

OMT BASICS: MYOFASCIAL AND LYMPHATIC TECHNIQUES FOR FAMILY MEDICINE PHYSICIANS

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STRUCTURE

Anterior & Posterior View

- Arch of feet
- Achilles Tendon
- Ankles (Malleoli)
- Knees (Inferior to Patellae)
- Iliac Crests (Superior Borders)
- Gluteal Folds
- Spine Curvature
- Scapula (Spines (T3) & Inferior Angles (T7))
- Shoulders (Superior Border including clavicles)
- Ears (superior borders)
- Inclination of the Head

Lateral View

- External auditory canal
- Lateral head of the humerus
- 3rd lumbar vertebra
- Anterior 1/3 of sacrum
- Greater trochanter
- Lateral condyle of knee
- Lateral malleolus

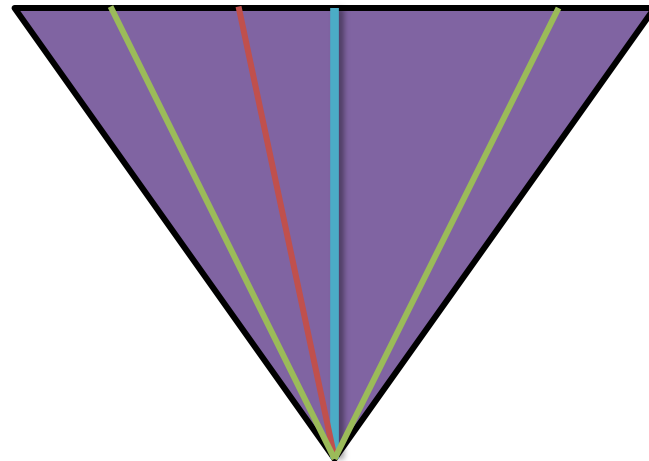
BARRIERS

Physiologic Barriers: Active

Anatomical Barriers: Passive

Restrictive Barriers: Loss of full range of motion

- Physiologic
- Anatomical
- Restrictive barrier
- Neutral



LAYER BY LAYER PALPATION

Newtonian Fluid: Has a linear shear stress to shear rate relationship. I.e., constant coefficient of viscosity.

Example: Water

Non Newtonian Fluid: Does **not** have a linear shear stress to shear rate relationship. Therefore, there is no constant coefficient of viscosity.

- **Time-dependent viscosity**: Apparent viscosity changes as the fluid continues to undergo shear.

Examples: Toothpaste, Starch Fluids, & **BLOOD**.

Cornstarch Experiment

REMEMBER THE BASICS

Layer-by-layer Palpation:

1. **Observation:** Commonly overlooked.
2. **Temperature** (very important): Acute vs. Chronic
3. **Skin topography and texture:** Looking at elasticity, moisture. (Should see no change in the color of physician's nailbeds).
4. **Fascia:** Look for fascial restriction. (Should see slight reddening of physician's nailbeds.)

REMEMBER THE BASICS (CONT.)

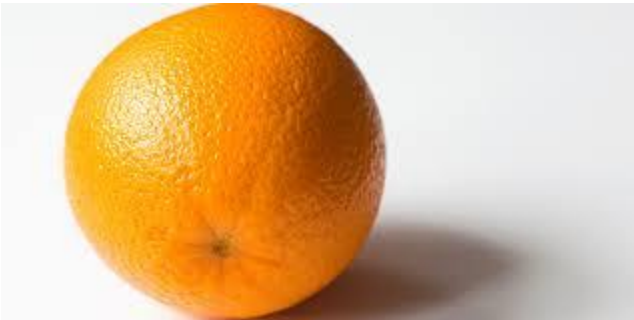
5. **Muscle:** Look for ropiness, bogginess, etc. (Should see blanching of physician's nailbeds.)
6. **Tendon:** Trace to bony attachment (Ex: Biceps tendon)
7. **Ligament:** Varies based on ligament location. Look for laxity & pain.
8. **Erythema friction rub:** Taking 2nd and 3rd finger and running it along paraspinal muscles.
 - Redness/pallor indicates vasomotor changes that may be secondary dysfunction.

FASCIA

(a) complete with blood supply, fluid drainage, and innervations and thus the largest organ system in the body, (b) composed of irregularly arranged fibrous elements of varying density, and (c) involved in tissue protection and healing of surrounding systems. ⁴

FASCIA

“An easy way to illustrate the many layers of fascia is by looking at an orange. You take off the peel and there is a layer of fascia holding onto the fruit, but other fascia holds it into sections, and within each section there are the little globules of pulp, also surrounded by fascia.” ~ Todd A. Capistrant, DO, MHA³



MYOFASCIAL RELEASE

The key to performing myofascial release is patience.

[Remember the cornstarch experiment](#)

MYOFASCIAL RELEASE TECHNIQUES

Examples of Myofascial Technique:

Thoracic Inlet (Driving the Osteopathic Bus)

Supine Leg Traction

Plantar Fascial Release

Interosseous Membrane

LYMPHATICS

“We strike at the source of life and death when we go to the lymphatics.” ~A.T. Still ⁴

LYMPHATICS

“The lymphatic system plays an integral role in this process, removing fluid, particulates, and extravasated proteins from the interstitium, to maintain osmotic balance between the extracellular, intracellular, and intravascular fluids.”³

LYMPHATICS

Thoracic inlet

- Right (minor) lymphatic duct
 - Right hemicranium (including the head and face)
 - Right upper extremity
 - Heart
 - Lobes of the lung (EXCEPT for left upper lobe)
- Left (major) lymphatic duct
 - Rest of the body

Interosseous Membranes

- Axillary
- Elbow
- Wrist
- Aponeurosis of the hand

LYMPHATIC & MYOFASCIAL TECHNIQUE

Effleurage

Petrissage (Can also be used as component of counterstrain.)

Understanding the fascial planes are extremely useful for treatment.



wiseGEEK



dreamstime.com

LYMPHATIC TECHNIQUES

- **Open Thoracic Inlet*******
- **CV4 Technique (encouraging extension of SBS with the thenar eminences just medial to the occipitomastoid sutures).**
- **Anterior Cervical Arches: Hyoid and Cricoid Release**
- **Cervical Chain Drainage**
- **Galbreath Technique (mandibular) & Auricular Drainage**
- **Alternating Nasal Pressure**
- **Submandibular Release**
- **Trigeminal Stimulation Technique & Effleurage**
- **Pec Major, Pec Minor, and Anterior Deltoid Traction**

LYMPHATIC TECHNIQUES

- **Miller Thoracic (Lymphatic) Pump**
(Can add exaggerated respiration. Remember to stand back afterwards!)
- **Doming the Diaphragm**
- **Rib raising**
- **Mesenteric Lift (Sigmoid colon: push in direction of the liver).**
- **Ischiorectal Fossa Release**
- **Hip (Ligamentous Articular Strain/Balanced Ligamentous Tension)**
- **Pedal Pump (Dalrymple Technique)**
- **Spencer's Technique**

VISCERO-SOMATIC OR SOMATO-VISCERAL REFERRAL

Viscero-somatic reflex: According to the Glossary of Osteopathic Terminology, a viscero-somatic reflex occurs when the localized visceral stimuli produce patterns of reflex response, in segmentally related somatic structures.²

Somato-visceral reflex: Somatic stimuli may produce patterns of reflex response in segmentally related visceral structures.²

VISCERAL TECHNIQUES

Celiac ganglion²

- Upper GI dysfunction
- Reduces sympathetic tone at T5-T9

Superior mesenteric ganglion

- Jejunum to mid-transverse colon
- GU dysfunction
- Reduces sympathetic tone at T10-T11

Inferior mesenteric ganglion

- Lower GI dysfunction
- GU dysfunction
- Pelvic dysfunction
- Reduces sympathetic tone at T12-L2

VISCERAL TECHNIQUES (CONT.)

Liver and Splenic Pump (check labs/hx before performing)

- R-sided CHF, Liver and splenic congestion, Infection, Parenchymal disease of the liver &/or spleen
- Augments pressure gradient to improve lymphatic movement (better immune function, removes toxins)

ARTICULATORY & COMBINED TECHNIQUES

Rib Raising

- Decreases sympathetic activity, improves maximum inhalation, & lymphatic return.
 - Hypersympathetic tone associated with visceral dysfunction
 - Decreased respiration
 - FEVER***
 - Lymphatic congestion

HOSPITAL PATIENT REGIMEN (SOME OF MY FAVORITES)

- **Thoracic Inlet with MFR (possibly 1st rib articulation depending on patient)**
- **Dome diaphragm**
- **Release all fossa pertinent to patient's condition**
 - Aponeurosis of hands and feet, antecubital fossa, popliteal fossa, axillary fossa, ischiorectal fossa (MFR to hips is a good alternative.).
- **Rib Raising**
- **Celiac ganglion, superior and inferior mesenteric ganglia.**
- **MFR/Soft Tissue (Especially of the cervical area: OA release & Perpendicular Traction)**
- **Counterstrain to Trapezius**
- **Effleurage**
- **Liver/Splenic Pump**
- **Cranial Field Techniques (CRI can be felt on every part of the body).**

GOOD TO KNOW

Inform your patients:

- Rebound reaction may occur for 24-48 hours after (likened to a gym workout).
- Plenty of water**** (approx. 1/2 your body wt (kg) in fluid oz)
- Anti-inflammatory foods/supplements/essential oils:
 - Ginger
 - Tumeric
 - Lavender
 - Oregano
 - Frankincense

BENEFITS

Patients' Benefit

- **Osteopathic Manipulative Treatment of Back Pain and Related Symptoms during Pregnancy: A Randomized Controlled Trial**
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2811218/>
- Osteopathic Manipulative Treatment in Women (The Journal of the American Osteopathic Association, June 2012, Vol. 112, 343-346.)
<http://jaoa.org/article.aspx?articleid=2094539#73002569>

Financial Example for OMT during office visit:

- http://koya.nyit.edu/Clinical_Applications/clinical_docs/CME_billing_coding.pdf
- (slide #8)

OMT NOTE TAKING

HPI

ROS

Physical Exam: must include somatic dysfunction findings!

Diagnosis

- OMT TECHNIQUES MUST ONLY BE PLACED UNDER A DIAGNOSIS OF **SOMATIC DYSFUNCTION**
- You must also make sure to list your allopathic diagnoses. E.g., Low back pain, lumbar radiculopathy, cervicalgia

ALL AREAS OF DOCUMENTATION MUST SUPPORT LEVEL OF E/M AND NEED FOR CPT, TX, & RX.

BILLING

Evaluation and Management (E/M)

- New Patient
 - 99200-99205
- Established Patient
 - 99210-99215

25-Modifier

- Significant, separately identifiable evaluation and management (E/M) service by the **same physician** on the day of a procedure.⁸

BILLING

OMT Diagnosis (ICD 10):

- Segmental and Somatic Dysfunction of:
(<https://www.osteopathic.org/inside-aoa/development/practice-mgt/icd-10/Documents/segmental-and-somatic-dysfunction-codes.pdf>):
 - head region M99.00
 - cervical region M99.01
 - thoracic region M99.02
 - lumbar region M99.03
 - sacral region M99.04
 - pelvic region M99.05
 - lower extremity M99.06
 - upper extremity M99.07
 - rib cage M99.08
 - abdomen and other regions M99.09

BILLING

Current Procedural Therapy (CPT)

- **98925:** 1-2 areas treated
- **98926:** 3-4 areas treated
- **98927:** 5-6 areas treated
- **98928:** 7-8 areas treated
- **98929:** 9-10 areas treated

BILLING

Quick and Easy Billing of OMT

- http://files.academyofosteopathy.org/CME/2012OMEDconvention/Doss_Presentation.pdf

Just How Much Documentation is Required

- http://hcca-info.org/Portals/0/PDFs/Resources/Conference_Handouts/Clinical_Practice_Compliance_Conference/2010/Sun/P3_BrembyFriedelPPT-PDF.pdf

BILLING EXAMPLE

Assessment and Plan:

1. **Low Back Pain (M54.5)**
2. **Sacroilitis (M46.1)**
 - 99214 with 25 modifier
3. **Segmental and Somatic Dysfunction of Lumbar region (M99.03)**
 - **OSTEOPATHIC MANIP, 9-10 BODY REGION (98929)**
 - **Osteopathic Manipulative Treatment [Procedure Note HERE]**
 - Head: completed.
 - Cervical spine: completed.
 - Thoracic: completed.
 - Rib Cage: completed.
 - Lumbar: completed.
 - Sacrum: completed.
 - Pelvis: completed.
 - Lower Ext: completed.
 - Visceral: completed.
 - Muscle Energy Isometrics
 - Myofascial Release techniques (MFR)
 - Counterstrain
 - Cranial OMT
 - OMT - Articular: completed.
 - High Velocity / Low Amplitude manipulative techniques

RESOURCES

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