



Introduction to OMM for MDs and DOs

Summary of Day 2

- May 20, 2024 – May 23, 2024 Kirksville, MO
- NCOPPE & KCOM



- Somatic Dysfunction

Impaired or altered function of related components of the somatic (body framework) system: skeletal, arthrodial, and myofascial structures, and their related vascular, lymphatic, and neural elements.

- Diagnostic Criteria for Somatic Dysfunction is T.A.R.T.

Tissue texture abnormalities
Asymmetry of structure
Restriction of motion
Tenderness

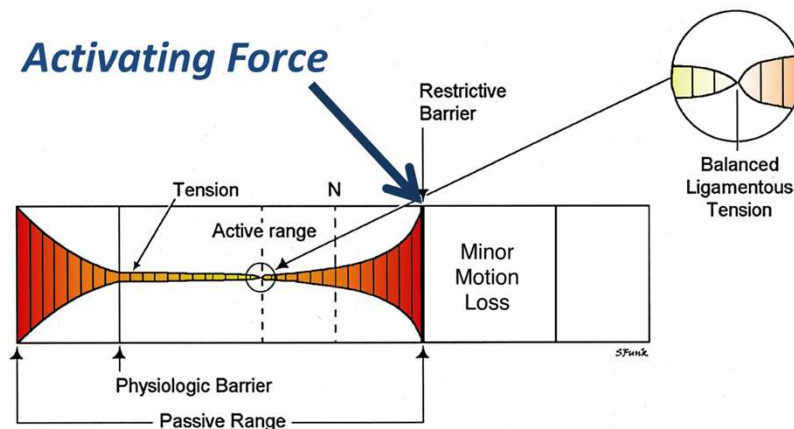
- Somatic Dysfunction is the indication for OMT

- OMT is directed specifically at the treatment of somatic dysfunctions

- OMT – Osteopathic Manipulative Treatment

The therapeutic application of manually guided forces by an osteopathic physician to improve physiologic function and/or support homeostasis that have been altered by somatic dysfunction.

- OMT: Direct or Indirect Techniques



Muscle Energy of Thoracic Spine

- A form of osteopathic manipulative diagnosis and treatment in which the patient's muscles are actively used on request, from a precisely controlled position, in a specific direction, and against a distinctly executed physician counterforce
- Typically a Direct Technique
- Usually patient is supine or seated
- Localize
 - Move trunk in each plane until you first feel the tissue tighten
- Activating force
 - Coach patient to lightly contract against your resistance
 - Typically physician provides isometric resistance

Somatic Dysfunction	Restrictive Barrier Direction of Bind
Named for preferred motion	Direct Technique Positioning
ER_LS_L	FR_RS_R
ER_RS_R	FR_LS_L
FR_LS_L	ER_RS_R
FR_RS_R	ER_LS_L
NS_LR_R	NS_RR_L (variable F or E)
NS_RR_L	NS_LR_R (variable F or E)
E	F (variable R or S)
F	E (variable R or S)

Counterstrain Treatment

An Indirect Technique

1. Find the tender point
 2. Establish a pain scale
 3. Position in standard treatment position
 4. Recheck TP -Goal is Zero - minimum is 30% of original pain
 5. Fine tune position for maximum effect
 6. Monitor point and Hold treatment position for 90 seconds
 7. **SLOWLY** return to neutral
 8. Recheck point
- Eliciting tenderness pressure
 - Monitoring tissue response pressure
 - Lighter
 - Palpating radial pulse
 - Therapeutic pulse
 - Improved tissue perfusion

Diagnosing Cervical Segmental Vertebral Somatic Dysfunction

- Screen to Find a Significant Region of the Spine
 - Asymmetry by inspection
 - Tissue Texture Abnormality (TTA)
 - Restriction of Motion
 - Regional cervical range of motion
 - Active or passive
 - Segmental Lateral translation
 - Tenderness
- Passive Motion Testing for Tri-axial Findings
 - Rotation
 - Sidebending
 - Flexion/Extension (Neutral)
- Calibrate your hands

Somatic Dysfunction of Cervical Spine
Named for preferred motion
C2 to C7 (Typical C-spine) C3 = C3 on C4
ER _L S _L
ER _R S _R
FR _L S _L
FR _R S _R
AA (Atlantoaxial, C1, C1 on C2)
R _L
R _R
OA (Occipitoatlantal, C0, C0 on C1)
ES _L R _R or ES _R R _L
FS _L R _R or FS _R R _L

Muscle Energy of Cervical Spine

- Typically a Direct Technique
- Usually patient is supine (can be seated)
- Localize
 - Move head/neck in each plane until you first feel the tissue tighten
- Activating force
 - Coach patient to lightly contract against your resistance
 - Typically physician provides isometric resistance
 - May try eye movements at the OA and AA

Somatic Dysfunction of C-Spine	
Named for preferred motion	Direct Technique Positioning
C2 to C7 (Typical C-spine) C3 = C3 on C4	
ER_LS_L	FR_RS_R
ER_RS_R	FR_LS_L
FR_LS_L	ER_RS_R
FR_RS_R	ER_LS_L
AA (Atlantoaxial, C1, C1 on C2)	
R_L	R_R
R_R	R_L
OA (Occipitoatlantal, C0, C0 on C1)	
ES_LR_R or ES_RR_L	FS_RR_L or FS_LR_R
FS_LR_R or FS_RR_L	ES_RR_L or ES_LR_R

Clinical Practice Guidelines (CPGs)

- Several professional organizations and national agencies have published practice guidelines recommending the inclusion of manual therapies as part of the management of specific conditions or types of musculoskeletal pain.
- Generally, these recommendations expand and become more specific as the evidence grows over time.

CPGs: Acute Pain

The National Academy of Medicine (formerly the Institute of Medicine) recommends that manual therapy be considered as part of a multimodal approach for initial management of acute pain for conditions that are likely to be short in duration.

- Institute of Medicine Committee on Advancing Pain Research, Care, and Education. Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research. Washington, DC: National Academies Press; 2011.

CPGs: Headaches

Clinical practice guidelines published by several countries and by the US Department of Veterans Affairs and the US Department of Defense recommend including manual therapies as part of nonpharmacological management of headaches.

- Ng JY, Hanna C. Headache and migraine clinical practice guidelines: a systematic review and assessment of complementary and alternative medicine recommendations. BMC Complement Med Ther. 2021;21:236.
- Sico JJ, Macedo F, Lewis J, et al. The primary care management of headache: synopsis of the 2020 US Department of Veterans Affairs and US Department of Defense clinical practice guideline. Mil Med. 2022;187(9-10):e1091-e1102.

CPGs: Low Back Pain

The American Osteopathic Association published clinical practice guidelines recommending the use of OMT for acute and chronic low back pain, including low back pain in pregnant and postpartum women.

In 2017, the American College of Physicians recommended spinal manipulation for acute and subacute low back pain.

- Task Force on the Low Back Pain Clinical Practice Guidelines. American Osteopathic Association guidelines for osteopathic manipulative treatment (OMT) for patients with low back pain. J Am Osteopath Assoc. 2016;116(8):536-549.
- Qaseem A, Wilt TJ, McLean RM, et al. Noninvasive treatments for acute, subacute, and chronic low back pain: a clinical practice guideline from the American College of Physicians. Ann Intern Med. 2017;166(7):514-530.

CPGs: Lumbar Stenosis with Neurogenic Claudication

The United States Association for the Study of Pain recommends multimodal management of lumbar stenosis with neurogenic claudication that includes education, behavioral changes, manual therapy, home exercise, rehabilitation, and acupuncture.

Bussieres A, Cancelliere C, Ammendolia C, et al. Non-surgical interventions for lumbar spinal stenosis leading to neurogenic claudication: a clinical practice guideline. J Pain. 2021;22(9):1015-1039.

CPGs: Lymphedema Associated with Breast Cancer

The Society for Integrative Oncology identified manual lymph drainage as potentially beneficial for patients being treated for breast cancer lymphedema, especially when used early in the disease process.

- Greenlee H, DuPont-Reyes MJ, Balneaves LG, et al. Clinical practice guidelines on the evidence-based use of integrative therapies during and after breast cancer treatment. CA Cancer J Clin. 2017;67(3):194-232.

CPGs: Neck Pain

Numerous organizations recommend the use of manual therapy as part of their clinical practice guidelines for neck pain management. In support of the current evidence, the American Osteopathic Association has repeatedly resolved that OMT of the cervical spine, including but not limited to HVLA treatment, is safe and effective for neck pain.

Ng JY, Uppal M, Steen J. Neck pain clinical practice guidelines: a systematic review of the quality and quantity of complementary and alternative medicine recommendations. *Eur Spine J.* 2022;31(10):2650-2663.

American Osteopathic Association. Osteopathic manipulative treatment (OMT) of the cervical spine: policy statement. https://osteopathic.org/index.php?aam-media=/wp-content/uploads/policies/Policy_H324-A-19_Osteopathic_Manipulative_Treatment_of_the_Cervical_Spine-2.pdf. Updated 2019. Accessed August 10, 2023.

CPGs: Osteoarthritis of the Knee Osteoarthritis of the Hip

The American College of Rheumatology and the American Academy of Orthopaedic Surgeons recommend manual therapy for knee and hip osteoarthritis in conjunction with supervised exercise.

- Hochberg MC, Altman RD, April KT, et al. American College of Rheumatology 2012 recommendations for the use of nonpharmacologic and pharmacologic therapies in osteoarthritis of the hand, hip, and knee. Arthritis Care Res (Hoboken). 2012;64(4):465-474.

CPGs: Plantar Fasciitis

The American College of Foot and Ankle Surgeons and the Orthopaedic Section of the American Physical Therapy Association recommend manual therapy, such as joint and soft tissue mobilization, to treat lower extremity muscle and joint dysfunction associated with plantar fasciitis.

- Martin RL, Davenport TE, Reischl SF, et al. Heel pain—plantar fasciitis: revision 2014. J Orthop Sports Phys Ther. 2014;44(11):A1-A33.
- Schneider HP, Baca JM, Carpenter BB, Dayton PD, Fleischer AE, Sachs BD. American College of Foot and Ankle Surgeons Clinical Consensus Statement: diagnosis and treatment of adult acquired infracalcaneal heel pain. J Foot Ankle Surg. 2018;57(2):370-381.

CPGs: Shoulder Rotator Cuff Disorders

Several countries and several US states recommend including manual therapies as part of the management of rotator cuff disorders.

- Doiron-Cadrin P, Lafrance S, Saulnier M, et al. Shoulder rotator cuff disorders: a systematic review of clinical practice guidelines and semantic analyses of recommendations. Arch Phys Med Rehabil. 2020;101(7):1233-1242.