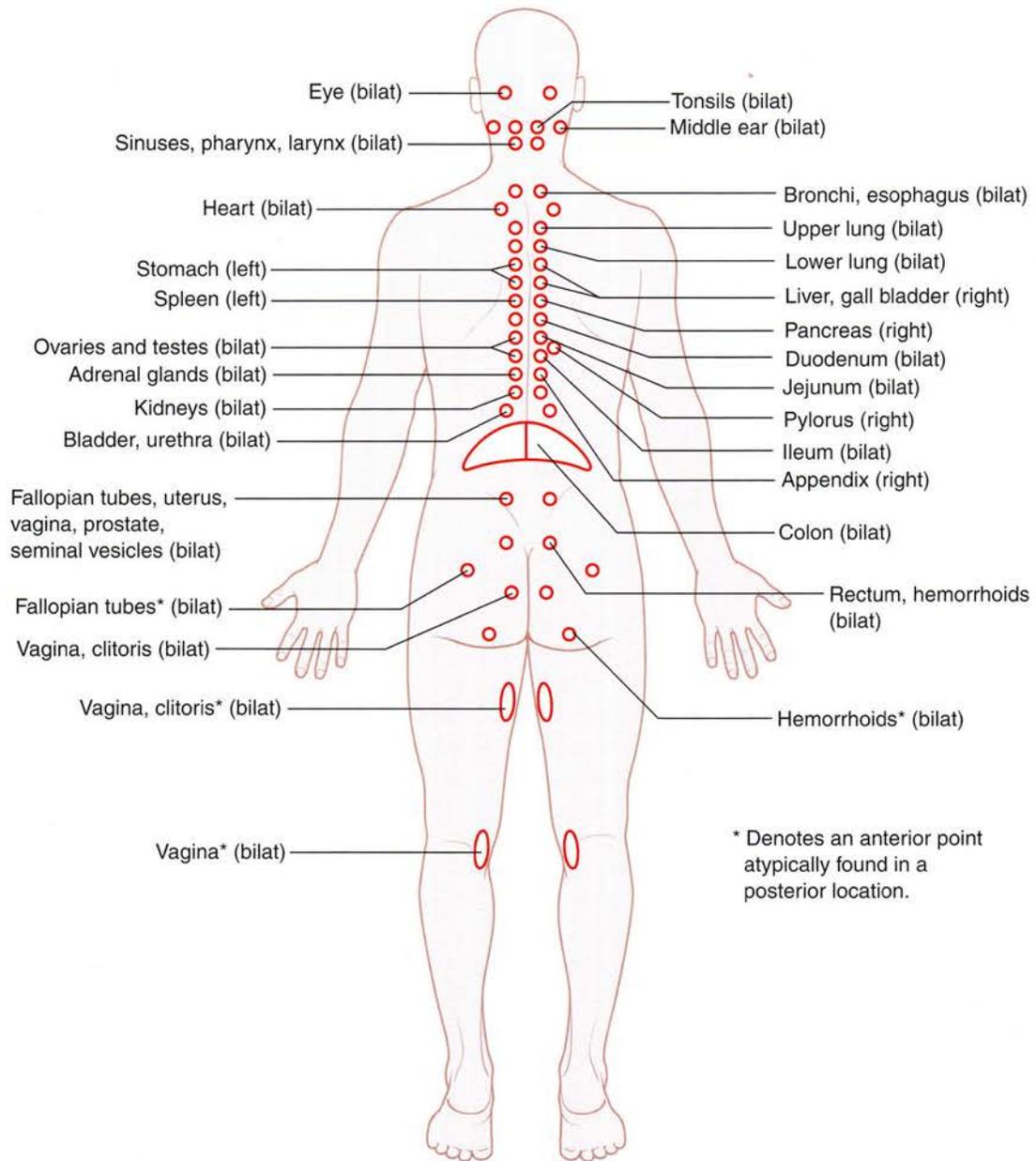
- Chapman's Reflexes can vary in size from a BB pellet, pea, pinhead, or an almond.
- Chapman's Reflexes are believed to be located **deep to the skin and subcutaneous areolar tissue, most often lying on the deep fascia or periosteum.**



- Chapman's points for each organ are present in the front (anterior) and back (posterior) of the body in specific locations.

- The anterior and posterior points form a reflex so treating the 2 together will cause a release of lymphatic congestion in a specific region. This is the best way to use these reflexes on someone else.
- When using these reflexes on yourself, you can use just the anterior points. While they may not be as specific, they can still be effective.
- To find these points, let your fingers slowly sink into the skin and press gradually deeper into the area until you are just deep to the muscle. This is where you usually find the nodules of a Chapman's reflex.
- When using both the anterior and posterior points together, let your fingers sink in until you feel that they "connect". This means the entire reflex has been engaged.
- Use a slow, steady, and even pressure over the anterior point without letting your finger slip off of the point. Continue until you feel the tissue relax.
- Do not over treat. 15-60 seconds is enough for each point.
- Change of the organ function is not normally observed for 24 hours.
- Treatment can be repeated until changes of organ function are noted and can be used often in cases of acute infection.
- Sympathetic nervous system generates and maintains the reflexes.





Chapman's Infectious Group

1. Liver
2. Spleen
3. Adrenals

T5-T6 Points

Torpid Liver (pages 110-111) - Use Firm but gentle rotary movement.

Anterior: Intercostal space between the 5th and 6th ribs, from the mid-mammillary line up to the sternum on the right side.

Posterior: The interspace between the transverse processes of T5 and T6 and midway between the spinous and the tips of the transverse processes on the right side.

T6-T7 Points

Congestion of the Liver and Gall Bladder (pages 108-109) - Use Firm but gentle rotary movement.

Anterior: A gangliform contraction of these tissues in the intercostal space from the mid-mammillary line up to the sternum on the right side between the 6th and 7th ribs.

Posterior: Between the transverse processes of T6 and T7, midway between the spinous processes and the tips of the transverse processes, on the right side.

T7-T8 Points/Rib 8 Points

Splenitis (pages 112-113) - Use Firm rotary movement.

Anterior: Intercostal space between the 7th and 8th ribs on the left side near the junction of the cartilages.

Posterior: Intertransverse space midway between the spines and tips of the transverse processes of T7 and T8 on the left side.

T11-12 Points

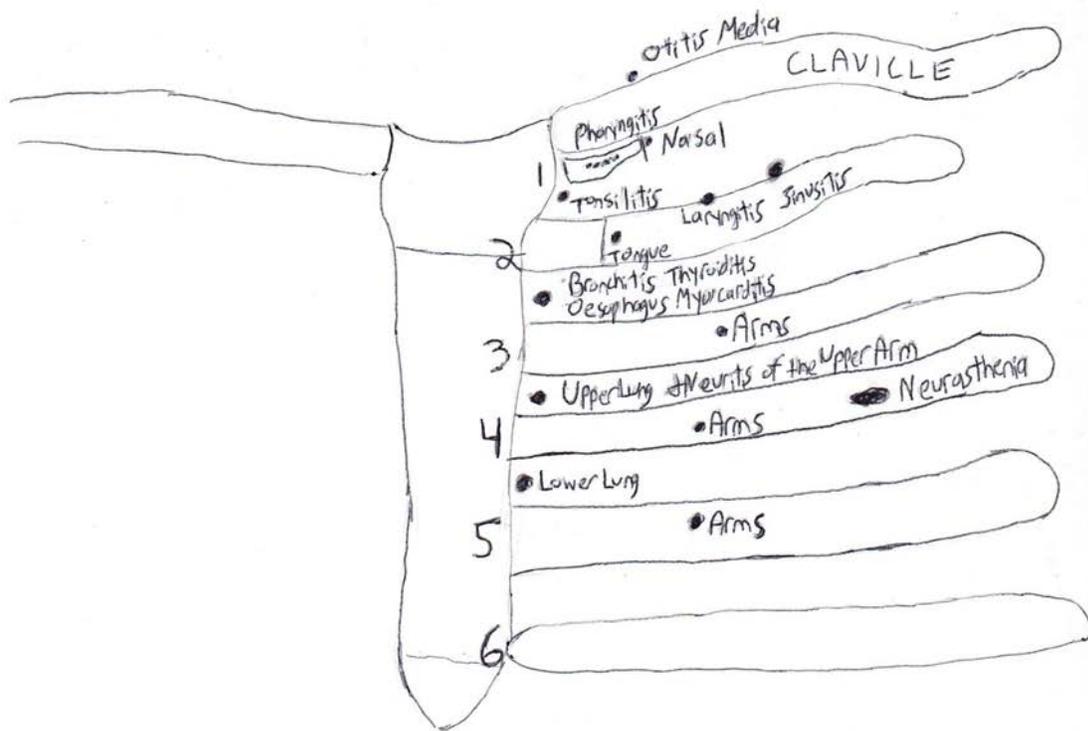
Adrenals (pages 96-97) - Use Deep firm rotary movement.

Anterior: An area from 2-2 ½ inches above and 1 inch on either side of the umbilicus.

Posterior: Intertransverse spaces on both sides of T11 and T12, midway between the spinous processes and the tips of the transverse processes when both adrenals are involved and on the affected side where only one is at fault.

Chapman's Respiratory Group

Chapman's Chest Points



C1 Points [Note Page Numbers reflect pages in Frank Chapman's Book, An Endocrine Interpretation of Chapman's Reflexes]

1. Otitis Media (pages 26-27) - Use Gentle but firm rotary movement.

Anterior: On the upper edge of the clavicle, just beyond where it crosses the first rib. It shows middle ear involvement; and, by extension, into the cells of the mastoid process.

Posterior: Upper edge of the posterior aspect of the tip of the transverse process of C1.

2. Nasal (pages 30-31) - Use Gentle rotary movement.

Anterior: On the first rib at the junction of the rib with the cartilage means an involvement of the membrane of the nose on the affected side.

Posterior: Placing the finger under the angle of the jaw, as if you were going to draw a line across the face to parallel the line of the mouth and shoving the finger backward until you come in line with the transverse process of the vertebrae, you will find an excessively sensitive gangliform contraction the size of a half pea.

3. Tonsillitis (pages 32-33)

Anterior: A gangliform contraction between the first and second ribs and close to the sternum indicates congestion of the tonsillar area with attendant soreness of the throat.

Posterior: Posterior surface of the transverse process of the first cervical vertebra, midway between the median line of the neck and the tip of the transverse process.

C2 Points

1. Pharyngitis (pages 28-29) - Use Gentle rotary movement.

Anterior: The front of the first rib for a matter of three quarters of an inch toward the sternum from where the clavicle crosses the rib.

Posterior: Midway between the spinous process and the tip of the transverse process of C2, on the posterior aspect of the transverse process.

2. Tongue (pages 34-35) - Use Firm rotary movement.

Anterior: On the front of the cartilage of the 2nd rib approximately $\frac{3}{4}$ of an inch from the sternum.

Posterior: Midway between the tip of the transverse process and the spinous process, on the superior aspect of the transverse process of C2.

3. Laryngitis (pages 36-37) - Use Gentle rotary movement.

Anterior: Upper surface of the 2nd rib, from 2-3 inches from the sternum.

Posterior: Midway between the tip of the transverse process and the spinous process, on the posterior aspect of the transverse process of C2.

4. Sinusitis (pages 38-39)

Anterior: Approximately 3 $\frac{1}{2}$ inches from the sternum, on the upper edge of the 2nd rib and in the first intercostals space above.

Posterior: Midway between the spinous process and the tip of the transverse process, on the posterior aspect of the process of C2.

T2 Points

Bronchitis (pages 44-45) - Use Gentle rotary movement.

Anterior: Intercostal space between ribs 2 and 3 close to the sternum.

Posterior: Across the face of the transverse process of T2, midway between the spinous process and the tip of the transverse process.

T3-T4 Points

Upper Lung (pages 50-51) - Use Deep firm rotary movement.

Anterior: Between ribs 3-4 near the sternum.

Posterior: Between the transverse processes of T3 and T4, midway between the spinous processes and the tips of the transverse process of T3 and T4.

T4-T5 Points

Lower Lung (pages 52-53) - Use Deep firm rotary movement.

Anterior: Between ribs 4-5, close to the sternum.

Posterior: Intertransverse space, midway between the spinous processes and the tips of the transverse process of T4 and T5.