Mastering HVLA and LVLA Thoracic, Lumbar and Extremities

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Objectives

1. Diagnosis seated, supine and lateral recumbent patient.
2. Brief review of Osteopathic modalities.
3. Perfecting HVLA of the thoracic.
4. Perfecting HVLA of the lumbar spine.
5. Introduction to articulatory manipulation of the hip.
6. Introduction to articulatory manipulation of the foot.
7. Introduction to articulatory manipulation of the wrist.
Diagnosis

- Seated
- Prone
- Supine
- Rotoscoliosis Diagnosis
Review of Osteopathic Modalities
Modalities

- **Indirect**
  - Position to the freedom
  - BLT, CS

- **Direct**
  - Position to the barrier
  - ME, HVLA, LVLA, MF, (BLT)

**Why?** To prepare the dysfunctional segment for HVLA
HVLA of the Thoracic Spine

“Kirksville Krunch”

- This technique is effective for Type 1 and Type 2 somatic dysfunctions.
- The variable is the sidebending component.
- Make a diagnosis
- Dr. stands on the side opposite the diagnosis
- Positioning of the patient’s elbows (add ME)
- Cradle pt’s head
- Positioning of Drs thenar eminence
- Align vectors; flexion, SB (towards Dr. for Type 2 SD and away with Type 1)
- Roll over thenar eminence and thrust
- Reassess

Image borrowed from Outline of Osteopathic Manipulative Procedures: The Kimberly Manual and Rocky Vista also has a nice YouTube video.
HVLA of the Lumbar Spine

“Lumbar Roll”

- Make a lumbar diagnosis.
- Position the patient with the posterior TP facing up.
  - *Recheck the diagnosis in lateral recumbent.*
- Flex both legs to the SD, extend the lower leg to the SD and place the upper foot in the popliteal fossa of the lower leg.
- Monitor the SD and the segment cephalad with *one hand*, rotate the torso to the cephalad segment.
- Patient grasps wrists.
- Dr. threads cephalad arm through pt’s folded arm and rests on anterior shoulder/axilla.
- Dr’s caudad forearm rests posterior to the greater trochanter.
  - *Utilize respiratory cooperation to localize the barrier.*
- Add a rotational thrust with the caudad arm at the end of exhalation. Remember to reassess.
Assess hip ROM to make a diagnosis. Thread caudad hand under the patient’s thigh. Have forearm contact as close to the lesser trochanter as possible.
Lie cephalad forearm on top of caudad forearm. Apply lateral traction and lift towards the ceiling. This gaps the greater trochanter at the acetabulum.
Hip LVLA with Traction

Maintain lateral and anterior traction and articulate the femur into internal and external rotation. Upon completion, reassess ROM
Fig. 3. The bony anatomy of the foot and ankle (medial aspect).

Boney Landmarks
Medial Arch, Hoppenfeld p. 200

Area of Spring Ligament
b. ½ The physician spreads his two hands and exerts a downward pressure to stretch the tissue between the two hands.

c. The physician exerts a clockwise or counterclockwise rotary thrust with the hand holding the talus while simultaneously exerting a downward thrust through the calcaneus with the other hand (Fig. 100-7).

Note: This technique can be localized and applied to specific restrictions for each articulation along the medial arch. This is done by maintaining contact on the bone proximal to the restriction and moving the other hand to any of the other bones along the arch – talus, navicular, cuneiform, etc.
LVLA for Somatic Dysfunction of the Medial Arch

- Bones of the medial arch; talus, navicular, cuneiform, metatarsal.
- Describe the articular motion at each joint.
- Diagnose a restriction.
- How can we utilize LVLA with this information?
Functional Anatomy

Radial deviation = ABduction
Ulnar deviation = ADduction
LVLA for Intercarpal Somatic Dysfunction

- Diagnose carpal bones.
- Interlace fingers and grasp radiocarpal joint between palms.
- *Allow pt’s hand to hang, utilizing gravity.*
- Mobilize wrist in multiple ranges of motion.
- Reassess ROM upon completion.

Excellent wrist mobilization technique
LVLA
Carpal Somatic Dysfunctions

- The Dr. contacts and stabilizes one metacarpal with his thumb and index finger.
- The Dr’s other thumb and index contact the neighboring metacarpal and proceed to mobilize towards the restrictive barrier (A/P glide & Ab/Ad).
- *An alternate contact; have both thumbs contact the restricted segment.*
- After enhancing the articulations, reassess ROM.

An Osteopathic Approach to Diagnosis and Treatment, p. 449-450
References

- OMT Techniques, online.
Thank you