Myofascial Release Lab Handout

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Length <u>to be divided</u> <u>between the pair</u>	On hour start	Topic
10 min	00:00-00:10	Intro//personal centering//clinical pearls
30 min	00:10-00:25	Thoracolumbar MFR Demo of Supine Thoracolumbar MFR
15 min	00:25-00:55	Forearm MFR
30 min	00:55-01:20	MFR long lever lumbar and lower thoracic spine with lower extremity Supine Psoas MFR
20 min	01:20-01:40	Review: Zink screen Thoracic inlet MFR Diaphragm MFR
10 min	01:40-01:50	Review as needed

Objectives:

- Understand the principles of myofascial release (MFR) as a technique that targets
 myofascial structures using either direct or indirect approaches, by stacking planes
 of motion toward ease or bind and maintaining the position until a release or
 unwinding occurs.
- 2. Differentiate MFR diagnostic criteria from other OMT techniques by emphasizing the relevance of TART changes, restricted range of motion, and fascial preferences rather than full triplanar somatic dysfunction.

- 3. Develop palpatory awareness of subtle fascial motions including rotational ease and tension (as seen in Zink patterns and Thomas Test) to guide myofascial release treatment.
- 4. Practice and demonstrate the following techniques

New techniques included in this lab:

- Thoracolumbar MFR
- Forearm MFR
- MFR long lever lumbar and lower thoracic spine with lower extremity
- Supine Psoas MFR

Techniques for review

- Supine thoracolumbar MFR (bonus)
- Zink screen
- Thoracic inlet MFR
- Diaphragm MFR

Pearls:

- MFR is guided by palpatory findings of fascial ease and restriction, not necessarily full triplanar somatic dysfunction, which is more relevant for techniques like HVLA and MET.
- TART criteria especially fascial texture, asymmetry, and restricted range of motion — are sufficient for diagnosis in MFR.
- Fascial preference can be subtle, often experienced as a gentle rotational bias (e.g., a clockwise twist at the inlet or diaphragm), rather than a hard end-feel.
- Zink patterns offer clinically useful insight into global fascial rotational preferences and asymmetries, helping guide treatment even without positional diagnosis.
- Unlike segmental diagnosis, fascial assessment emphasizes functional rather than structural findings trust the tissue response.
- Stacking tissue in planes of motion and holding until release enhances proprioceptive feedback and supports self-correction.
- Common signs of release include softening, warmth, tissue creep, and unwinding.
 Some tissues may shift slowly and subtly be patient and perceptive.
- Range of motion tests such as the Thomas Test can help localize fascial restriction and asymmetry, especially in the anterior kinetic chain.
- While each technique describes specific hand placements or body parts used to guide motion, fascia is interconnected — your hands can be placed anywhere you feel the tissue respond. Follow the unwinding wherever it presents, even if it's outside the "textbook" contact points.

Please work with your preceptors to get hands-on, hand-over-hand experience with each technique. This is the best way to develop a feel for key elements of MFR — including stacking ease vs. barrier, sensing the point of balanced tension, following a myofascial unwind, and recognizing what a true release feels like.

New Techniques

Thoracolumbar Myofascial Release (MFR)

Possible TART Findings/Diagnosis: TART changes in the

thoracolumbar region

Example Diagnosis: Increased hypertonicity and skin drag in the

right thoracolumbar region

Patient Position: Prone (Supine or lateral recumbent optional) **Physician Position:** Seated or standing at the side of the table

Treatment:

- The physician places one hand over the lower thoracic spine (T10–T12) and the other over the upper lumbar spine (L1–L3). Hands may be oriented horizontally or vertically, depending on physician comfort and patient body habitus.
- 2. Gentle pressure is applied to engage the myofascial layer beneath each hand.
- Fascial motion is assessed in all planes superior/inferior, right/left, and clockwise/counterclockwise — both independently and in relation to each hand.
- 4. The diagnosis is made based on the combination of directions where the fascia exhibits greatest ease or restriction (e.g., inferior, right, and clockwise).
- 5. Treatment is applied by stacking the tissues into either the position of ease (indirect) or toward the restriction (direct), emphasizing the tension across the thoracolumbar junction.
- 6. The position is maintained for up to two minutes while monitoring for a release, characterized by tissue softening, warmth, creep, or unwinding. The physician may follow any tissue changes as they occur.
- 7. Once a release is appreciated, the tissues are gently returned to neutral and the region is reassessed for improved motion and symmetry.

Reassess





Forearm Myofascial Release (MFR)

Possible TART Findings/Diagnosis: TART changes in

the forearm

Example Diagnosis: Myofascial ease in pronation,

dorsal translation, and compression **Patient Position:** Seated or supine

Physician Position: Seated, facing the patient

Treatment:

1. The physician engages the forearm by placing both hands around the medial and lateral compartments, using a broad, gentle contact to access the myofascial layer.

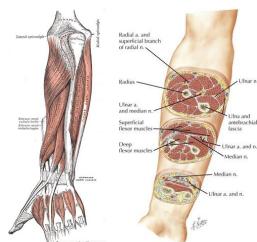
- Motion testing is performed to evaluate the forearm in all available planes, including pronation/supination, medial/lateral translation, dorsal/ventral translation, and compression/distraction.
- 3. A diagnosis is made based on the directions of ease or restriction in these motions.
- For treatment, the physician stacks the tissues into the diagnosed position of ease (indirect) or into the restriction (direct), engaging the tissues in all planes.
- 5. The position is held while monitoring for a release, which may present as softening, warmth, or tissue creep. The physician may follow the tissue as it unwinds.
- 6. Once a release is appreciated, the forearm is gently returned to neutral and the initial diagnosis is reassessed.

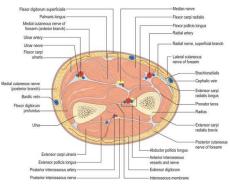
Reassess

<u>Myofascial Release (MFR) – Long Lever Lumbar and Lower Thoracic Spine</u> <u>with Lower Extremity</u>

Possible TART Findings/Diagnosis: TART changes in the lower thoracic and lumbar regions, often associated with fascial restrictions through the pelvis or lower extremities Example Diagnosis: Fascial restriction at L2–L4 with associated ease in hip internal rotation and flexion Patient Position: Supine, with the lower extremity supported in either a flexed or extended position (flexed is typically preferred)

Physician Position: Standing at the side of the table







Treatment:

- 1. The physician identifies the segment of greatest restriction in the lower thoracic or lumbar spine.
- 2. The cephalad hand is placed over the region of restriction, contacting the involved segment and surrounding myofascial tissues.
- 3. The caudad hand supports the patient's lower extremity, maintaining a position that is comfortable for the patient and allows for ease of motion.
- 4. The lower extremity is gently moved through ranges of motion including flexion/extension, internal/external rotation, and abduction/adduction to identify the position of maximal ease or engage the restriction, depending on the chosen approach.
- 5. Compression or distraction through the femur may be applied to further engage the myofascial tissues and refine the position.
- The position is maintained until a release is palpated, which may present as tissue softening, warmth, or an unwinding motion. The physician may follow the tissue as it shifts.
- 7. Once a release is appreciated, the lower extremity is returned to neutral, and the region is reassessed for improved motion and tissue quality.

Reassess

Notes:

- This technique utilizes the lower extremity as a long lever to influence and treat restrictions in the lumbar and lower thoracic regions.
- Patient comfort and gentle engagement of the myofascial structures should be prioritized throughout the treatment.

Myofascial Release (MFR) - Supine Psoas

Possible TART Findings/Diagnosis: TART changes in the upper lumbar region and/or anterior hip

Example Diagnosis: Fascial ease in lumbar sidebending and external rotation of the ipsilateral thigh, suggestive of psoas hypertonicity

Patient Position: Supine

Physician Position: Seated or standing on the ipsilateral side of the psoas being treated, facing the patient's head

Treatment:

 The cephalad hand contacts the upper lumbar spine to engage the deep myofascial tissues of the psoas. The crease of the hand is placed over the spinous processes, with the heel of the hand contacting the ipsilateral transverse processes and the fingertips contacting the contralateral transverse processes.



The patient may be turned lateral in illustrations solely for educational visualization; the technique itself is performed with the patient supine.

- 2. The caudad hand contacts the patient's ipsilateral thigh.
- 3. With the cephalad hand, the physician assesses and engages the vertebral segments in all planes: rotation, sidebending, and flexion/extension. Each plane is positioned into its respective ease.
- 4. Simultaneously, the caudad hand gently rotates the thigh internally and externally to identify the direction of ease at the psoas's distal attachment. The thigh is held in the position of maximal ease to facilitate shortening of the psoas.
- 5. Additional refinement may be achieved by incorporating hip flexion or applying gentle compression or distraction through the femur, either into or away from the psoas attachments.



6. The position is maintained while monitoring for signs of release, such as softening, lengthening, or a decrease in lumbar lordosis.



Fine-tuning through the femur allows the physician to localize force transmission toward the superior psoas attachments.

- 7. Once a release is appreciated and no further change is noted, the hands are relaxed and tissues are allowed to return to a neutral position.
- 8. The region is reassessed for changes in tissue tension and motion.

Reassess

Techniques for Review

Zink Fascial Pattern Screening (Modified Zink Screen)

Purpose: To identify patterns of fascial ease and restriction at transitional junctions of the body to guide further treatment, especially diaphragm and inlet balancing techniques.

Possible TART Findings/Diagnosis: Myofascial asymmetry or restriction at major transitional junctions

Example Pattern: Compensated fascial pattern with left-right-left-right ease across pelvic, thoracolumbar, cervicothoracic, and OA junctions

Patient Position: Supine

Physician Position: Standing or seated at the side or head of the table, depending on the

region being evaluated

Assessment Steps:

1. Occipitoatlantal (OA) Junction:

The physician maintains their position at the head of the table and contacts the base of the occiput bilaterally. Fingers are placed on either side of the occiput-C1

region. Rotation is assessed by gently lifting anteriorly and medially on one side, then repeating on the other, to determine the direction of fascial ease.

2. Cervicothoracic (CT) Junction:

The physician moves to the head of the table and places their palms over the anterior thoracic inlet, with thumbs approximating the CT junction posteriorly. Bilateral gentle rotation is tested through the tissues. Ease is again noted.

3. Thoracolumbar Junction (TL):

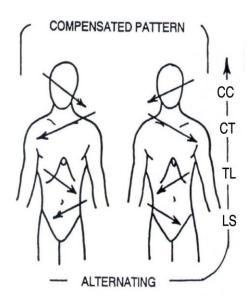
The physician places both hands under the patient's 12th ribs and applies gentle rotational motion through the thoracolumbar junction. The direction of ease is assessed by sensing which rotation allows freer movement or softer tissue texture.

4. Pelvic /Lumbosacral (LS) Junction:

The physician stands at the side of the table and places fingertips gently over the posterior ilia bilaterally. Light rotational pressure is applied by lifting one side of the pelvis anteriorly while pressing the opposite side posteriorly, then reversing. The direction of fascial ease is noted (e.g., ease with rotation to the right). *Note*: Lifting the left ilium induces relative right pelvic rotation and vice versa.

Interpretation:

- The screen provides a "pattern" of fascial rotation (ease) across transitional zones.
- A **compensated pattern** (e.g., alternating rotational ease at each junction) is commonly observed in asymptomatic individuals.
- An uncompensated pattern (e.g., multiple junctions restricted in the same direction or showing restriction without clear ease) may indicate increased somatic dysfunction and decreased adaptability.



Fascial Patterning Possibilities

- Physiologic/ Ideal paired structures level
- Compensated (patterned asymmetry)
 - Common Compensatory Pattern 80%, L/R/L/R
 - Uncommon Compensatory Pattern 20%, R/L/R/L
- Uncompensated (non-patterned asymmetry)

Clinical Use:

- The Zink screen helps identify which junction may benefit most from initial treatment.
- After treating the area of greatest restriction (commonly the thoracic inlet or diaphragm), the screen should be repeated to assess changes.
- May be supplemented with upper and lower extremity fascial assessments in a full-body screen.

Reassess:

Reassess all four junctions following treatment to evaluate for improved balance and tissue motion.

Notes:

- The Zink screen is not a treatment but serves as a diagnostic tool to prioritize and sequence osteopathic treatments.
- Students are encouraged to practice related techniques such as thoracic inlet release and respiratory diaphragm MFR, which are frequently tested in practical examinations.

Myofascial Release (MFR) - Thoracic Inlet

Possible TART Findings/Diagnosis: TART changes at the cervicothoracic junction, restricted motion of the thoracic inlet, lymphatic congestion, or respiratory asymmetry **Example Diagnosis:** Thoracic inlet restriction with ease in left sidebending, right rotation, and inhalation

Patient Position: Supine

Physician Position: Seated at the head of the table

Treatment:

- 1. The physician places their thumbs over the transverse processes of T1 and the finger pads over the anterior aspects of the clavicles bilaterally.
- 2. A gentle compressive force is applied by approximating the thumbs and fingers to create slack in the thoracic inlet fascia and engage Sibson's fascia.
- The thoracic inlet is motion tested in sidebending and rotation, and—if indicated flexion and extension.
- 4. The patient is asked to briefly hold their breath in both inhalation and exhalation to assess which respiratory phase offers greater ease.
- The physician stacks all identified directions of ease (indirect) or, alternatively, positions the tissues into the restricted directions (direct), depending on the intended treatment approach.
- 6. This position is maintained while monitoring for a myofascial release, which may be appreciated as tissue softening, lengthening, or improved symmetry.
- 7. Once the release is achieved, the tissues are gently returned to neutral and the region is reassessed for improved motion.

Reassess

Notes:

- Engaging the thoracic inlet can influence lymphatic drainage, autonomic tone, and respiratory mechanics.
- This technique may be used as part of a sequence addressing the Common Compensatory Pattern (Zink screen).

Myofascial Release (MFR) - Thoracic Diaphragm

Possible TART Findings/Diagnosis: Fascial restriction at the thoracic diaphragm, altered

respiratory excursion, tissue tension in costal margins or central tendon

Example Diagnosis: Thoracic diaphragm ease with inhalation, right sidebending, and

inferior translation

Patient Position: Supine

Physician Position: Standing at the side of the table, facing cephalad

Treatment:

1. The physician contacts the lateral aspects of the costal cage with a broad palmar

contact. Thumbs are positioned to sink posteriorly and superiorly beneath the medial costal margins to engage the diaphragm.

- 2. A gentle inward compressive force is applied to reduce tension in the diaphragm and engage the myofascial tissues.
- 3. The patient is asked to breathe in and out. The physician observes the motion of the diaphragm to determine the respiratory phase of ease (inhalation or exhalation).
- 4. Additional motion testing is performed in multiple planes: rotation, sidebending, lateral translation, and superior/inferior motion.
- 5. The somatic dysfunction is diagnosed by identifying the directions of fascial ease in each of these motions, including the respiratory phase.
- 6. For treatment, all planes of motion are stacked into either the directions of ease (indirect) or restriction (direct), depending on the chosen approach.
- 7. The position is maintained while monitoring for a release, appreciated as reduced tissue tension, softening, or decreased resistance to the engaged position.
- 8. Once a release is palpated, the diaphragm is gently returned to neutral and the original findings are reassessed.







Notes:

- This technique is frequently used following thoracic inlet MFR or in patients with impaired respiration or lymphatic flow.
- Subtle changes in breath movement, fascial drag, and tissue compliance may indicate release.