



OSTEOPATHIC MANIPULATIVE MEDICINE

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Family Medicine and Sports Medicine Conference

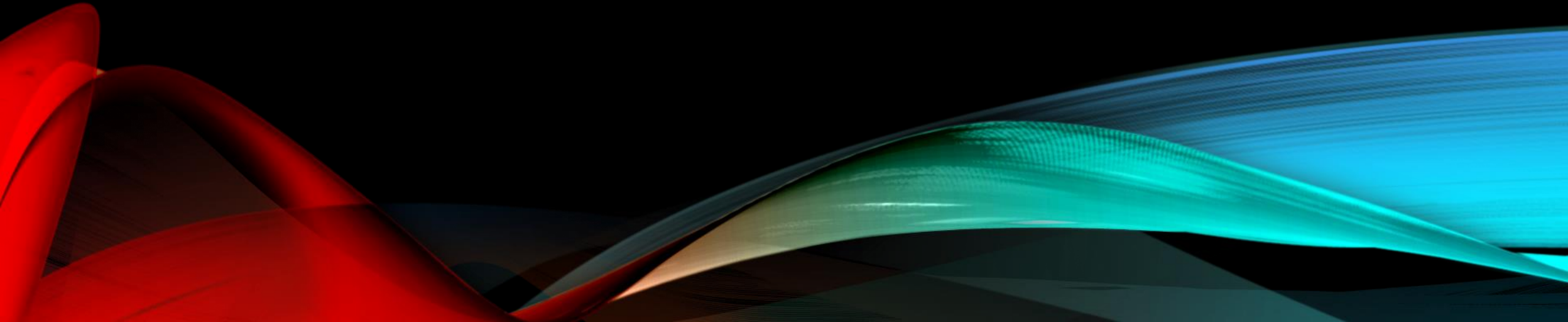
November 13, 2022

OBJECTIVES

- Discussion of the history of osteopathic medicine
- Review leg restrictor anatomy associated with low back pain
- Demonstrate muscle energy of the pelvis
- Discuss treatment for acute low back pain

HISTORY OF OSTEOPATHIC MEDICINE

Amazing History



A.T. STILL

- Andrew Taylor Still - Father of Osteopathic Medicine
- Born 1828 in rural Virginia. His father was a circuit rider Methodist preacher. His father also served as a physician.
- A.T. Still's education was split as the family moved frequently and was taught by his parents between formal instruction. He was a farmer and hunter. Hunting was some of his first anatomy lessons.
- He opened the first osteopathic school in 1892 in Kirksville, Mo. at age of 64.
- He suffered a stroke in 1914. He died December 12, 1917.
- He was M.D. trained.

OTHER INFLUENCES

- Slavery - Methodist church split due to opposing belief.
- A.T. Still married Mary Vaughn in 1849 and had their first child. Followed his father to a Shawnee Mission assignment where he farmed and provided medical care.
- Joined the Kansas Territorial Legislature due to anti-slavery beliefs.
- 1850's - Dr. Still's wife Mary Vaughn, his infant son and fifth child died. He was widowed with 3 children for a time.

OTHER INFLUENCES

- Remarried Mary Elvira in 1860.
- 1861 - joined the 9th Kansas Calvary US and served as a hospital steward and later in 1862 served in the 18th and 21st Kansas Militia regiments.
- 1864 - Dr. Still's 2 children died of meningitis as well as his adopted son. The same year another of his children died of pneumonia.
- Doubt formed regarding the medical practices of the day such as use of mercury, arsenic, purging and blood letting.

AFTER THE CIVIL WAR

- Worked as a physician but stopped treating with medicine of the time and investigated other theories of application.
- Study of anatomy on bodies dug up from native American graves gave Dr. Still the belief that good health was achieved by a properly aligned musculoskeletal system. Osteopathy meaning “bone” and “suffering”.
- Moved to Kirksville, Missouri in order to apply his medical treatment with his hands not drugs.

SINCE THEN

- 1967 D.O. graduates participate in the military match
- 1973 The D.O. degree is recognized in all 50 states
- 2001 Louisiana is the 50th state to accept the COMLEX examination
- 2007 Practice rights granted to osteopathic physicians in 45 countries
- 2014 Transition into a single accreditation system for residencies announced
- 2016 the number of D.O.s in the US surpasses 100,000
- 2017 Osteopathic Medicine celebrates its 125th anniversary

QUICK GROWTH OF THE SCHOOL OF OSTEOPATHY



First School was a two-room cabin and after a couple of years grew to the American School of Osteopathy on the right

WAY BEFORE ITS TIME



- The first Class 1892 of the American School of Osteopathy.
- 5 women in the first class.
- Each student had to master anatomy in order to move forward in the class.
- The first classes were 2 years but soon expanded to 3 then 4 years to include the other sciences physiology and histology.

WOMAN- OSTEOPATHIC MEDICINE



Louisa Burns, D.O. –Head of the AT Still
Research Institute 1917-1935



There was training for nurses who also learned
anatomy

MANY OF THE PRINCIPLE OF TRAINING AND PRACTICE AS WE KNOW THEM TODAY

No. 8128

This number fixes the order in which you will be waited upon; register with the Clerk and you will be called when your turn comes.

Do not sit or stand in the Hallways.

Do not ask me or any of the Doctors to stop and talk with you in the Hallways or Waiting Rooms; arrange for a consultation.

After your examination, arrange with the Secretary for a "Treatment Card" before you ask to be treated. Make all business arrangements with the Secretary: do not come to me with such matters.

Most of the actual labor of treating patients must necessarily devolve upon my Assistants, under my direction: I have confidence in their ability, and you must accept my judgment in their selection.

Patients are forbidden talking over their ailments with each other.

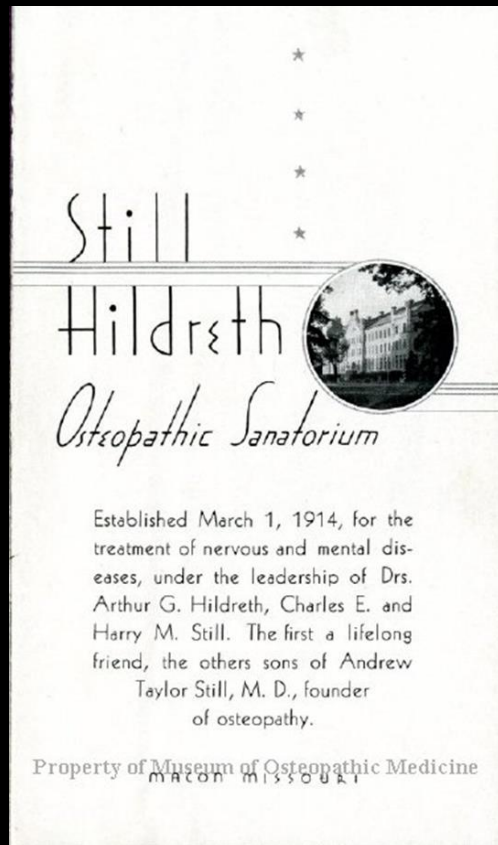
No work done on the "No Cure, No Pay" plan.

Work begins with payment.

A. T. STILL.

- Dr. AT Still represented an early model of the following:
 - Business of medicine
 - Residency like training
 - Rural health care initiative
 - Healthy lifestyle focus

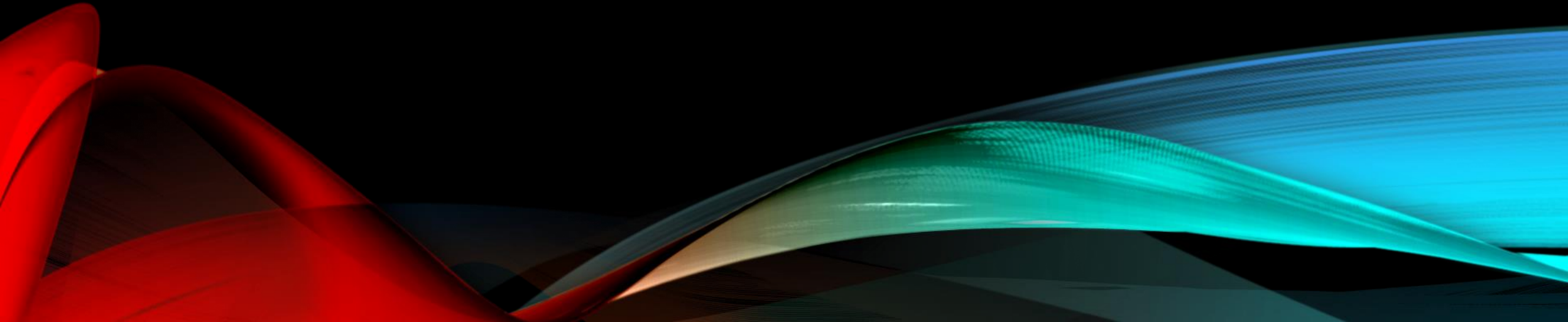
PSYCHIATRIC CARE



- One of the first hospitals was a psychiatric hospital that had amazing results.
- Was able to discharge many patients back into society.
- Article by Leslie Ching D.O.

OSTEOPATHIC MEDICINE

Low Back Pain



TENETS

- The body is a unit of body mind and spirit.
- Structure and function are reciprocally inter-related.
- The body is self regulating, self healing, and health maintenance.
- Rational treatment is based upon on the basic principles of body unity, self regulation, and the inter-relationship of structure and function.

MODEL OF OSTEOPATHIC CARE

- Biomechanical
- Respiratory/circulatory
- Neurological
- Metabolic-Nutritional
- Behavioral Biopsychological

OBSERVATION

- This is a key component
 - Asymmetry of static observation
 - External rotation of lower extremity (side of a short leg)
 - Palpatory - Asymmetries, vitality, stress
 - Red Reflex
 - Sitting, standing, walking, breathing

APPROACH TO LBP

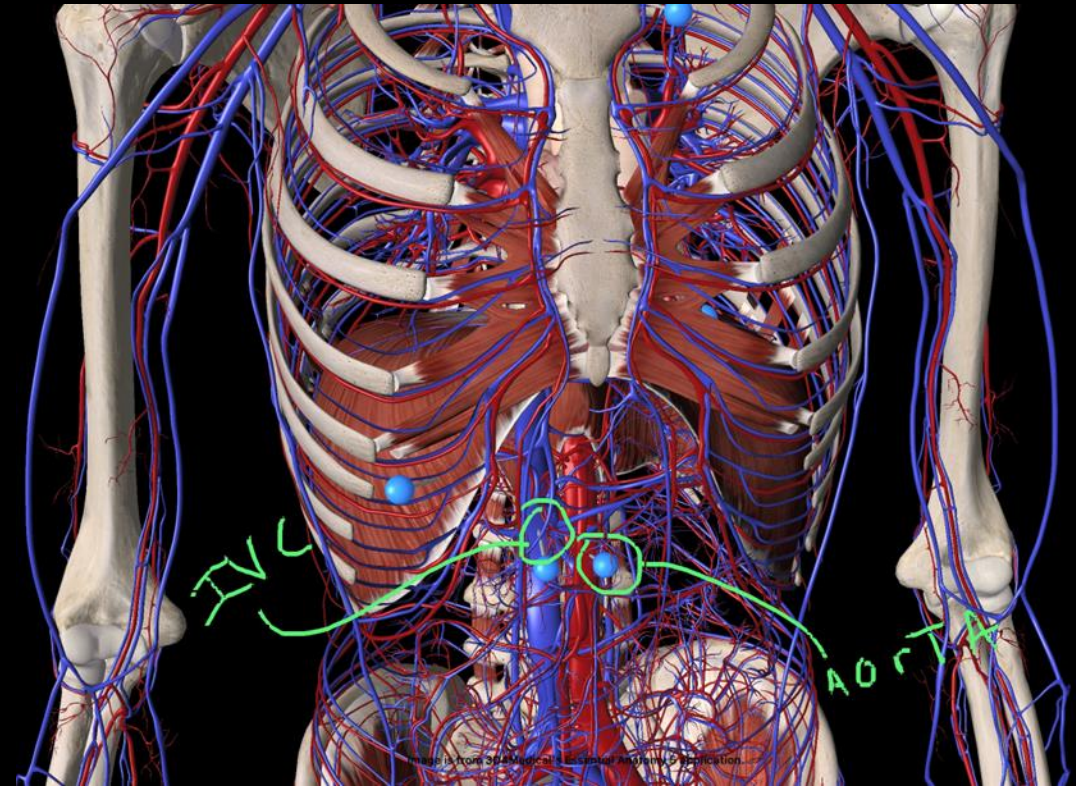
- **Lower Body Sequence**

- Leg Restrictors
- *Thoracic and Diaphragm
- Pubic Bone
- Upslip
- Sacrum
- Iliopsoas
- Innominate



DIAPHRAGM ANATOMY

- Attaches to the last 6 ribs
- Attaches to T12 - L1-L2
- Xiphoid Process is connected to the pubic bone by the rectus abdominus
- Consider treating the diaphragm when treating a patient for low back Pain

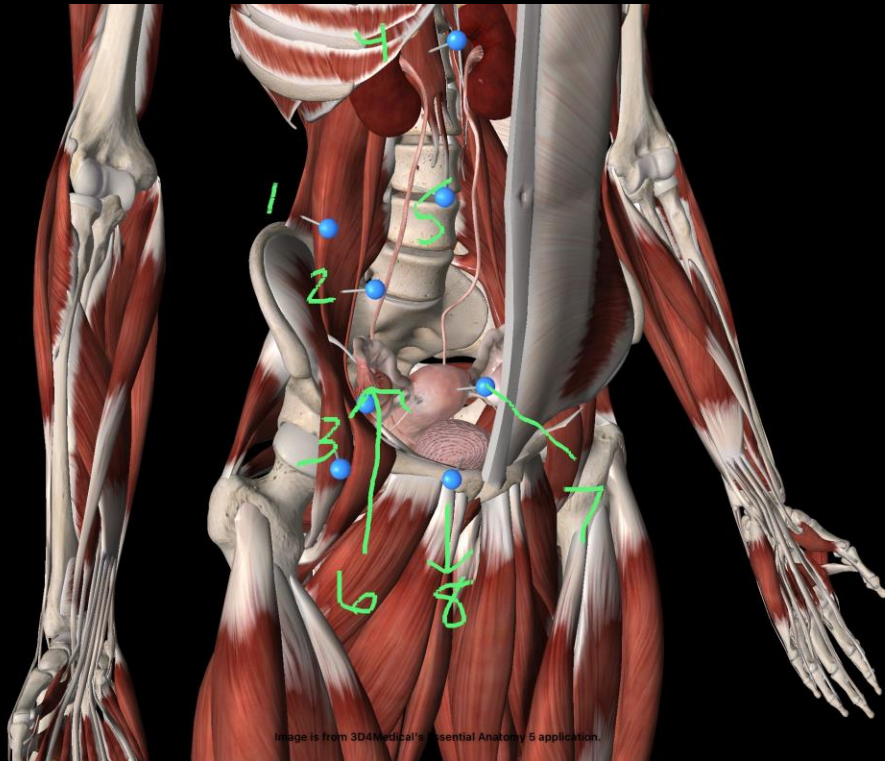


DIAPHRAGM MUSCLE RELEASE



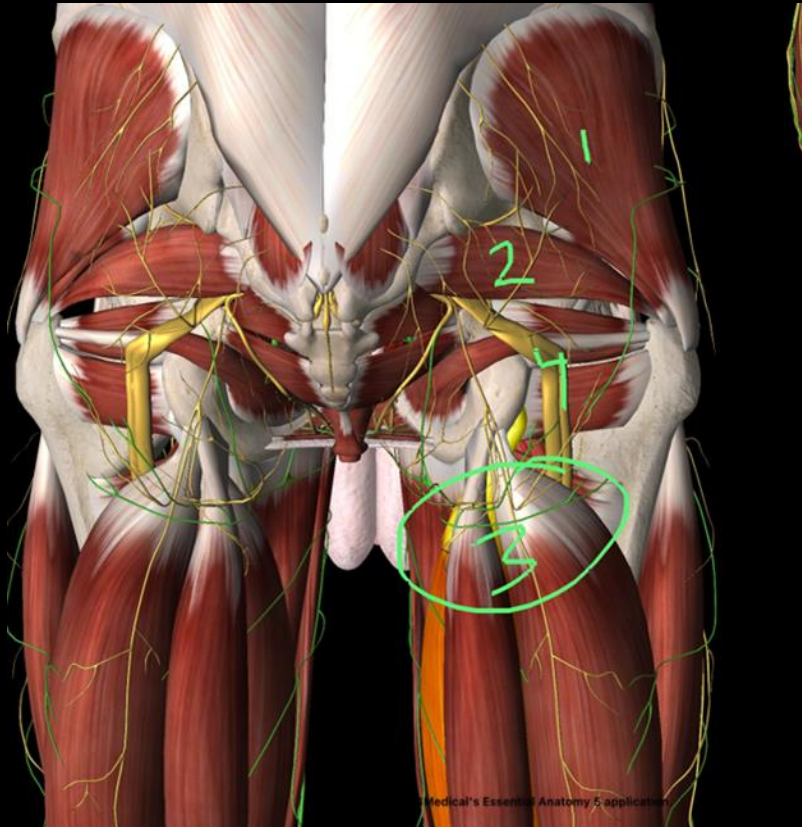
- Patient Supine
- Physician the opposite side of the dysfunction. The cephalad hand is placed on the lower costal cage posteriorly. The caudad hand is placed under the costal cage on the side being treated,.
- As the patient inhales the hand position stays stable. With exhalation the caudad hand sinks further under the costal cage and the cephalad hand lifts the posterior costal cage anterior and lateral.
- Repeat for a 3-5 cycles

LEG RESTRICTORS



- Psoas - Anterior Innominate
- Quadratus Lumborum - Elevated iliac crest
- Iliacus – Anterior Innominate
- Hamstring – Posterior innominate
- Piriformis - sciatica

HAMSTRINGS



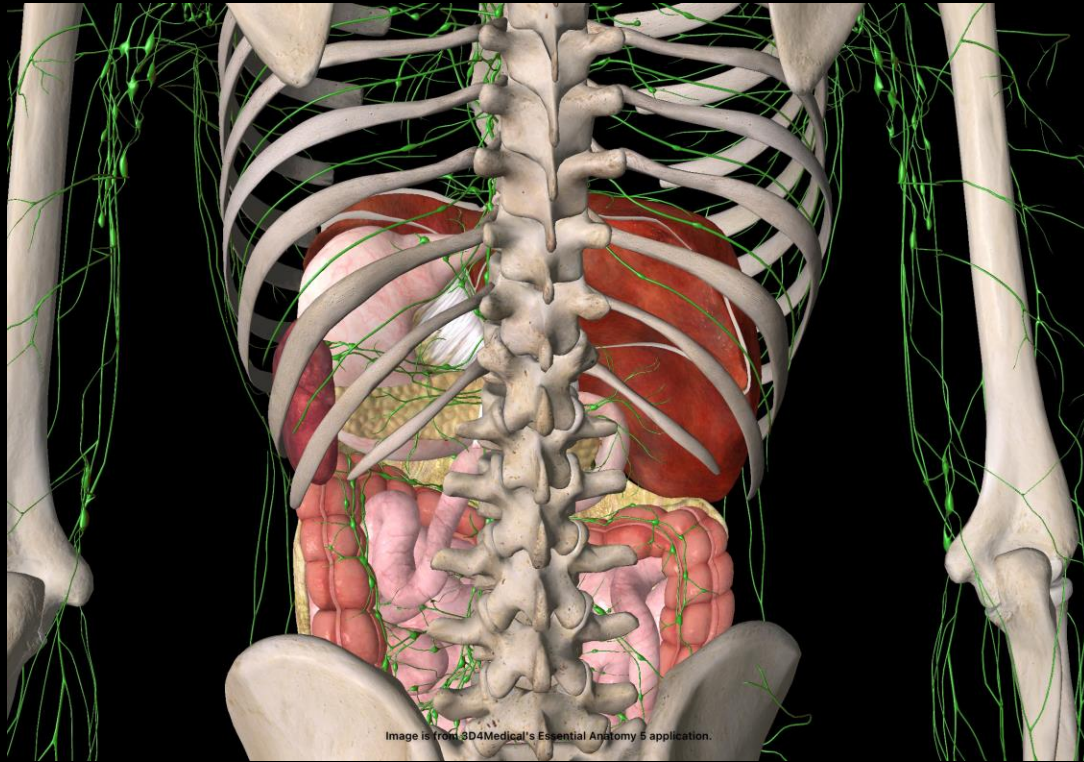
- Sciatic Nerve going through above or below the piriformis muscle.
- Treating the piriformis muscle helps with sciatica
- Tight Hamstrings may cause a posterior innominate

CHAPMAN POINTS

- Chapman Points are neuro-lymphatic points that are found at a location that refers to a particular viscera.
 - Helps with diagnosis and treatment of visceral disease.



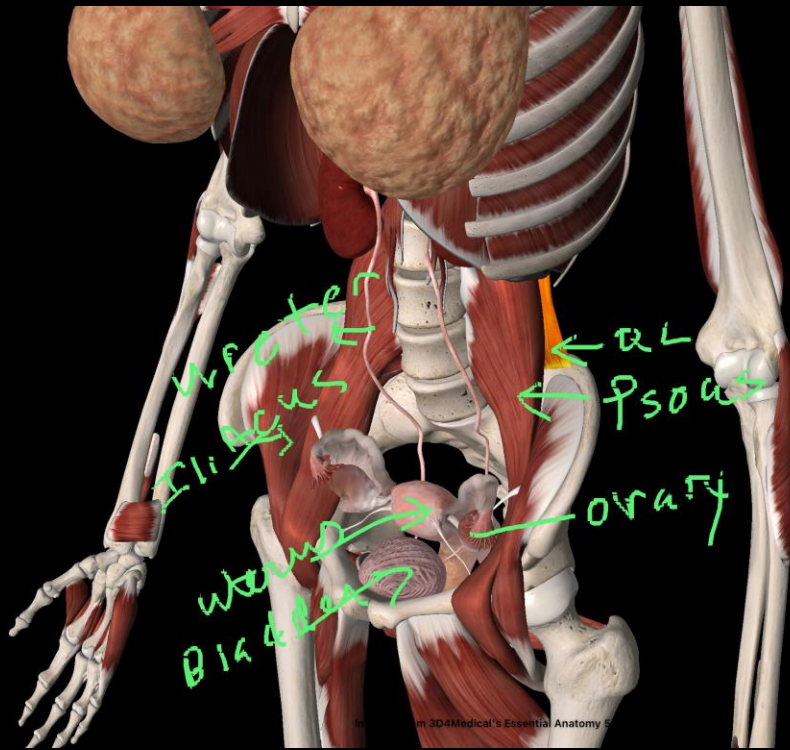
POSTERIOR VIEW



- Visceral Considerations
 - Chapman Point –
 - Appendix-tip of 12th rib
- Referral pain with systemic disease
 - Pancreas
 - Kidney

ANATOMY AND CHAPMAN POINTS

- Pelvis and Viscera



- Chapman Points

- ASIS level - on Abdomen Chapman Point Intestinal Peristalsis
- Pubic Bone Location
 - Uterus
 - Urethra
 - Ovaries

STILES SCAN SCREEN

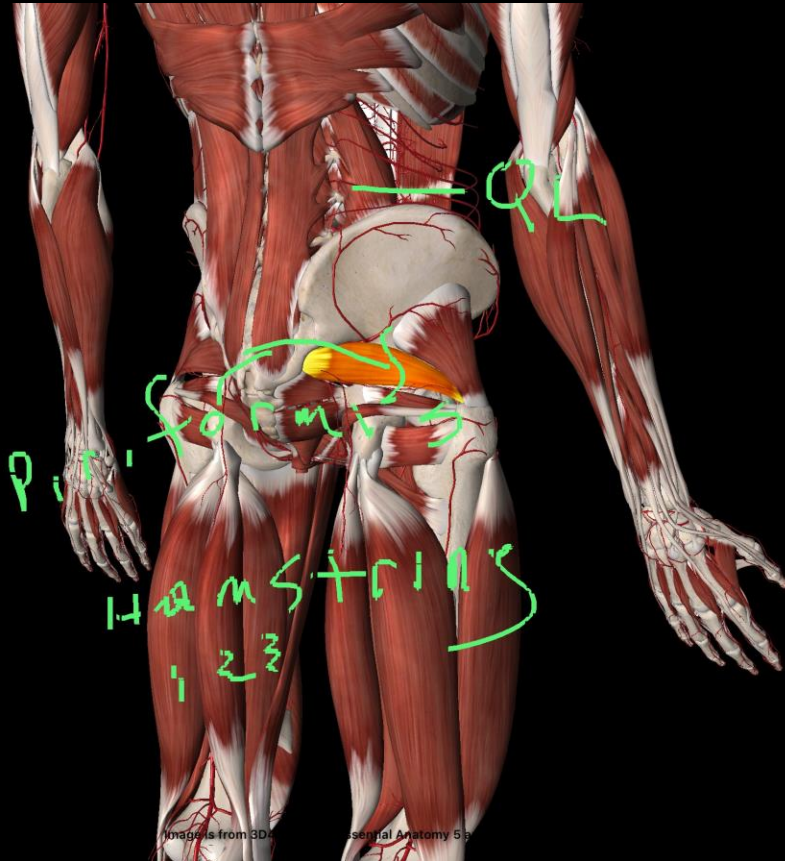
- Seated Position
- Quick and Efficient
- Area of most restriction when applying side bending and rotation in unison while monitoring tissue restriction



STANDING AND SEATED FLEXION TEST



POSTERIOR LEG RESTRICTORS



- Piriformis – Sciatic Nerve referred pain
- Hamstring – may cause posterior innominate
- Quadratus Lumborum – attaches to the iliac crest
- Gluteal Medius - Weakness can lead to low back pain and hip pain

POSTERIOR INNOMINATE ME

- Landmarks
- Iliac crest
- ASIS - superior
- PSIS - Inferior
- Malleolar Height - superior
- ASIS Compression Test + on side of dysfunction
- Ischial Tuberosity
- Mechanism: Tight Hamstrings may cause



MUSCLE ENERGY: POSTERIOR INNOMINATE

- Patient is supine
- The physician is on the side of the positive standing flexion test.
- The physician asks the patient to move to the edge of the table and drop the leg off the table. The physician stabilizes the opposite ASIS and the other hand is on the ipsilateral thigh.
- Ask the patient to push their thigh to the ceiling while the physician resists the effort with an equal counterforce 3 - 5 seconds.
- Ask the patient to relax. Take up the slack and ask the patient to repeat 3 - 5 times. Return the patient to neutral and recheck the standing flexion test



Nicholas and Nicholas 4th ed Atlas of Osteopathic Techniques

ANTERIOR INNOMINATE ME

- ASIS-inferior
- PSIS-superior
- Malleolar Height - inferior
- ASIS Compression Test
- Mechanism: Tight Hip Flexors may cause



MUSCLE ENERGY: ANTERIOR INNOMINATE

- Patient is Supine.
- Physician is on the side of the standing flexion test.
- The physician flexes the patient's knee and hip into restriction while adding mild internal rotation of the hip.
- The patient is asked to push their knee into the physician's shoulder against their counterforce. This is held 3 - 5 seconds. The patient relaxes and the physician takes up the slack with out returning to neutral and repeats 3 - 5 times



Nicholas and Nicholas 4th ed Atlas of Osteopathic Techniques

UPSLIP/SUPERIOR INNOMINATE SHEER

- Mechanism of the dysfunction
- All Landmarks superior
- Consider fall on a knee causing an upslip
- Mechanism of injury - Miss a step and come down hard



MUSCLE ENERGY UPSLIP

- Patient is supine.
- Physician at the foot of the table on the side of the positive standing flexion test.
- Hold the patient's ankle and internally rotated the lower extremity. Place traction on the leg and ask the patient to pull their hip toward their shoulder on the same side against your counterforce. Hold 3 - 5 seconds. Take up the slack without returning to neutral. Repeat 3 - 5 times



Nicholas and Nicholas 4th ed
Atlas of Osteopathic Techniques

STILL TECHNIQUE: SACRUM

- Indirect and Direct
- Diagnosis of the Sacrum
 - Seated flexion test
 - Posterior ILA
- Patient is seated with arms crossed and sit up straight
- Physician stands on the side of the posterior ILA and places their arm around the patient with the physician axilla resting on the patient's shoulder.
- The physician places the patient in position of side bending and rotation to the side of the posterior ILA.
- Compression is added to the level of the ILA. Hold 3-5 seconds. Take the patient in the opposite directions of side bending, rotation and flexion/extension.
- Recheck the seated flexion test

THANK YOU

Questions?

