

Principles of Myofascial Release

WVSOM OMT Outline- Lecture and Hands on Session

For AOBFP OCC Component 3

Course Overview

Lecture 30 Minutes- Principles of Myofascial Release

Hands On Lab 70 Minutes-The hands-on portion of this lab will instruct participants how to perform a regional diagnosis and a tri-planar diagnosis for the thoracic spine. After diagnosis of the thoracic spine, participants will apply myofascial release technique regional and to a specific segment. Additionally, the students will be instructed on the diagnosis of the of somatic dysfunction at the tibial and fibula interosseous membrane and application of myofascial release. Treatment techniques will be applied in a direct and indirect manner

Learning Objectives

Lecture Objectives:

1. Understand the barrier concept and how it relates to diagnosis and treatment.
2. Understand the principles of myofascial release (direct and indirect).

OMT Goals:

1. Remove fascial restrictions in order to decrease pain, improve mobility, increase circulation/lymphatic flow, improve metabolism to improve function and prevent disease progression.
2. Develop palpatory skill based on engagement and palpatory feedback to achieve successful osteopathic treatment.
3. Understand the principles of myofascial release in order to apply MFR to any region of the body.

Anatomical Considerations and Osteopathic Principles:

Thoracic Region

Finding hypertonicity and using the barrier concept to direct diagnosis and treatment of somatic dysfunction.

Palpate for hypertonicity and fascial restriction and ease in the thoracic paraspinal region

Perform a Fryettes' triplanar diagnosis focused on the ligamentous and fascial ease and restriction at a specific level of the thoracic spine.

Lower Extremity

Palpation of the forearm for motion testing to a restrictive barrier and to a position of ease.

Location of the interosseous membrane and the relationship to the proximal and distal aspects of the tibia and fibula.

Explain the principles of unwinding, feathers edge, activating force, stacking and the barrier concept.

- Barrier – the limit of motion
- Anatomic(al) barrier – limit of motion imposed by anatomic structure. The limit of normal passive motion. Beyond this barrier, tissue disruption occurs.
- Physiologic barrier – the limit of normal active motion.
- Elastic barrier – the range between physiologic and anatomic barriers in which passive ligamentous stretching occurs before tissue disruption.
- Pathologic barrier – a restriction of joint motion associated with pathological changes in tissues (e.g. osteophytes).
- Restrictive barrier – a functional limit that abnormally diminishes the normal physiologic range.

Hands On Session Objectives

1. Apply the principles of myofascial release to diagnosis and treatment of somatic dysfunctions.
2. Demonstrate Myofascial release for the following:
 - Thoracic regional myofascial release
 - Thoracic segmental myofascial release
 - Lower Extremity tibia and fibula interosseous membrane myofascial release

Treatment Techniques:

Prone Regional Thoracic MFR

Indications: Restricted thoracic motion or other TART changes in the posterior thoracic region

May be associated with back pain, chest wall pain, rib restriction, shoulder pain and other problems.

Relative contraindications: Acute thoracic or rib fracture, or open wounds where you will be placing your hands

1. Place both hands, palms down, on either side of the thoracic spine with fingers slightly spread apart. Apply enough pressure so that you are affecting the fascia (remember your layer palpation). Your hands should not slide on the skin.
2. Gently move your hands in the same direction superiorly/inferiorly, right/left, and clockwise/counterclockwise to determine the motion barrier.
3. Indirect: Gently take the tissues to the position of laxity. Apply compression or other activating force, if needed, and follow any tissue release until completed.
4. Direct: Gently take the tissues to the “feather edge” of the motion barrier. Apply steady force until tissue give is completed.
5. Retest tissue motion.

Thoracic MFR (Triplanar)

Indications: Restricted thoracic vertebral motion.

May be associated with back pain, chest wall pain, rib restriction, shoulder pain, and other problems

Relative contraindications: Acute thoracic fracture or open wounds on the skin over the affected segment or in the immediate area (where you will be placing your hands)

1. Sitting at the head or side of the table, place your fingertips on the transverse process of the restricted segment. Hint: it's a good idea to have the patient turn their head one way and you turn yours the other if you're approaching from the head of the table.
2. Indirect: Use your fingertips to gently move the segment to the position of laxity in flexion/extension, rotation, and sidebending. Apply an activating force, if needed, and follow any tissue release until completed.
3. Direct: Slowly move the segment into the “feather edge” of the motion restriction in flexion/extension, rotation, and sidebending. Apply steady force until tissue give is completed.
4. Retest thoracic motion

Tib-Fib Interosseous Membrane Myofascial Release

Indications: Restricted motion or other TART changes in the tib-fib interosseous membrane

May be associated with knee pain, ankle pain, abnormal gait, and other problems.

Relative contraindications: Acute tibia or fibula fracture, open wounds where you will be placing your hands, untreated DVT

Technique (supine):

1. Hold the proximal leg at the tibial tuberosity and fibular head with one hand and the distal leg at the lateral and medial malleoli with your other hand;
2. Rotate the hands in opposite directions and then reverse directions to determine torsional laxity versus restriction;
3. Indirect: Use both hands to slowly rotate the lower leg into its position of torsional laxity, apply compression or traction between your hands to facilitate laxity, and follow any tissue release until completed;
4. Direct: Use both hands to slowly rotate the lower leg into its torsional restriction and apply steady force until tissue give is completed;
5. Retest rotation/torsion.

Note: Somatic Dysfunction is named based on the location of the distal hand

Summary

Myofascial Release (MFR) technique is a safe and efficient treatment for fascial restrictions that lead to somatic dysfunction. MFR can be applied as a regional treatment or segmental. Once the principles are learned MFR technique may be applied to almost every region of the body. To understand and apply MFR one must understand characteristics of fascia, barrier concepts, and feathers edge. The physician must develop a palpatory skill to engage fascial tissue and use palpatory feedback to provide treatment.