

Osteopathic Lab for UNM Residents I

Part One: Theory

Not only you as a whole but each part of you maintains an exquisite state of balance that is constantly self-adjusting. This mechanism is operational even as we sleep. Stress and strain disturb this balance. We all live with various degrees of imbalance that affects our health and limit our potential. A large portion of our neural hard drive is devoted to posture, balance and proprioception due to our biped habitus. This kind of imbalance can overload us as with chronic pain and even detract from a child's development.¹ Yet, this imbalance is also a substrate for personal growth. Our fascial mechanics and neuromuscular mechanism are not immutable. The principles to ameliorate their imbalances are found within their own physiology.

Acupuncture and manual medicine are the most direct modalities attempting to restore this balance. Because treatment is generally performed in recumbent and seated positions the idea that we are restoring balance is not fully appreciated. *Taiji Quan* and *Qigong* can be practiced as meditative exercises, with the aims of improving health or cultivating spiritual understanding. Their standing and moving practices illuminate the relationship between balance and manipulative medicine or acupuncture. Let's elucidate this:

Understanding

I. Fascia

- a. Properties of continuity, non-extensibility and piezoelectric conductivity
- b. Tensegrity: (Tensional integrity) tension arrayed everywhere equally minimizes articular compression
- c. "When one-part moves, all parts move", The Taiji Classics²

plus

II. Central Equilibrium, Posture and Balance

- a. Anti-gravity, vestibular, proprioceptive & oculocephalic reflexes
- b. When balance is lost, (1) *arms go out*, either quickly or less so
 - i. Balance beam
 - ii. Tightrope
 - iii. *Near-fall*
- c. When balance is lost, (2) *feet take steps*
 - i. Sudden impact

¹ Effect of osteopathic medical management on neurologic development in children, Frymann, Carney, Springall. J Am Osteopath Assn 1992 Jun;92(6):729-44. <https://pubmed.ncbi.nlm.nih.gov/1377192/>

²T'ai Chi Ch'uan Classics, Michael P. Garofalo

<https://www.egreenway.com/taichichuan/classics.htm>

- ii. Earthquake
- iii. Near-fall

leads to

III. Osteopathic Correction = Restoration of Balance (Central Equilibrium)

- a. Precision- success in this art and science is directly related to the degree of precision in the application of procedures
- b. Wholistic- When indicated, ambulatory technic is safer, more efficient and efficacious. Whole-body neural integration required to 'catch your balance' is both protective and parsimonious in manual medicine
- c. Instantaneous reaction- The various postural reflexes flawlessly integrate a response to the procedures that is both involuntary and instantaneous
- d. Recumbent treatment is useful for addressing the legs, neck and head and necessary for the more infirm. It follows the same principles though it is less obvious.
- e. Reverse engineer and harness this reflexive balance mechanism:

IV. Why Focus on the Spine?

- a. Spinal cord is a key regulator in function and disease
- b. Segmental activation of autonomic nervous system occurs under conditions of dysfunction, acting as a lens focusing dysregulation upon discreet innervation patterns
- c. The spinal cord and roots are the most vulnerable part of CNS and PNS
- d. It is the central axis of the locomotor system
- e. It is the best place to start learning for both you and your pts care

Part Two: Application

V. Diagnosis

- a. Standard Tests: Muscle tests, tender points, long and short (joint) restrictions but we are going to change our orientation to the meridians as a regulator of the neuromuscular and other systems
- b. New approach: localize to spine through upper extremity via the fascia:
 - i. **Principles- Hand near body flexes spine, hand away extends, hand to side exhales rib**
 - ii. **Method- Place hand at correct spinal level**
 - iii. **Deviate wrist toward body (radial or ulnar deviation) + flex wrist, pronate or supinate + flex elbow, ensure elbow is in front of (anterior to) shoulder**
 - iv. **Test by pulling wrist from trunk**
- c. Differential Diagnosis: The 5 Element model
 - i. Fryette's laws of spinal mechanics
 - ii. Vertebral flexion/extension, organs and meridians

VI. **Dx and Tx Postures for the 5 Primary Organs**

- a. *Liver- Palm face up one inch below xyphoid T9*
- b. *Spleen- Palm down ½ way between xyphoid and umbilicus T11*
- c. *Kidney Yin- Palm down at navel L2*
- d. *Kidney Yang- Palm down at xyphoid T8*
- e. *Heart- Palm face away at mid-sternum T5*
- f. *Lung- Palm down at shoulders for T3*

VII. **Discerning the “Nimble Opposing Force”****

- a. Partner practice: Feel spine as pt moves,
- b. Test arm strength as muscle test (pt pushes out)
- c. Note restriction if present, in upper extremity
- d. Compare strength at different spine levels, correlate with spine movement
- e. Feel hand drift forward when close to body vs. restricted spine levels**
 - i. The forward drift is toward the neutral point between flexion/extension for the spinal segment

VIII. **Treatment Principles**

- a. **To release hand forward (and vertebrae from flexion): engage further flexion of spinal segment by pt stepping backward**
- b. **To extend vertebrae pt steps forward**
- c. **To move rib to exhalation move straightened arm to side**
- d. **In summary**
 - i. **Start in diagnostic posture, Dx leads straight into Tx**
 - ii. **As pt steps back he releases hand forward to you**
 - iii. **As arm fully straightens it will spontaneously move laterally**
 - iv. **Walk pt forward guiding straight arm to side**
 - v. **Each spinal level has its own finishing movement starting from the Dx posture**

Performed standing with precise arm positioning, we connect the patient’s arm to their spine through the inelastic thoraco-lumbar fascia for dynamic, moving adjustments involving the whole-body simultaneously in an integrated fashion.³

IX. **Conclusions**

- a. This is a level I, mechanical approach
 - i. It is effective and easily mastered
 - ii. My curriculum starts with a mechanical approach to the spine, continues to extremities, viscera, head with increasing emphasis on an evolving understanding of explicating the underlying energetic mechanisms

³ Standing techniques were more prominent in the work of the founder of Osteopathic Medicine, AT Still, MD, DO. Examples are provided in the appendix of *Teachings in the Science of Osteopathy* WG Sutherland, DO, Anne Wales, DO Ed., Sutherland Cranial Teaching Foundation 2003

- b. Focus on finding the “nimble opposing force” in yourself⁴
 - i. Correlate this experience with your neck, head and extremity function
 - ii. Correlate with digestion, respiration, HR/BP and urinary function
- c. Find the flexed vertebrae and inhaled ribs
 - i. We take an indirect approach, away from the restrictive barrier
 - ii. We use the arm as a long lever to access the spine
 - iii. Start Tx accentuating spinal flexion by walking them backwards
 - iv. If the problem vertebra is in extension, don't Tx it directly but use the 5 Elements relationships instead (more later)
- d. We use the whole body, moving in space
 - i. This is safer and more effective than pushing on the vertebra. Sometimes more direct work is indicated but this is a way to decrease the amount of force, the time and repetition required.
 - ii. Harness the mechanism of balance and proprioception in Dx and Tx
- e. Next Steps
 - i. Hold on to this handout. We will work on it next time and continue to refer to it.
 - ii. We will learn to apply as meditative exercise for the practitioner and as prescriptive exercise for patients. This can be the key to you and your patients resiliency and rehabilitation on all levels
 - iii. We will learn the rest of the organ-meridian-vertebral correlations (the hollow organs or, “receptacles”) and movements for the remainder of the spine
 - iv. After mastering these basic procedures we will discuss the 5 Element differential Dx to address vertebrae stuck in extension and ribs in exhalation

*” True human nature loves naturalness and unrestricted free movement; the whole offshoot of the natural instincts is the basis of that. Every morning in the fresh air, without any method, just let the joints of the whole body be slightly bent, consider the sky, move slowly and freely, experience and observe the intestinal qi and the flow of blood. At the same time, intuitively perceive the external void and nimble opposing strength. This is called the spirit resembles as if it was swimming.”

Interview of Wang Xiangzhai in Beijing newspaper, 1940's
[file:///Users/chrislaseter/Desktop/Meditative-Exercise/Yiquan/A Quan-Shu Manuscript: An Interview with Mr Wang Xiangzhai.webarchive](file:///Users/chrislaseter/Desktop/Meditative-Exercise/Yiquan/A%20Quan-Shu%20Manuscript%20An%20Interview%20with%20Mr%20Wang%20Xiangzhai.webarchive)

Nimble opposing strength often called integral strength, refers to a wholistic kind of muscular activity as opposed to normal, linear and unbalanced exertion which Wang considered detrimental. This kind of muscular exertion can be cultivated and is useful in

⁴ The “nimble opposing force” is a phrase used by the modern promulgator of standing meditation, the martial arts and qigong Master Wang Xiangzhai*

medicine, martial and performing arts. An important characteristic of integral strength is that it includes coordination between the spine, foot and hand. If the spine cannot move there is no integral strength. Restoring integral strength is another kind of manual medicine.