Facilitated Positional Release:

Efficient and Integrative OMT for Diagnosis and Treatment

Presented by: Charles J Smutny III, DO, FAAO
Board certified, Residency Trained and Fellowship Awarded
Asst. Professor of Osteopathic Medicine at CUSOM
Program Director: NMM Plus 1 Residency CUSOM

Copyrights & Regulations

- Materials (hereafter including PowerPoints, Handouts and Lecture Recordings) are distributed for the exclusive use of Participants in the OMED 2018 National Osteopathic Scientific Education Programs. Access to and use of materials are conditioned on agreement with the terms and conditions set out below. Any Participant who does not agree to them is prohibited from accessing or making any use of such materials.

- Any Participant accessing materials (1) acknowledges the faculty members' intellectual property rights and that distribution of the materials violates Copyright Policy; (2) recognizes the privacy rights of fellow participants who speak in lectures and practical sessions; (3) accepts that distributing, posting, or uploading materials to any other third party not authorized to receive them or to those outside OMED is an Honor Code violation; and (4) agrees that the materials are to be accessed and used only as directed by the faculty member(s) teaching the course(s) at OMED 2018. Participants are not permitted to take photographs or screenshots of any screens or projected materials during lectures or practical sessions. Audio recording is also not permitted outside of what is provided through the pre approved and recorded OMED sessions available through the academy and/or the AOA.

Conflict of Interest Statements

Dr. Smutny has no conflicts of interest!

Learning Objectives:

1. Remember (or learn) the Fundamentals of FPR
2. Identify common office and hospital reasons to use FPR
3. Analyze the utility of FPR in office and hospital practice

Stanley Schiowitz DO, FAAO, Author of FPR and Mentor to many…

- QUOTATIONS:
- "FPR is much like high speed CS"
- "Many of my patients were getting older and I felt that HVLA should be avoided…my fingers began to talk to me and I found that I could get the results I wanted without HVLA".
- "As I discovered this reflex process it seemed to me to be more like rapid counter strain"
- "Find it, fix it, and leave it alone"

NYCOM teachers, peers, undergraduate fellows and life long students

Stanley Schiowitz, D.O., F.A.A.O.

Eileen L. DiGiovanna, D.O., F.A.A.O.

Gary Ostrow, D.O

Robert G. Thorpe, D.O., F.A.A.O.

Mary Hitchcock,, D.O., F.A.A.O.

Andrew "Jack" Tatom, D.O

Hugh Ettlinger D.O., F.A.A.O.

Dennis Dowling D.O., F.A.A.O.

11F

Theory and practice generated by Stanley Schiowitz DO FAAO (1922-2011) with nearly 70 years of service to our profession

- Introduction
- Facilitated positional release was developed by Dr.Schiowitz. He first presented it to the profession in an article in the *Journal of the American Osteopathic Association*, "Facilitated Positional Release," in 1990.
- This technique uses a modification of indirect myofascial release techniques, enhanced by placing the region in the *postural* neutral position and adding a facilitating force of compression or torsion. The advantage of this technique is its ease of application and speed of response. In addition, if the desired results do not occur immediately, it may be repeated or other methods of treatment can be added.

An Osteopathic Approach to Diagnosis and Treatment, 3e
Eileen L. DiGiovanna, Stanley Schiowitz, Dennis J. Dowling

Publication History:

F.P.R.

J Am Osteopath Assoc. 1990 Feb;90(2):145-6, 151-5.

Still Technique

J Am Osteopath Assoc. 1996 Oct;96(10):597-602.

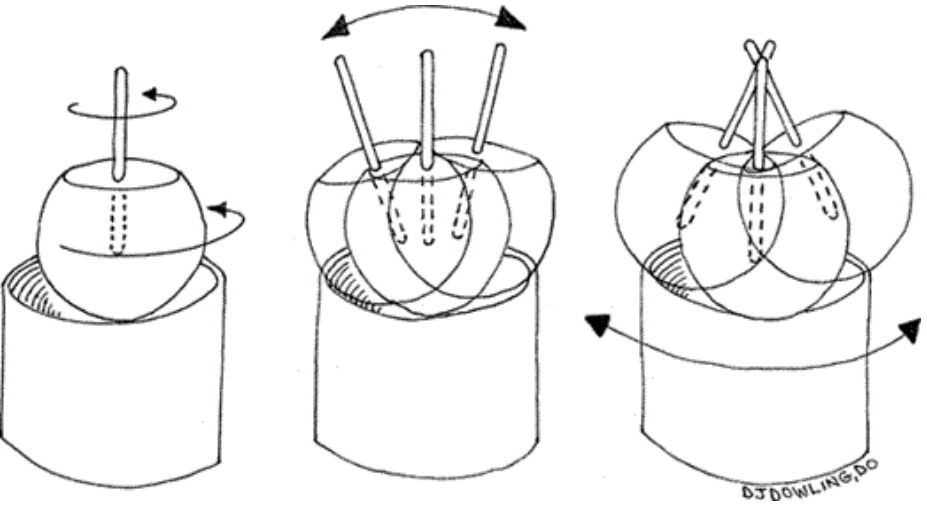
Fundamentals of FPR

Can be considered a High Speed Counter Strain, a Modification of Myofascial release, the Second iteration of Still technique

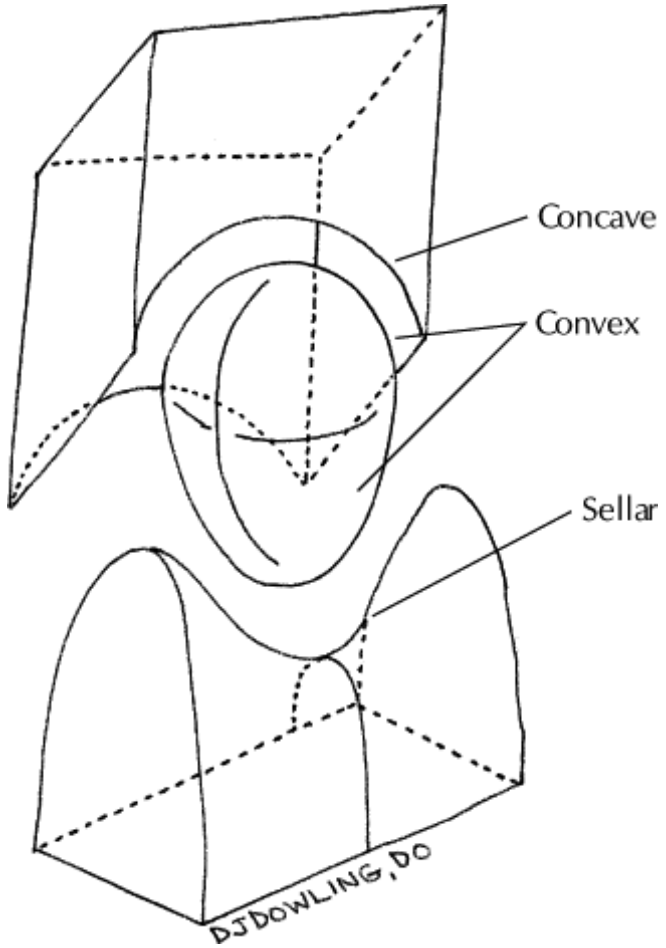
1. Diagnose a somatic dysfunction and identify ALL the freedoms of motion
2. Place the joint in a neutral position (postural neutral)
3. Compress to the joint until an initial movement of the joint can be palpated
4. Move sequentially under compression into each of the freedoms, stacking them
5. If the joint or muscle group has not released up to this point, add a small joint ACCESSORY motion ("Jiggle") to signal the vestibular system that "there are no restrictions here" (appx. 5 seconds with palpable changes) and continuously palpate for tissue texture changes. Restore slowly to neutral and re-assess.
   - Repeat if necessary one more times, RE-diagnose first, THEN RE-APPLY THE PRINCIPLES, 2-5.
   - Or use other techniques to reduce or eliminate the somatic dysfunction

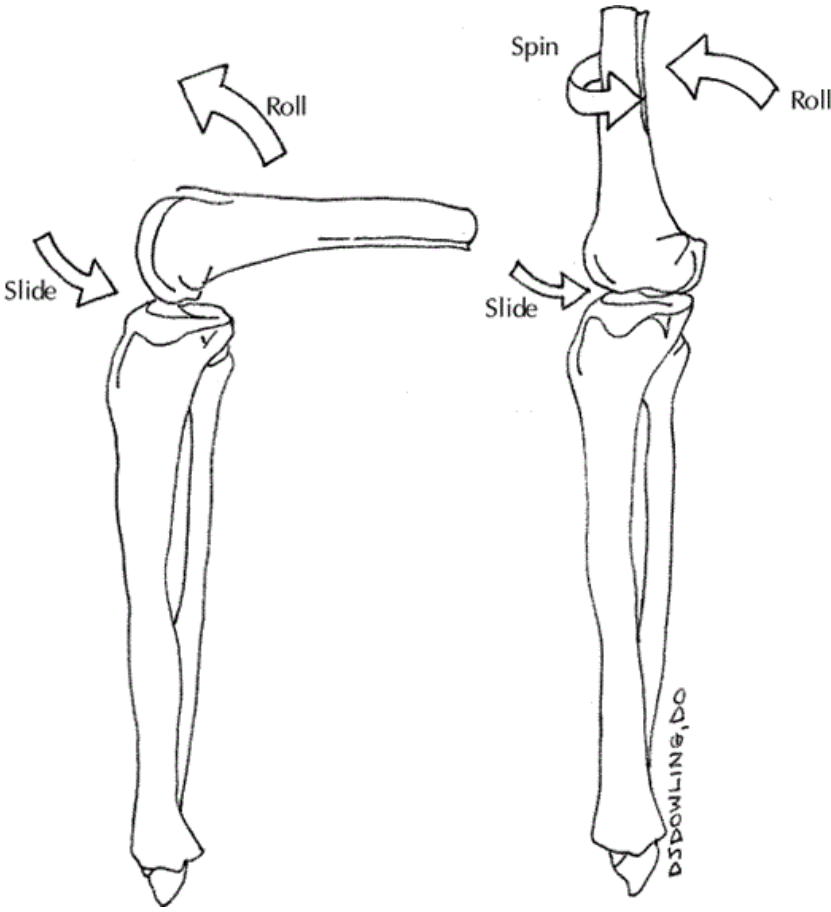
Principles and Models of Thinking

- Joint motion
- Muscle spindle apparatus (CS)
- Golgi tendon apparatus (ME)
- The reflex circuit (*and vestibular proprioceptive sense*)
- *The homunculus circuit (Posture, muscle tone, ligamentous tension, vestibular awareness and mapping to conscious and subconscious memory sectors in the cerebrum and cerebellum*)
- *The vestibular system and cerebellum as agents of reflex (Real Muscle Memory = practiced movement patterns)*
- *Tissue texture change as a response to the reflex (is a homeostatic mechanism in dynamic change)*



Images from: Osteopathic approach to diagnosis and treatment, Schiowitz & DiGiovanna 3rd ed. pgs. 30-31



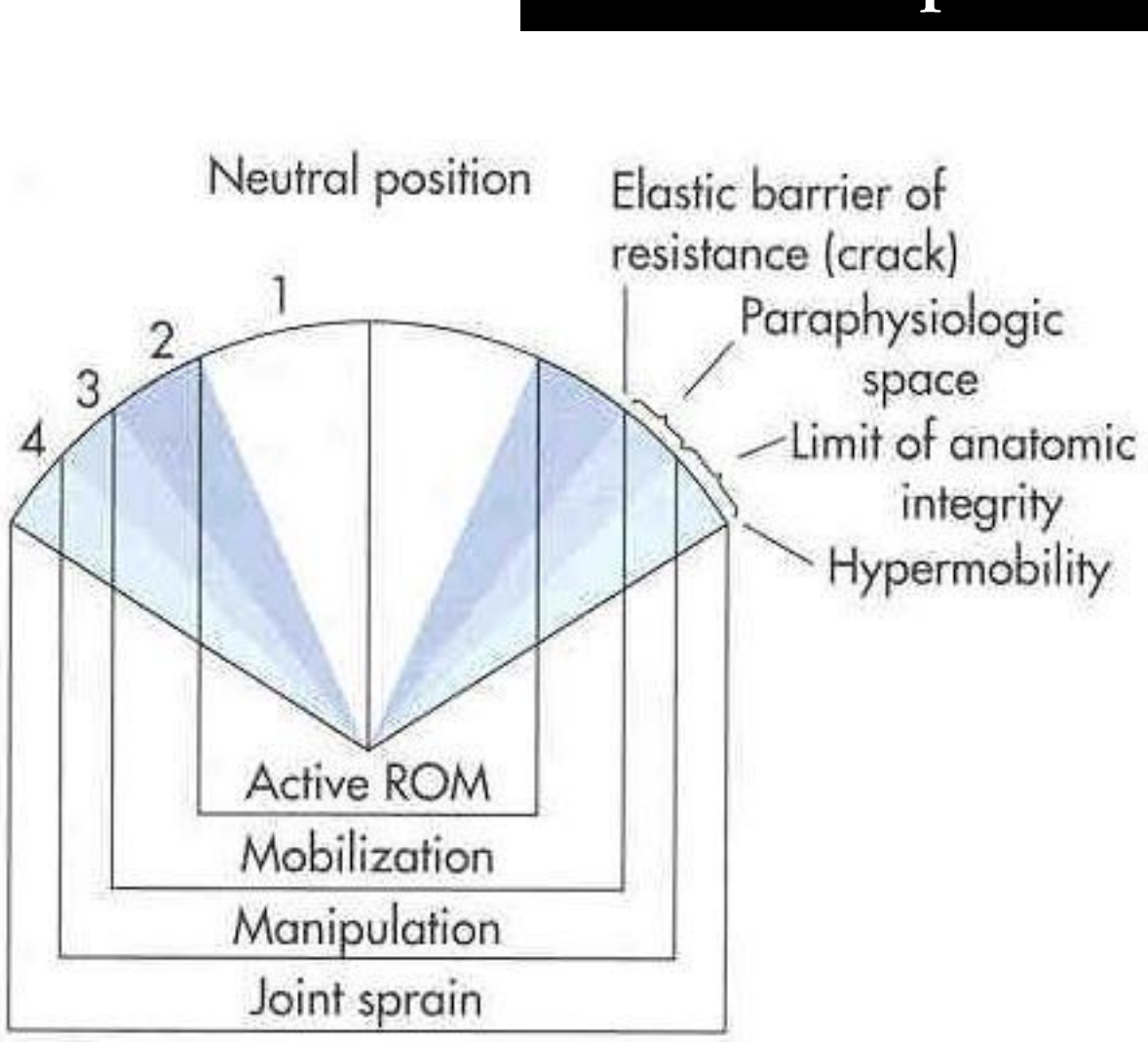


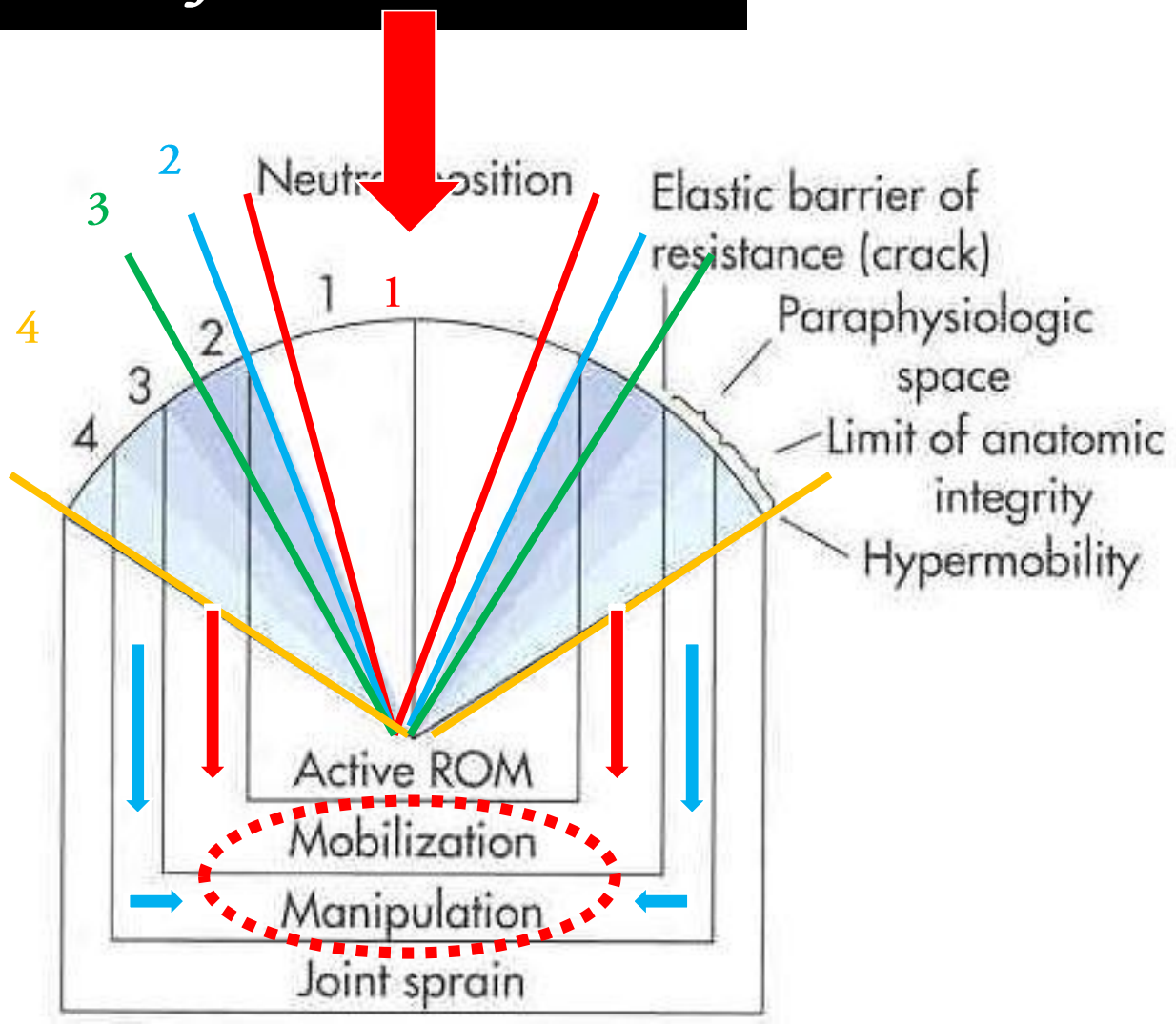
modify (reduce) motion

reduce

Philip E. Greenman; Principles of Manual medicine; Lippincott Williams and Wilkins; 3 rd ed; pg:53 – 65

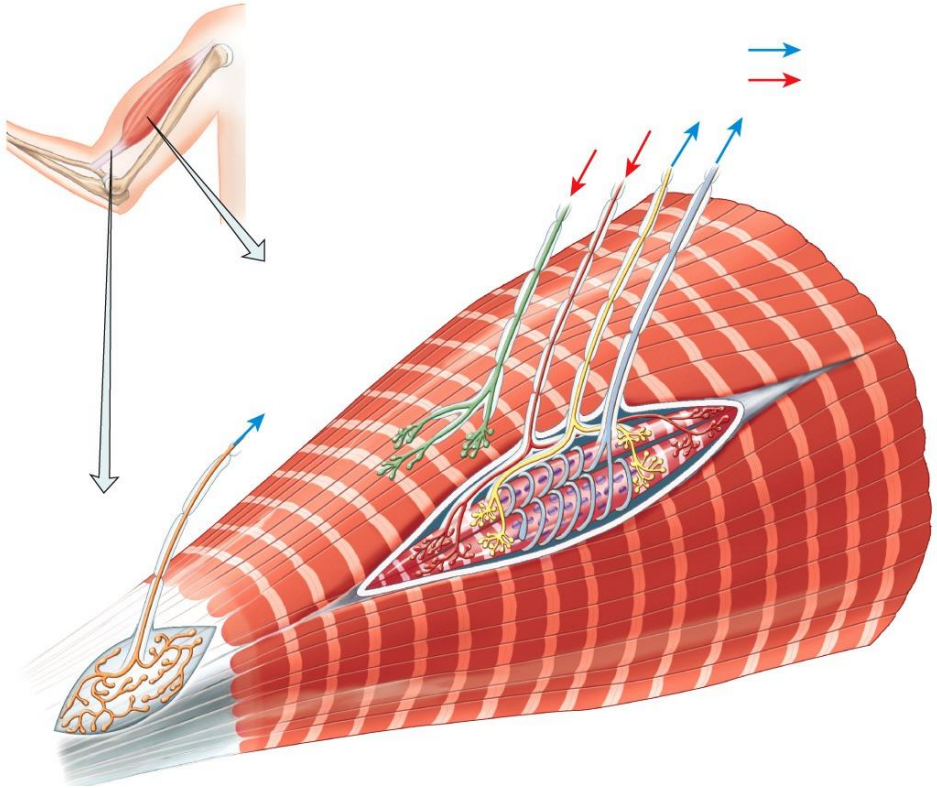
FPR- Compression and Joint ROM



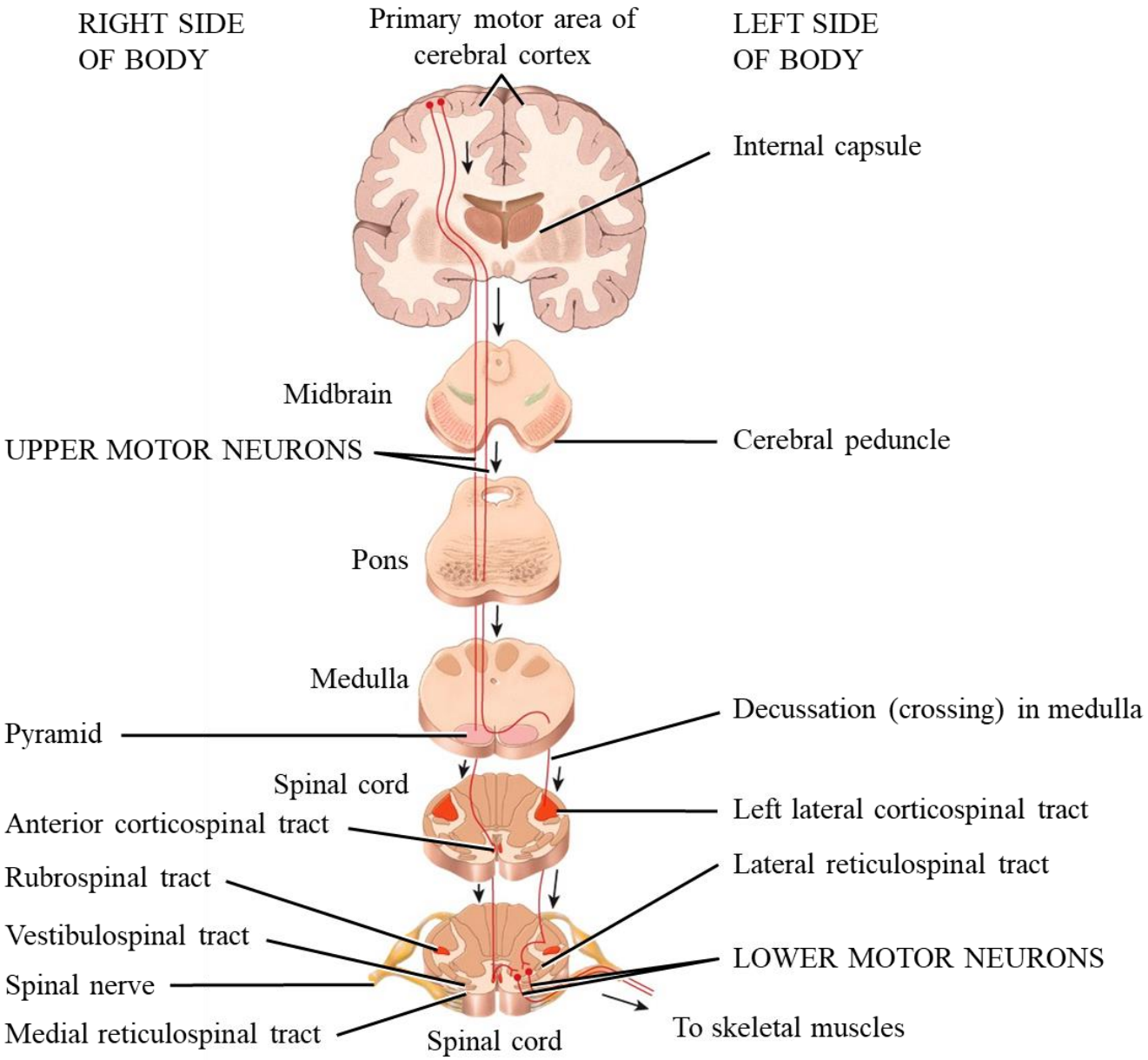


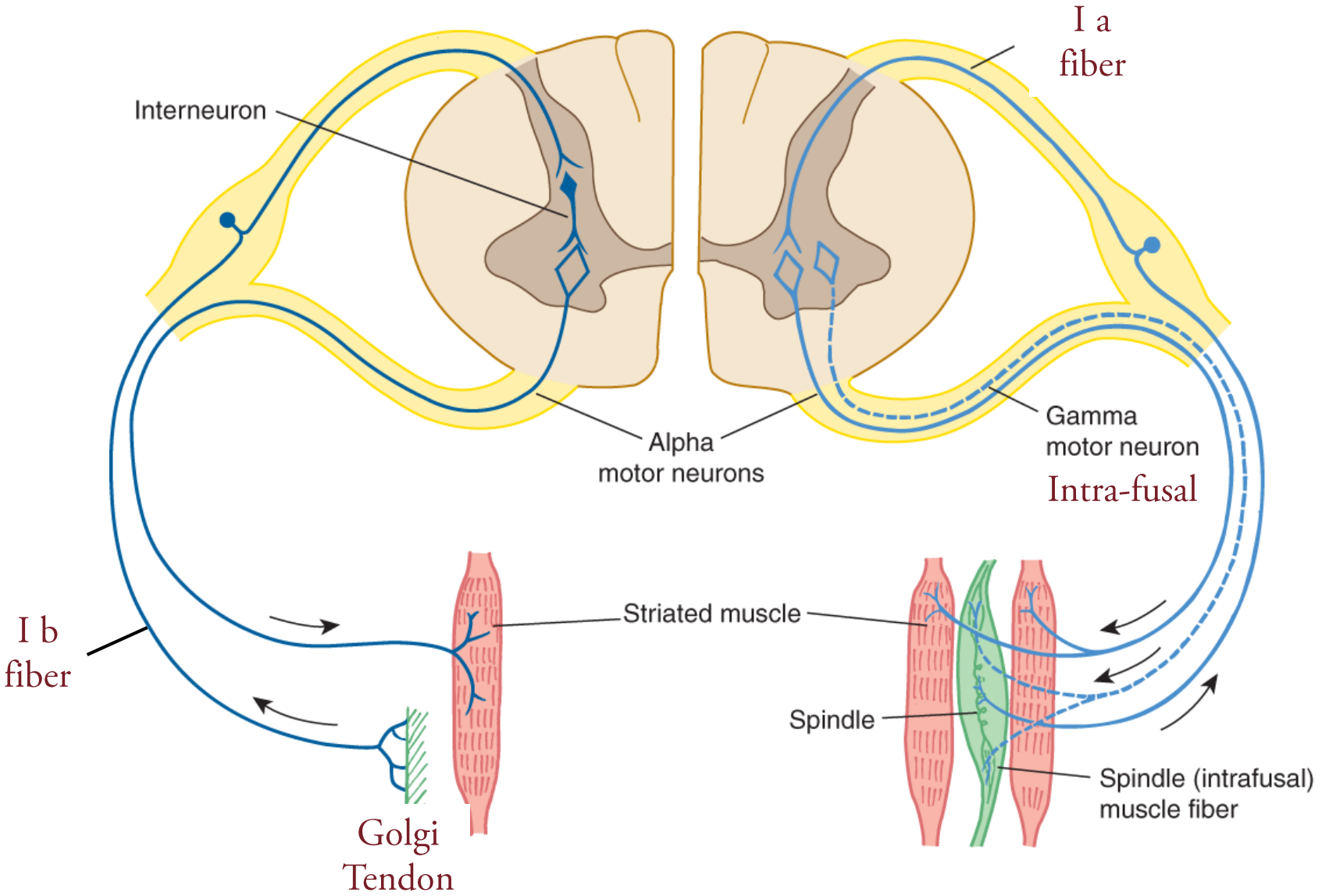
Compression decreases the movement necessary to "stack" all Planes in freedoms.
(Fryette's rule III)

Muscle spindle & Golgi tendon



When alpha motor neurons contract the entire gamma complex responds in reciprocation. The sensory tracts all report all the time.





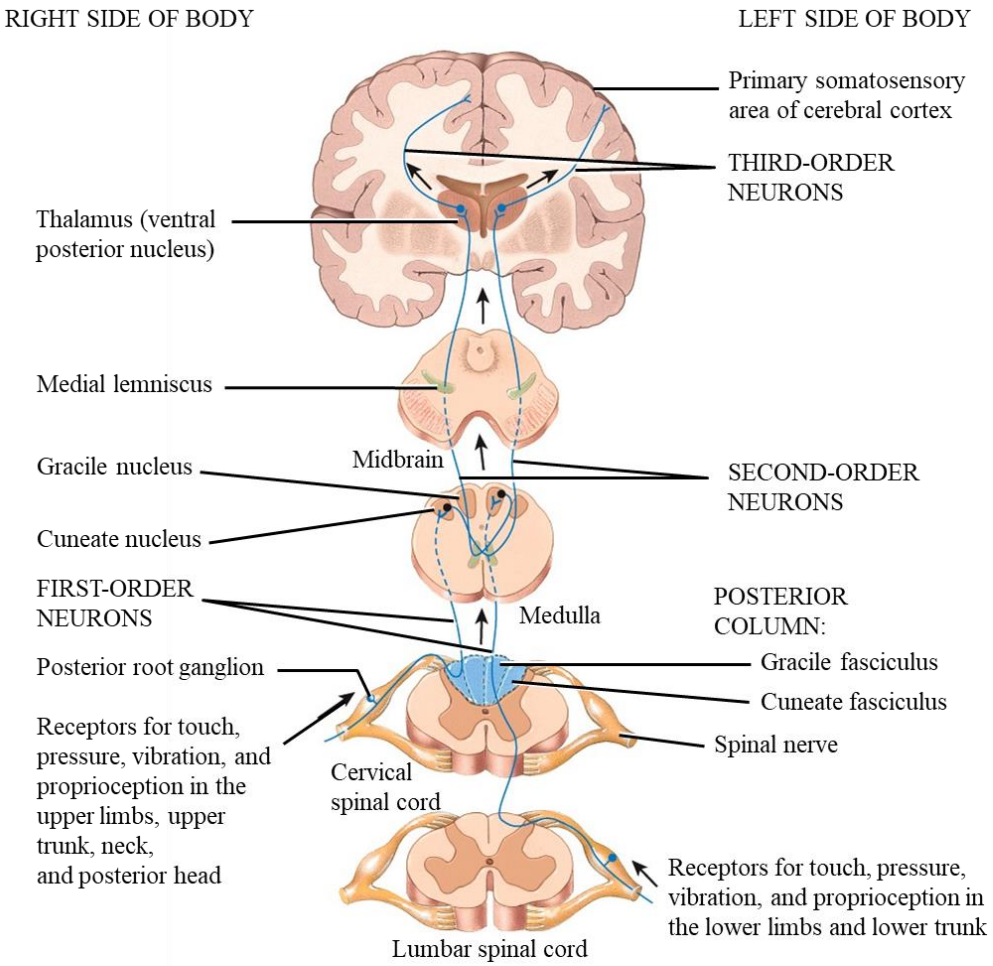
Source: Waxman SG: *Clinical Neuroanatomy: Twenty-Seventh Edition:* www.accessmedicine.com

American Academy of Osteopathy®

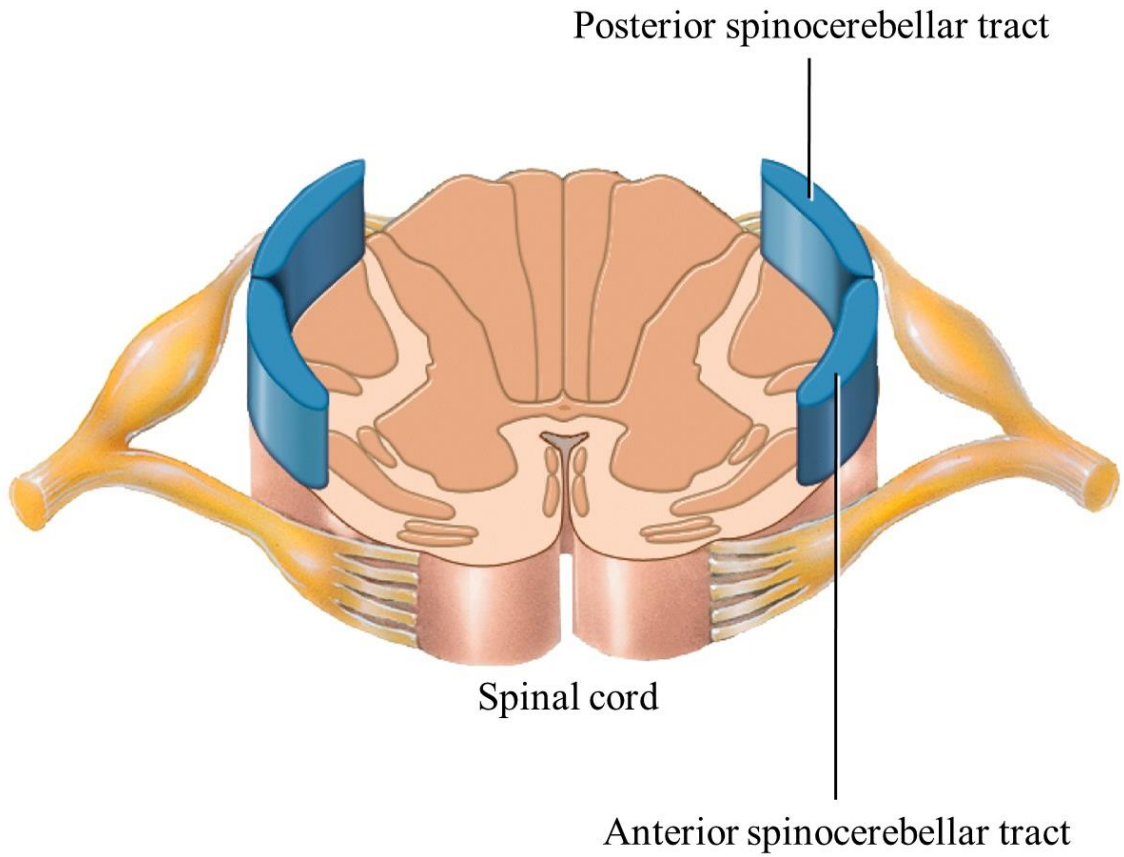
Primary Descending (Motor) Pathways

Tract	Location of Upper Motor Neurons	Destination (termination)	Site of Decussation (crossover)	Function
CORTICOSPINAL PATHWAY				
Corticobulbar tracts	Primary motor cortex (cerebral hemispheres)	Lower motor neurons of cranial nerve nuclei in brainstem	Brainstem	Conscious motor control of skeletal muscles
Lateral corticospinal tract	As above	Lower motor neurons of anterior gray horns of the spinal cord	Pyramids of medulla oblongata	As above
Anterior corticospinal tract	As above	As above	Level of lower motor neuron	As above
MEDIAL PATHWAY				
Vestibulospinal tracts	Vestibular nuclei (at the border of pons and medulla oblongata)	As above	None (uncrossed)	Subconscious regulation of balance and muscle tone
Tectospinal tract	Tectum (mesencephalon: superior and inferior colliculi)	Lower motor neurons of anterior gray horns (cervical spine only)	Brain stem (mesencephalon)	Subconscious regulation of eye, head, neck, and upper limb position in response to visual and auditory stimuli
Reticulospinal tracts	Reticular formation (network of nuclei in brainstem)	Lower motor neurons of anterior gray horns of spinal cord	None (uncrossed)	Subconscious regulation of reflex activity
LATERAL PATHWAYS				
Rubrospinal tracts	Red nuclei of mesencephalon	As above	Brain stem (mesencephalon)	Subconscious regulation of upper limb muscle tone and movement

Somatosensory & Spinocerebellar



(a) Posterior column-medial lemniscus pathway



10 Major Tracts

Conscious sensation

Anterolateral system

Dorsal columns

Other ascending tracts

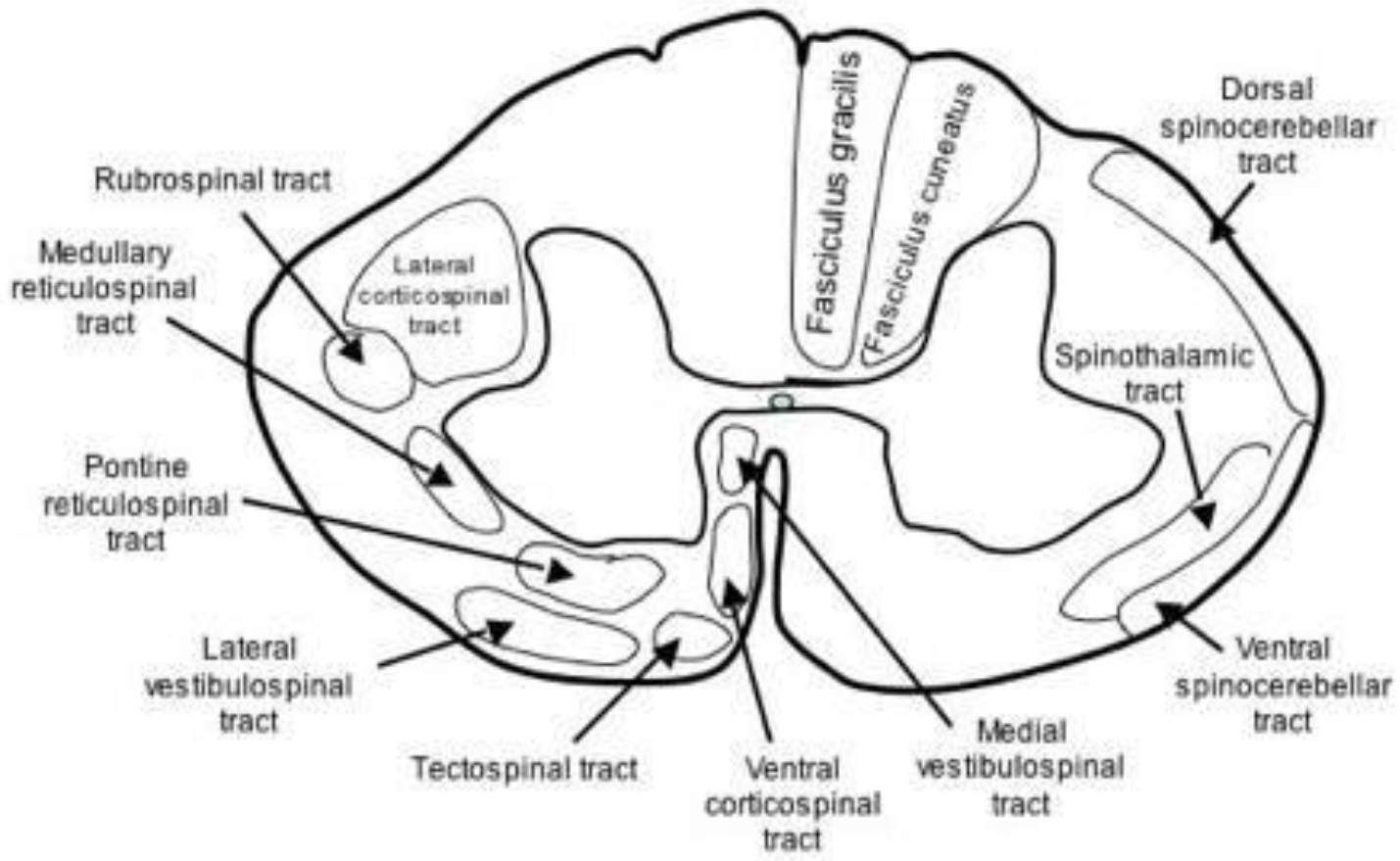
SUB-conscious sensation

Dorsal spinocerebellar tract

Cuneocerebellar_tract

Ventral spinocerebellar tract

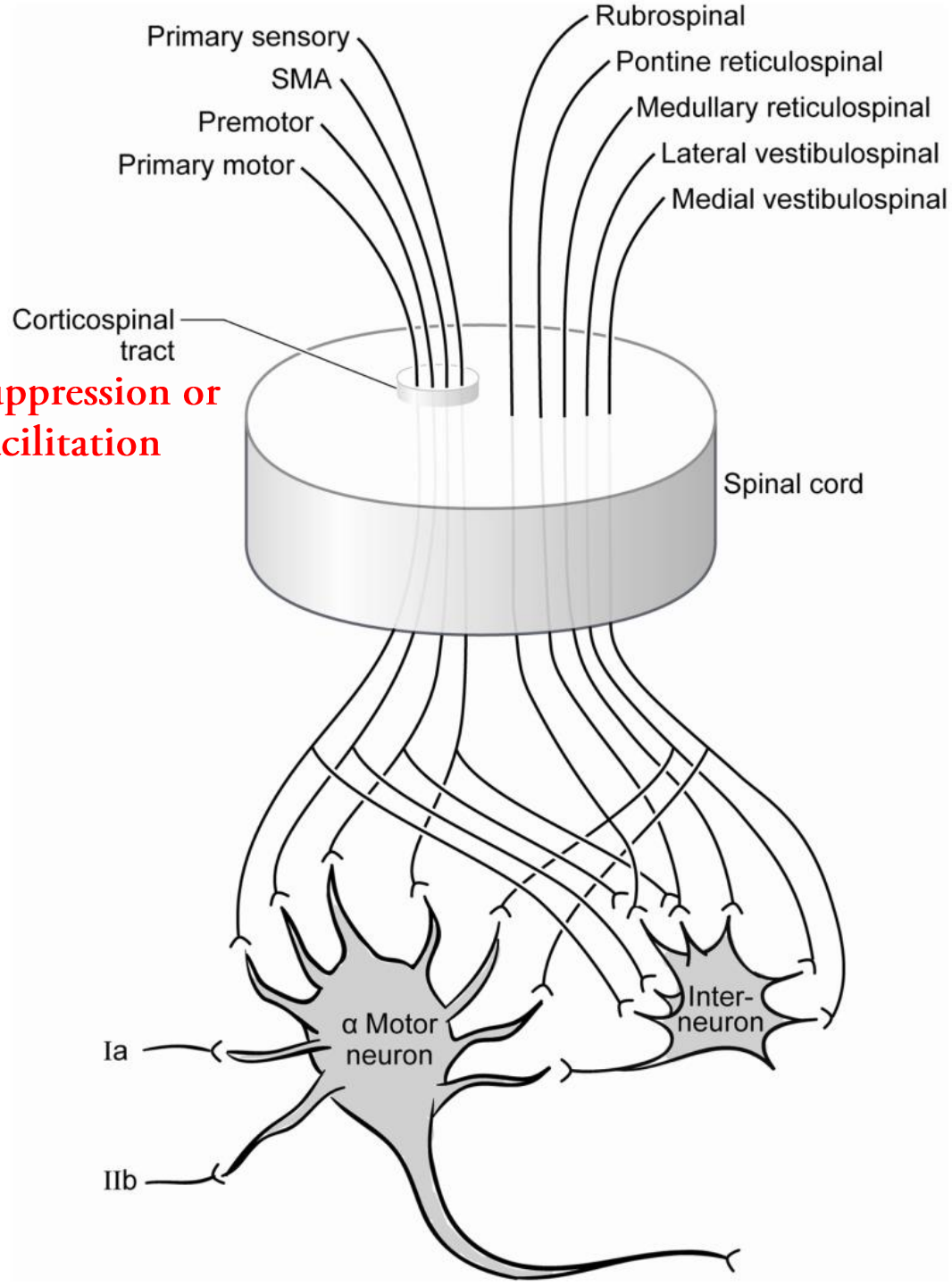
Indirect spinocerebellar tracts



Site editor: Rand Swenson, DC, MD, PhD
Dartmouth Medical School

Gaiting at the interneuron

Contemporary summary of the afferent (sensory) pool of the alpha motor neuron. Significant contributions include those from the spinal interneuron pool whose inputs include the same projections received from the corticospinal tract. This allows for cortical suppression or facilitation at segmental levels.
FPR hits this reflex mechanism at multiple levels.



Florman, Jeffrey & Duffau, Hugues & Indulal Rughani, Anand. (2013). Lower Motor Neuron Findings after Upper Motor Neuron Injury: Insights from Postoperative Supplementary Motor Area Syndrome. Frontiers in human neuroscience. 7. 85. 10.3389/fnhum.2013.00085.

Identify common office and hospital reasons to use FPR

- What are your reasons? Diagnostic?

1. Speed
2. Gentle
3. Indirect
4. Few contraindications- patient refusal, necrotizing fasciitis, etc.
5. Many indications-viscerosomatic, lymphatic, biomechanical, 5 models
    1. Neurological
    2. Biomechanical
    3. Metabolic
    4. Respiratory-circulatory
    5. Psycho-social-behavioral
6. Outcomes- improved motion, drainage, normalized PS-S balance, L.O.S.
7. Safety- everyday motions create more force that FPR, side effects minimal to none
8. Easy to Supervise student's and resident's in hands on Tx
9. Billable (next slide for details)

Coding

- Office visit New pt. (99201-99205) Established pt. (99211-99215)
- Initial Hospital Care code (99221-99223)
- Subsequent Hospital Care code (99231-99233)
- Regions treated ICD-10 regions M99.xx codes
- Time spent in counseling on exercise, LfSt,
  - Ergonomics and nutrition
- Modifiers: 25 for combined E&M

Procedure codes➔

CPT 2009 Codes	Body Regions Treated With OMT, No.
98925	1 or 2
98926	3 or 4
98927	5 or 6
98928	7 or 8
98929	9 or 10

ICD-10 codes	Region of Somatic
M99.00	Head (includes occi
M99.01	Cervical
M99.02	Thoracic
M99.03	Lumbar
M99.04	Sacral/sacroiliac
M99.05	Hip/pelvic
M99.06	Lower extremity
M99.07	Upper extremity
M99.08	Rib
M99.09	Abdomen

Analyze the utility of FPR in office and hospital practice

- Outcomes

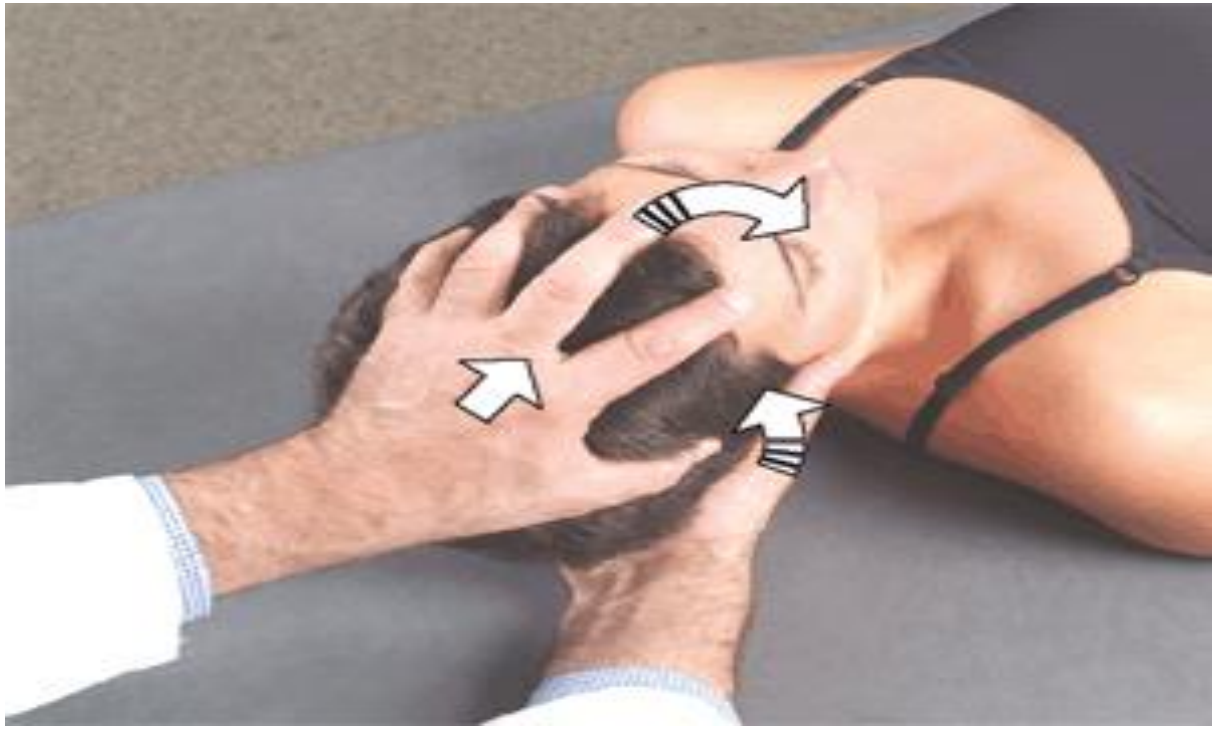
1. Improves healing by:
   - Reducing energy drains on a weakened system
   - Promotes increased mobility therefore reduces the work of movement
   - Promotes clearing of toxins in tissue in the region
   - Reduces pain
   - Reduces medication usage
   - Improves responses to medication at lower doses
2. Biomechanical advantages
3. Viscerosomatic assessment (diagnostic) targeting of specific organs
4. Lymphatic changes restoring circulatory balance

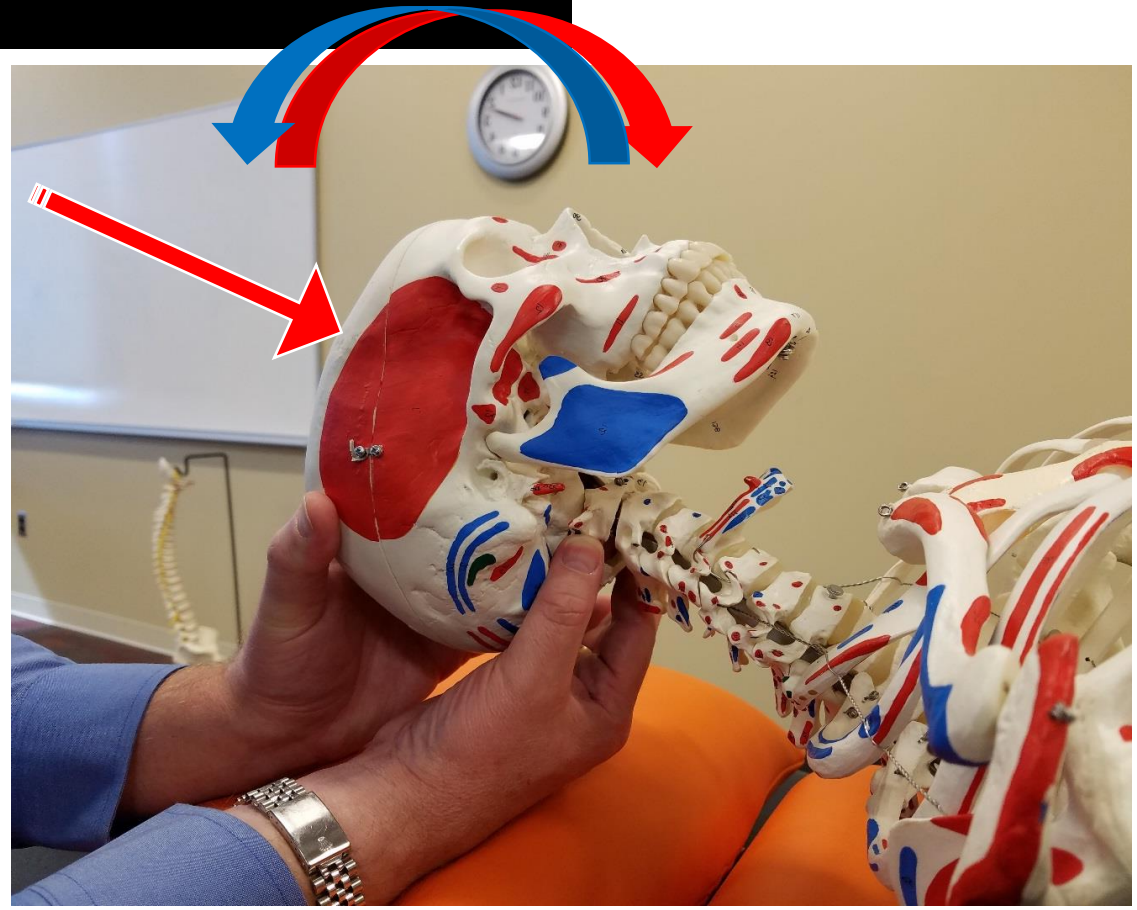
Demonstration and Practice of FPR Technique

Lab Format C spine, T spine, first rib & L spine

- For each body region we will be treating:
  1. Scan, Screen, and Diagnose the body regions related to systemic diagnosis
  2. Check for Chapman's points
  3. Confirm Diagnosis and discuss with Preceptor consider lymphatic, viscerosomatic, neurological and biomechanical effects of treatments
  4. Treat the Somatic Dysfunction Using *FPR*
  5. *After completing FPR and rechecking the dysfunctions, re-check the Chapman's points*
- Be prepared to answer questions regarding how treatment to the relevant regions would produce a desired therapeutic effect on the *Organ system(s)* using information from the biomechanical effects, the viscerosomatic effects and/or the lymphatic effects.

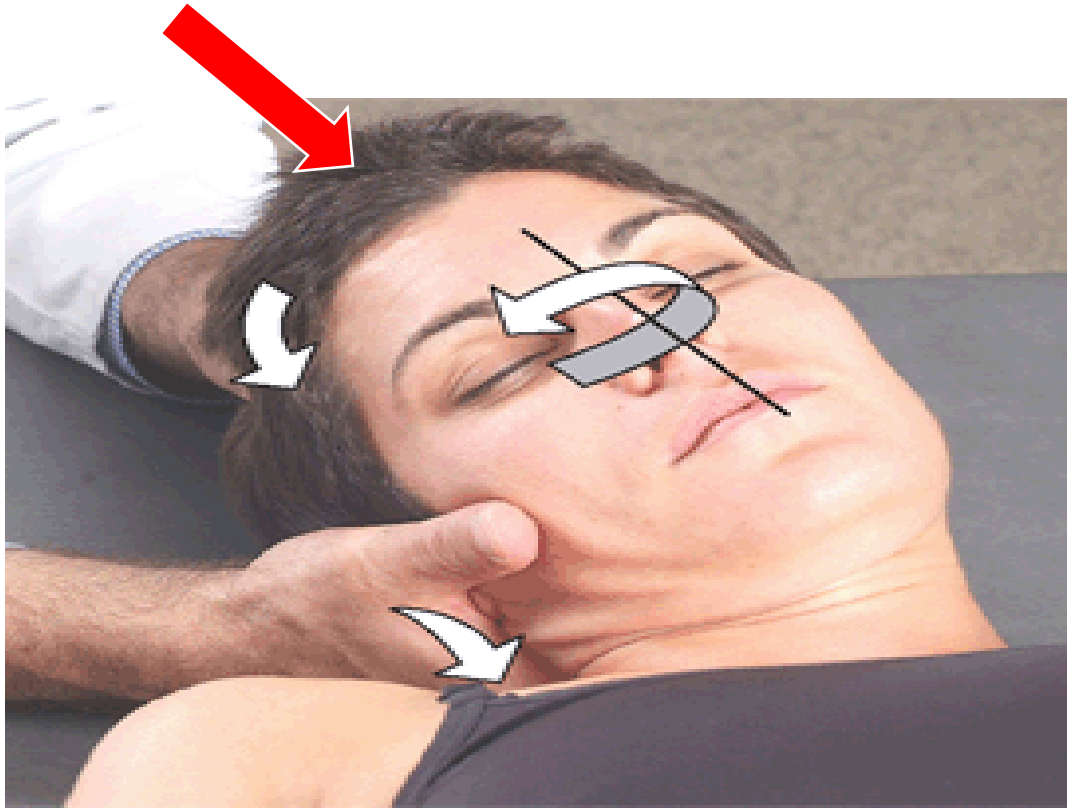
FPR Treatment of the OA – C2-Supine Segmental

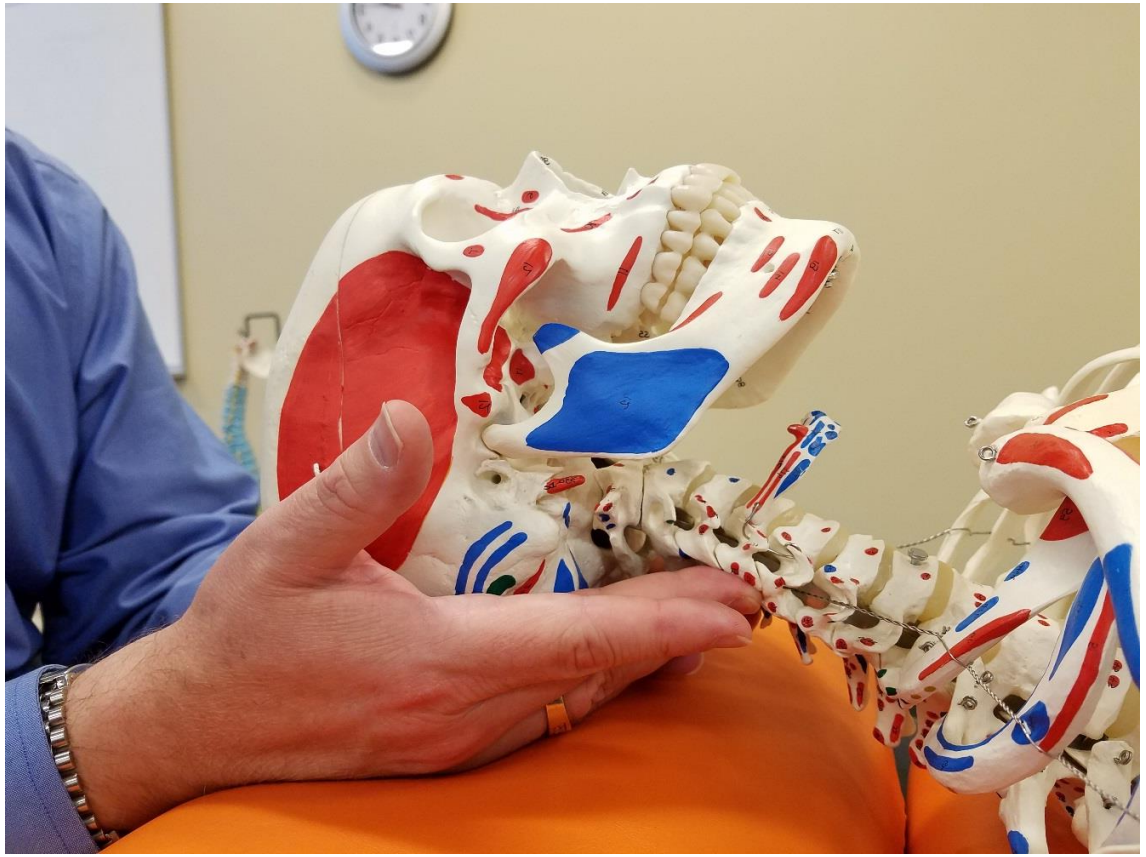




Isolate atlas lateral masses with upper C-spine in neutral "idling position"), Compress, "Stack" into freedoms, side bending, then rotation, then flex/ext – monitor for TART changes, 3-15 seconds, return to neutral, recheck

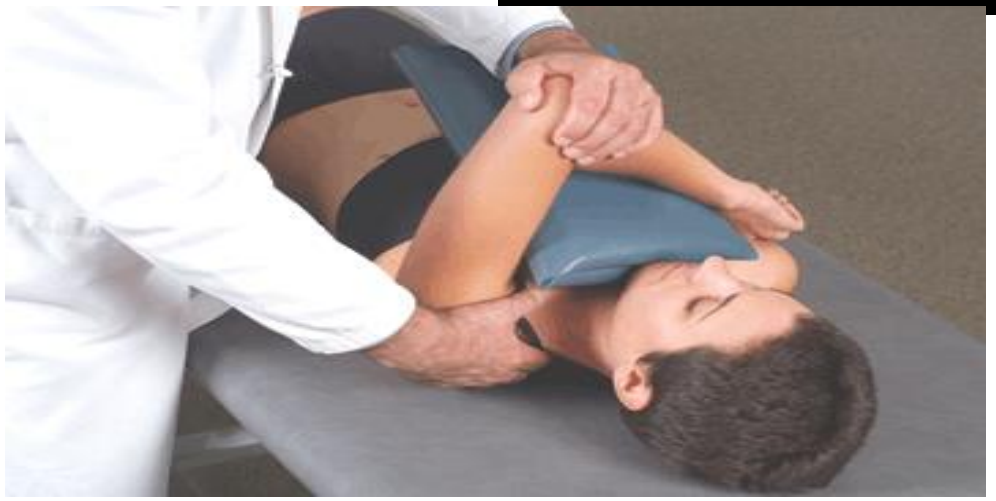
FPR Treatment of the Cervical Vertebral (Supine Segmental) C3-7 E SRRR

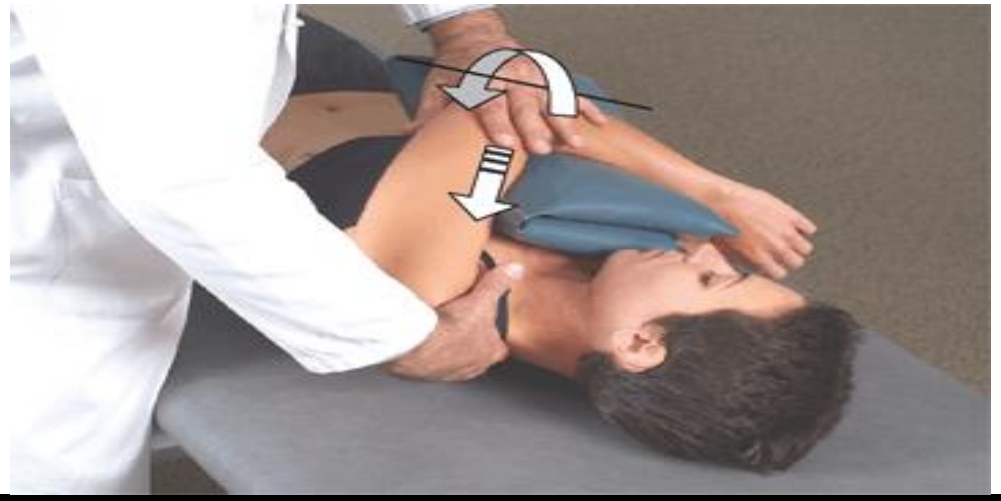


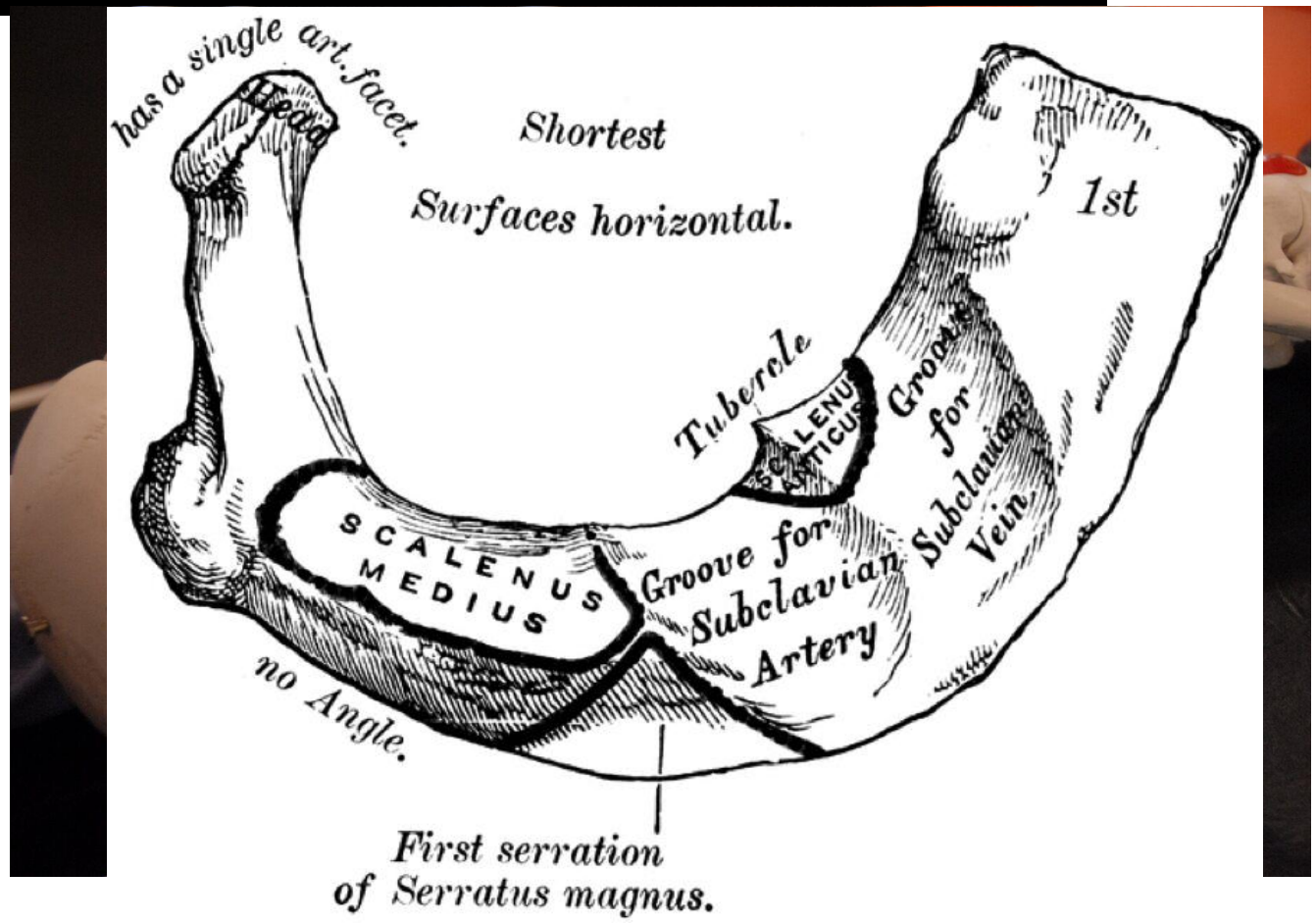


Isolate vertebral segment with upper C-spine in neutral “idling position”), Compress, “Stack” into freedoms, side bending, then rotation, then flex/ext – monitor for TART changes, 3-15 seconds, return to neutral, recheck

FPR Treatment of the Elevated First Rib- Supine Segmental

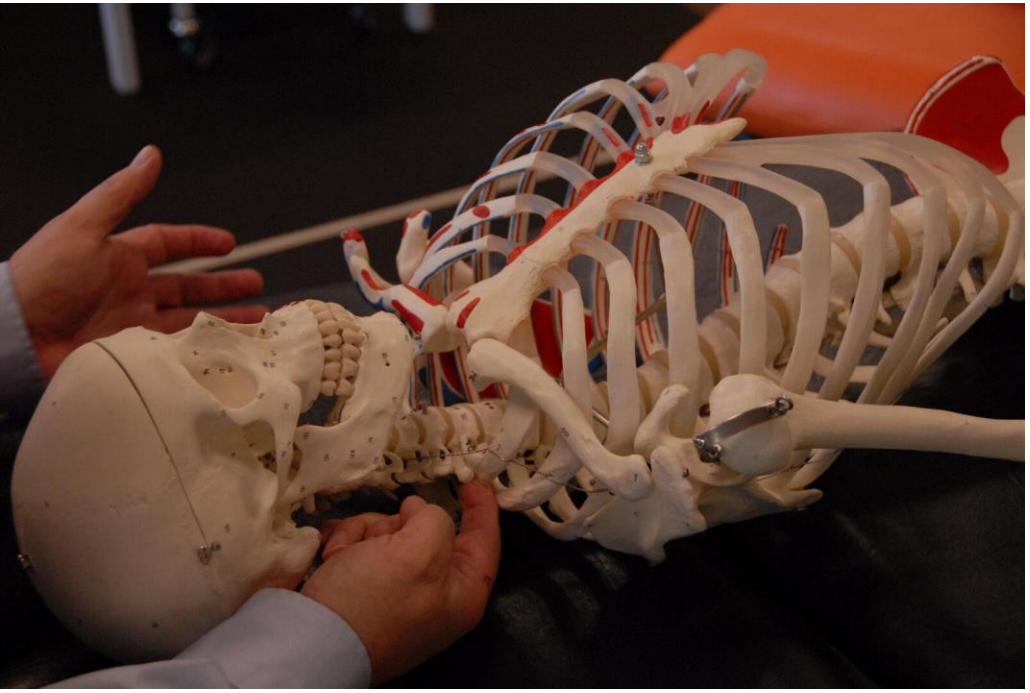


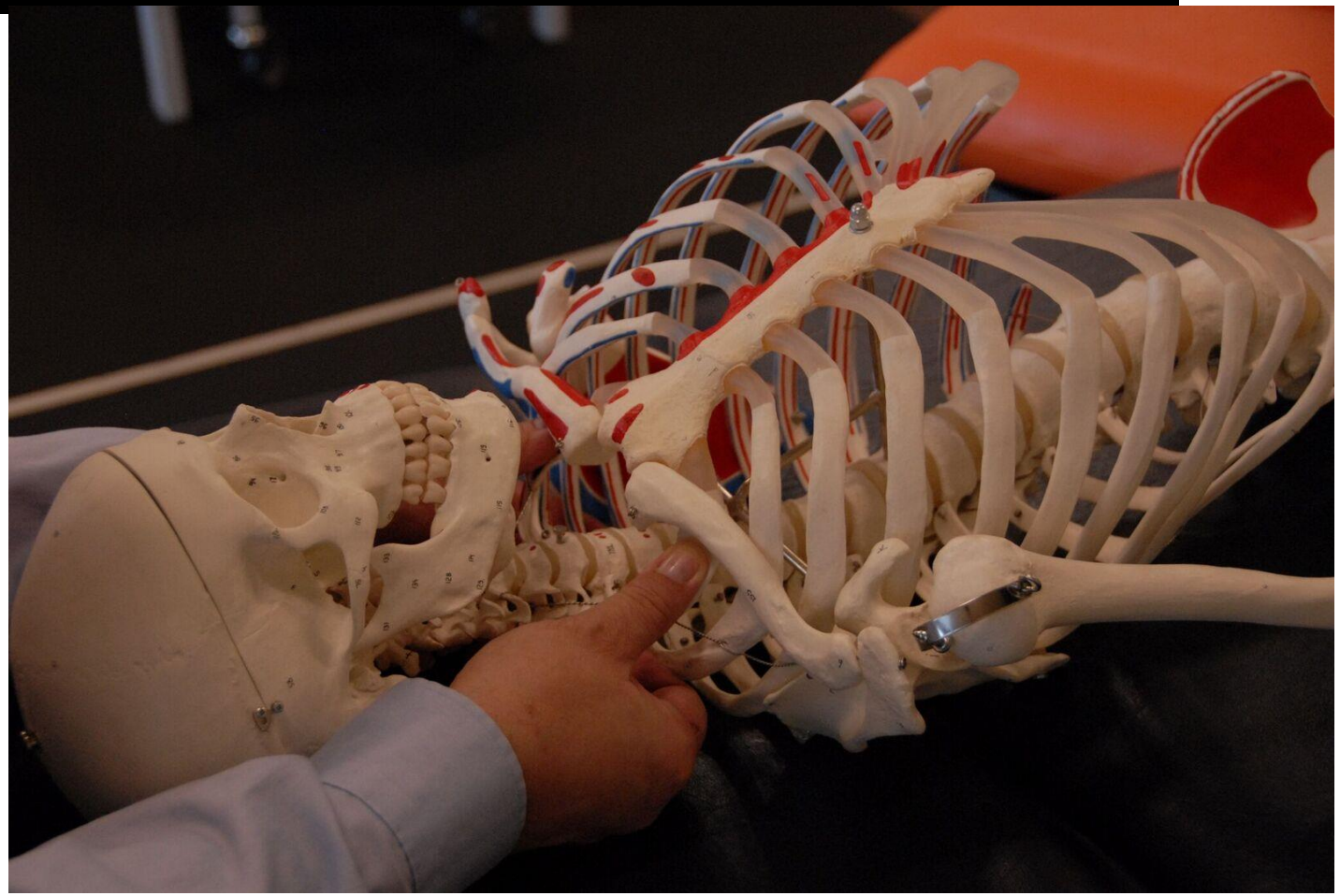




Contact the 1st rib posteriorly at the costo- transverse junction and anteriorly near the scalene tubercle.

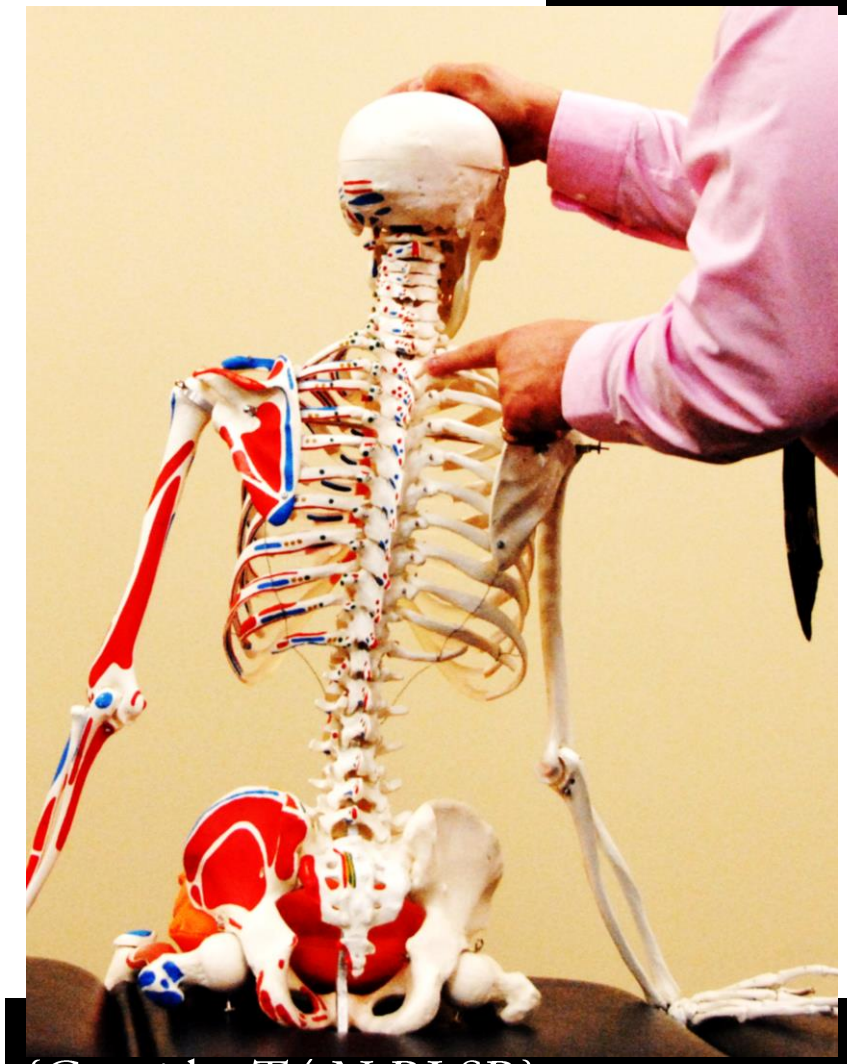
FPR Treatment of the Elevated First Rib- Supine Segmental

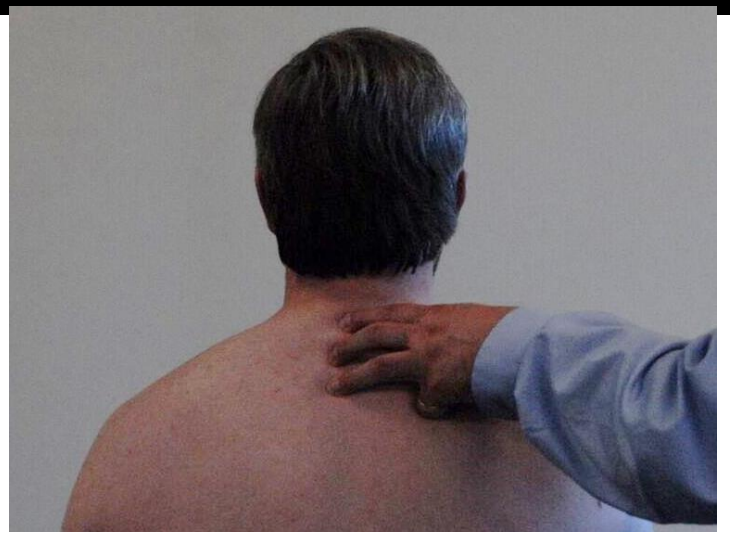


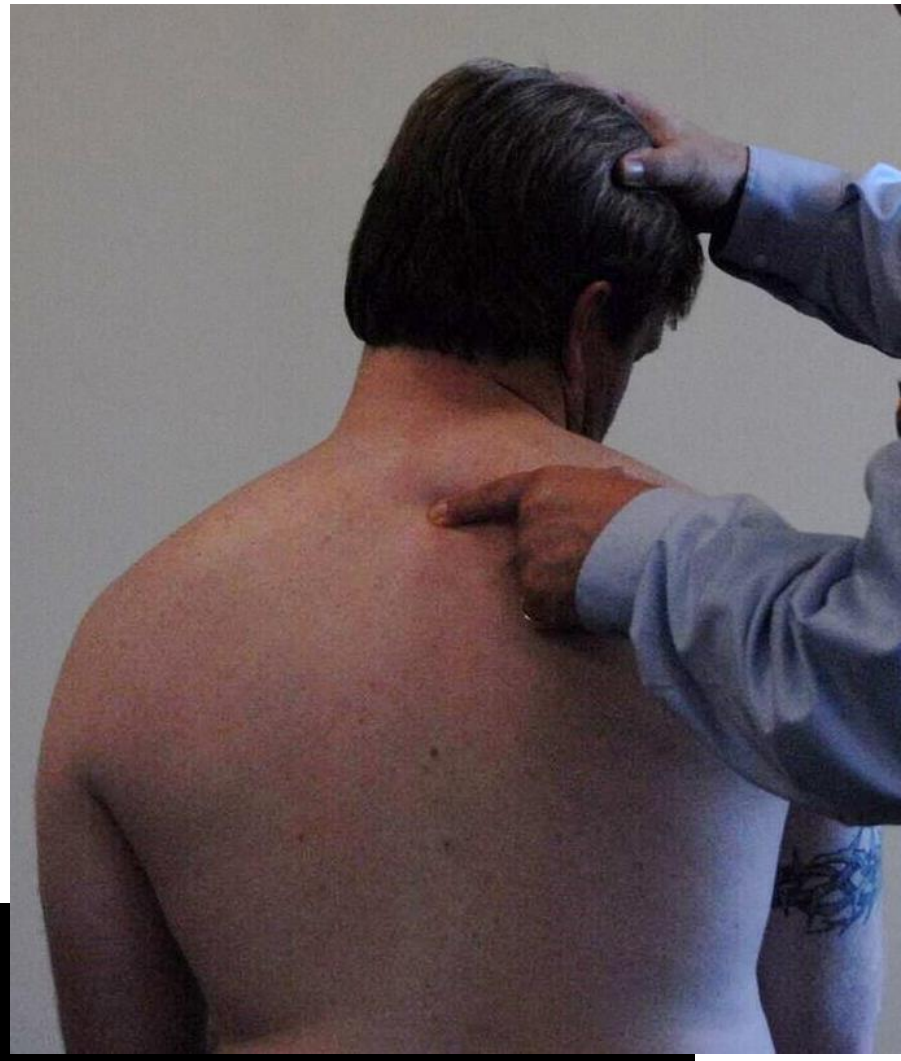


Contact the 1st rib posteriorly at the costo- transverse junction and anteriorly near the scalene tubercle.

FPR Treatment of the thoracic vertebral 1-4 – T3 F SRRR (Seated Segmental)

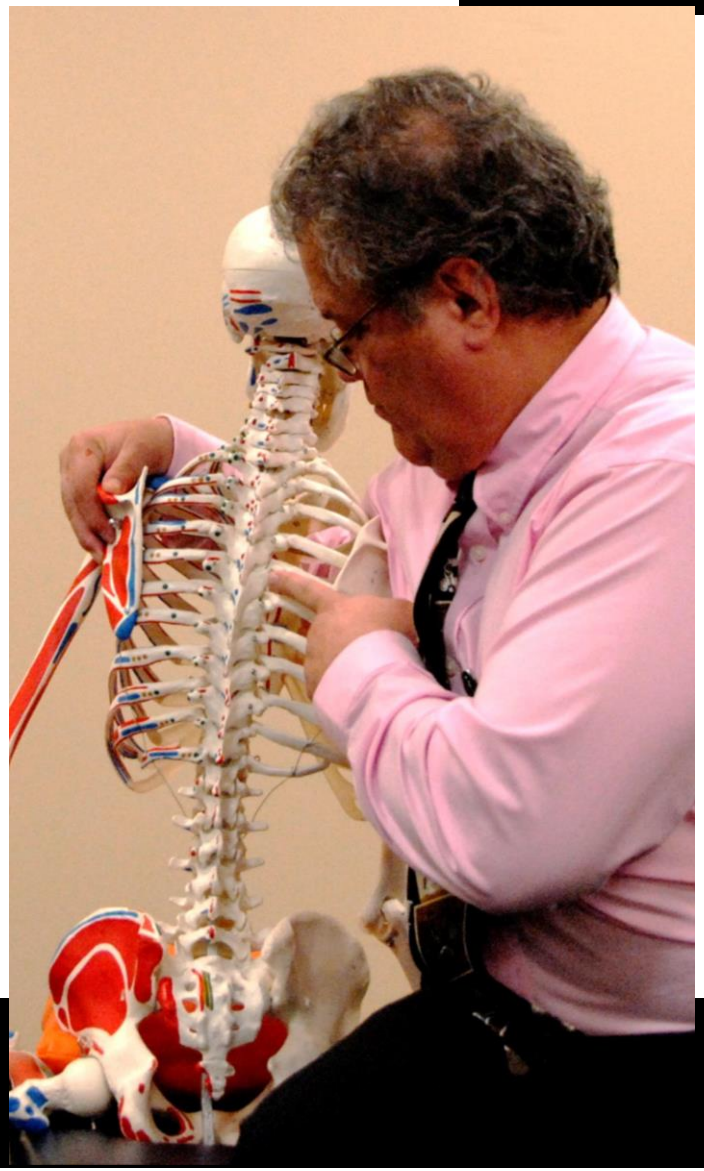


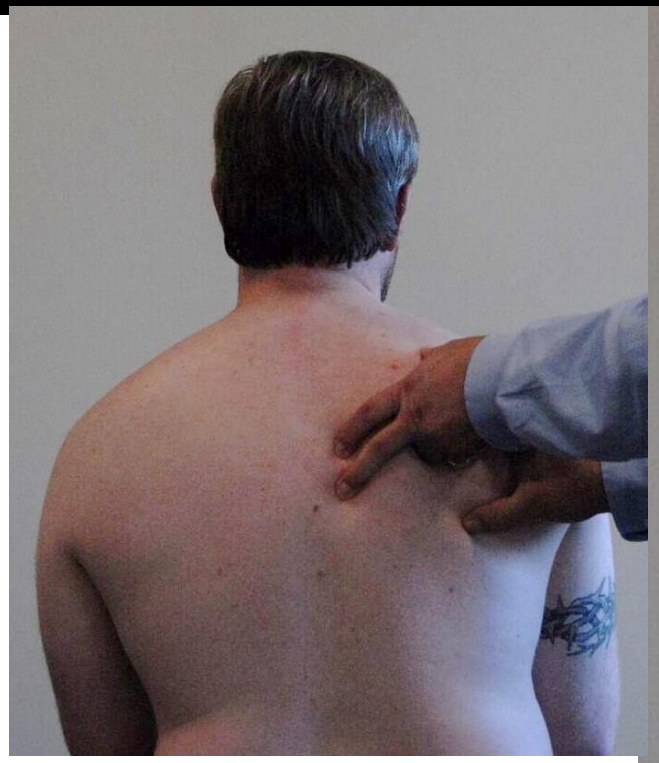


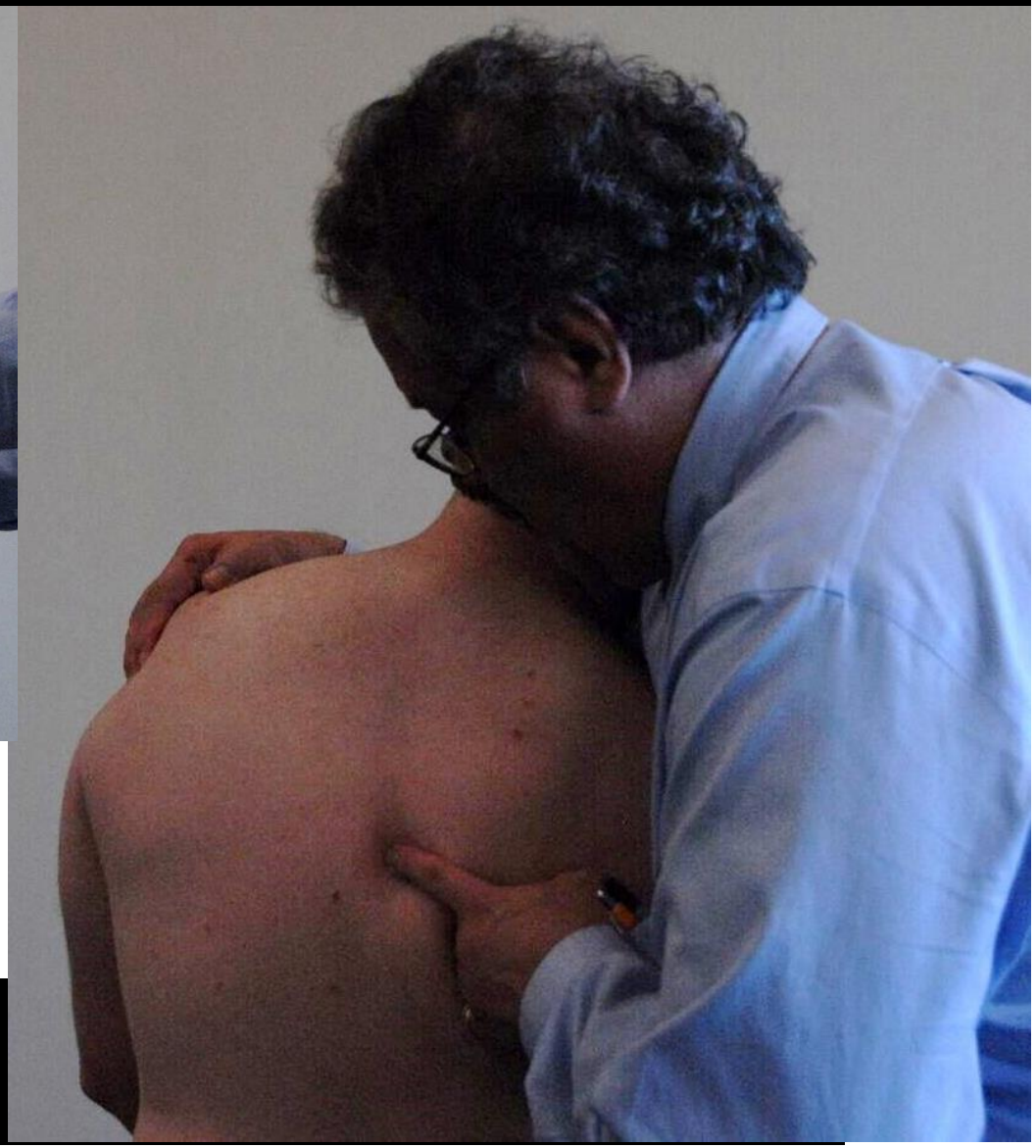


{Consider T4 N RLSR}

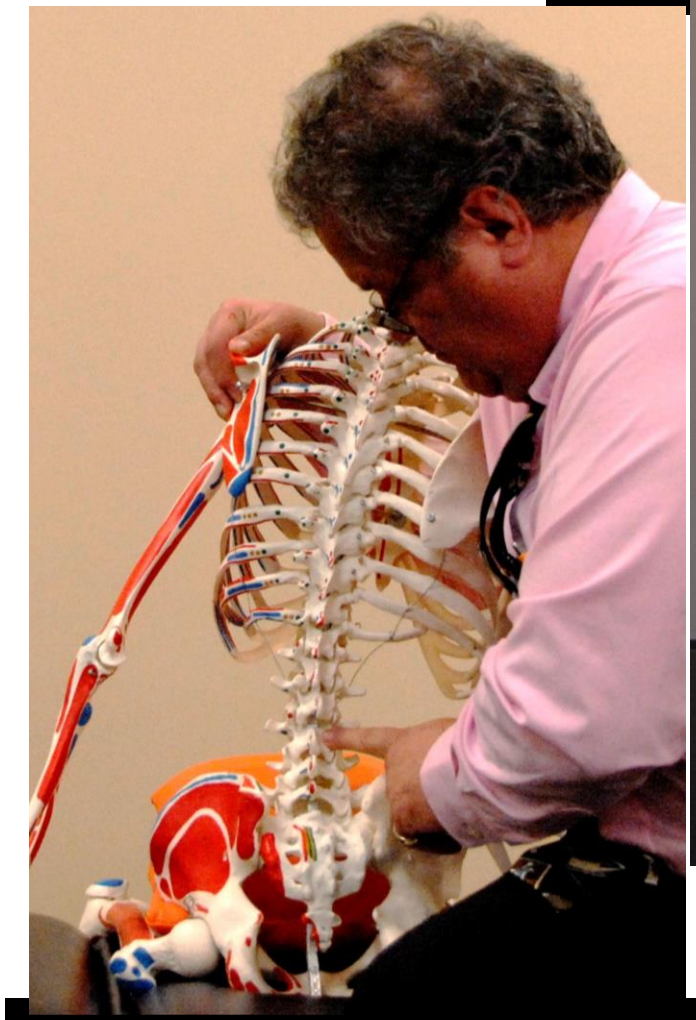
FPR Treatment of the thoracic vertebral 5-12 – T6 F SRRR (Seated Segmental)

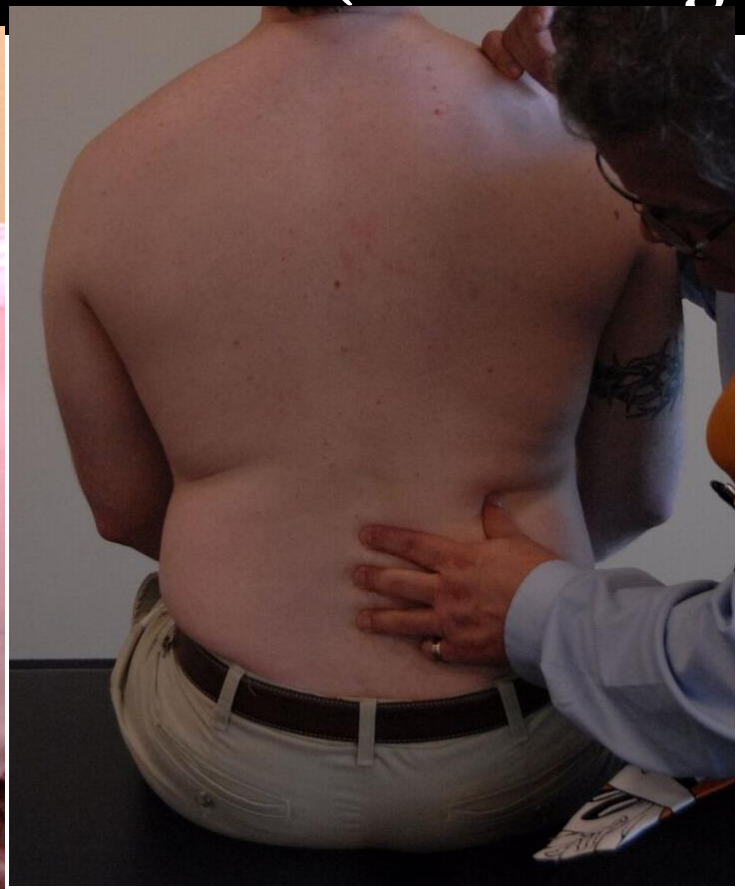


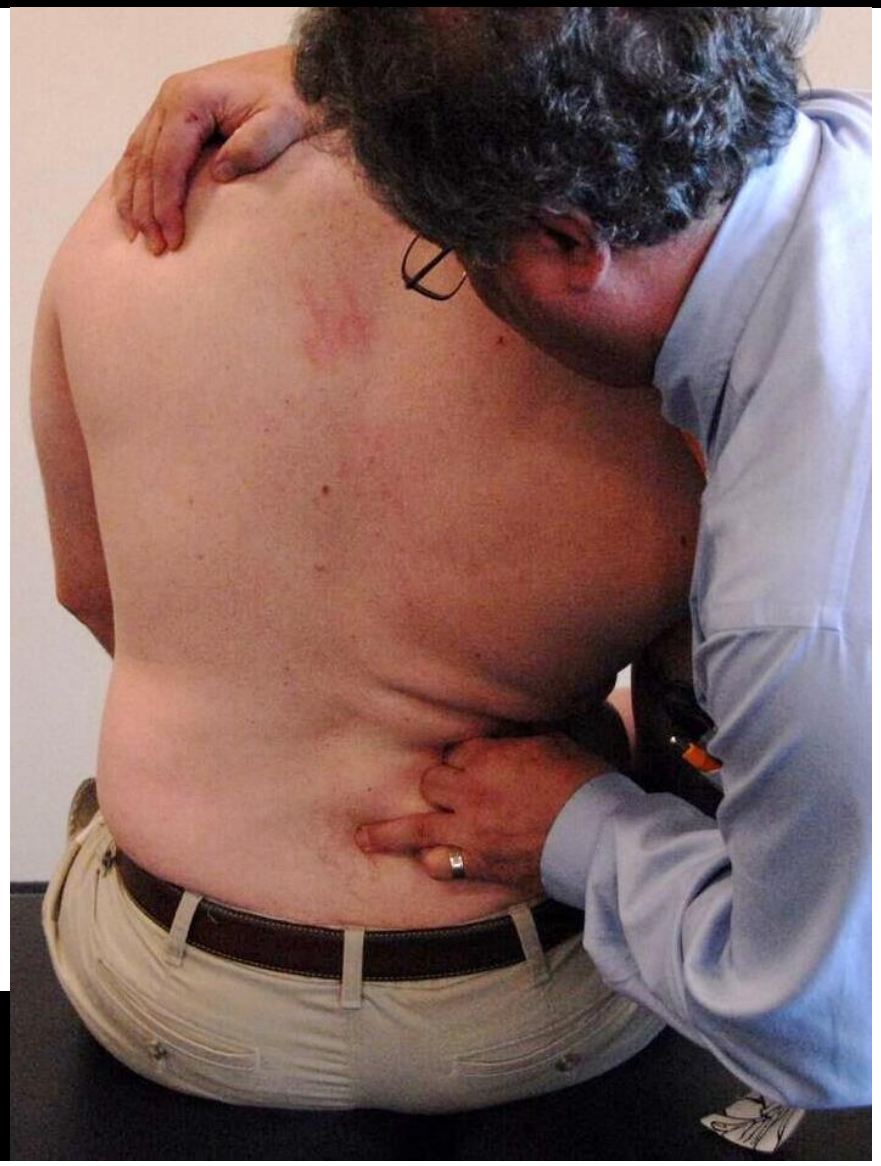




FPR Treatment of the lumbar vertebral 1-5- L3 E SRRR (Seated Segmental)







Location: Rib 12, count L1-3

REGIONS OF APLICATION

C, T, RIBS, L, S, P, UE, LE, GROSS MUCLE, OR JOINT SPECIFIC

VISCEROSOMATIC? LYMPHATIC? DISCOGENIC?

QUESTIONS?

Coding Slides below from John Wolf DO, FACOFP
OMT documentation and coding

OMT in the Hospitalized Patient

Rebbecca J. Bowers D.O.

2014 CMS Reimbursement

• 99213 - $70.61	Estab Office visit
• 99214 - $104.36	
• 98925 - $25.82	OMT 1-2 Regions
• 98926 - $38.85	OMT 3-4 Regions
• 98927 - $51.24	OMT 5-6 Regions
• 98928 - $65.51	OMT 7-8 Regions
• 98929 - $78.77	OMT 9-10 Regions

OMT Regions – CPT defined

- Head
- Cervical
- Thoracic
- Lumbar
- Sacral
- Pelvic
- Abdomen and Viscera

Lower Extremities
Upper Extremities
Ribs

Office E&M Coding

- 99214: 4 HPI, 2ROS, 1PMHx
- Exam – 5 organ systems
- MDM – Dx, Data, Risk

- Is NOT DIFFICULT to document 99214 !!!
- Read this article: "Coding Level-IV Visits without Fear". www.aafp.org/fpm

Efficiency: 3 Regions, 3 Minutes

- Procedure: OMT

✓Trained and certified

✓No additional equipment required

✓Already in the CPT book and on CMS fee schedule.

Documentation

- T – Tissue Texture Changes
  - Temp differences, swelling, hyperesthesia, firmness
- A – Asymmetry of bony landmarks
  - SI joint, ASIS, leg lengths
- R – Restriction of Motion
  - Spine segments, joint range
- T – Tenderness

EMR Templates – Physical Exam

- KISS

- “Paraspinal muscles with TTCs on R L at “
  - Example: On R at C5-7 and T 1-6 with…

…ROM restriction in Cervical, Thoracic and Lumbar spine
  - Or can be more specific (C4 Right Rotation, etc)

TIME OUT

- At this point, if fairly certain only dealing with a musculoskeletal problem (Somatic Dysfunction), most likely will just treat (perform a procedure)

- *Not the most efficient way to bill but still billable!*

EMR Templates – Procedure (PLAN)

- KISS – 3+ Regions is realistic goal

- "OMT discussed with pt, pt consented to Tx, OMT to spine with good results"
  - Example: C/T/L spine
  - Example: Rt ribs, Thoracic Outlet, Pelvis

Can be more specific: Muscle Energy, HVLA, etc
Or: Cranial techniques and OMT to spine.....

EMR Template: Procedure

- Important to document OMT as a procedure (plan)
- If insurance company declines payment for OMT, want it documented properly

- If payment declined, recommend also sending CPT book page which describes OMT as “a form of manual Tx applied BY A PHYSICIAN to alleviate somatic dysfunction and related disorders”.

Link Dx to Procedure

- You link Wart Dx to Cryo procedure
- You link HTN Dx to ECG procedure
- You link Asthma Dx to PFT
- You link Osteoporosis Dx to DEXA

- You link Somatic Dysfunction Dx to OMT

- Example 1: Dx – Cervical Sprain – S13.4
  Somatic Dysfunction Cervical -M99.01
- Example 2: Dx – cholecystitis - K81.0 -with viscero-somatic reflex at T7
  Somatic Dysfunction Thoracic - M99.02

OMT in the Hospitalized Patient

by Bowers

by Rebeca J Bowers, DO

OMT in the Hospitalized Patient

Rebecca J. Bowers, D.O.
NMM/OMM resident, 3rd year
Mercy Health Partners: Muskegon, MI

Lecture Topics

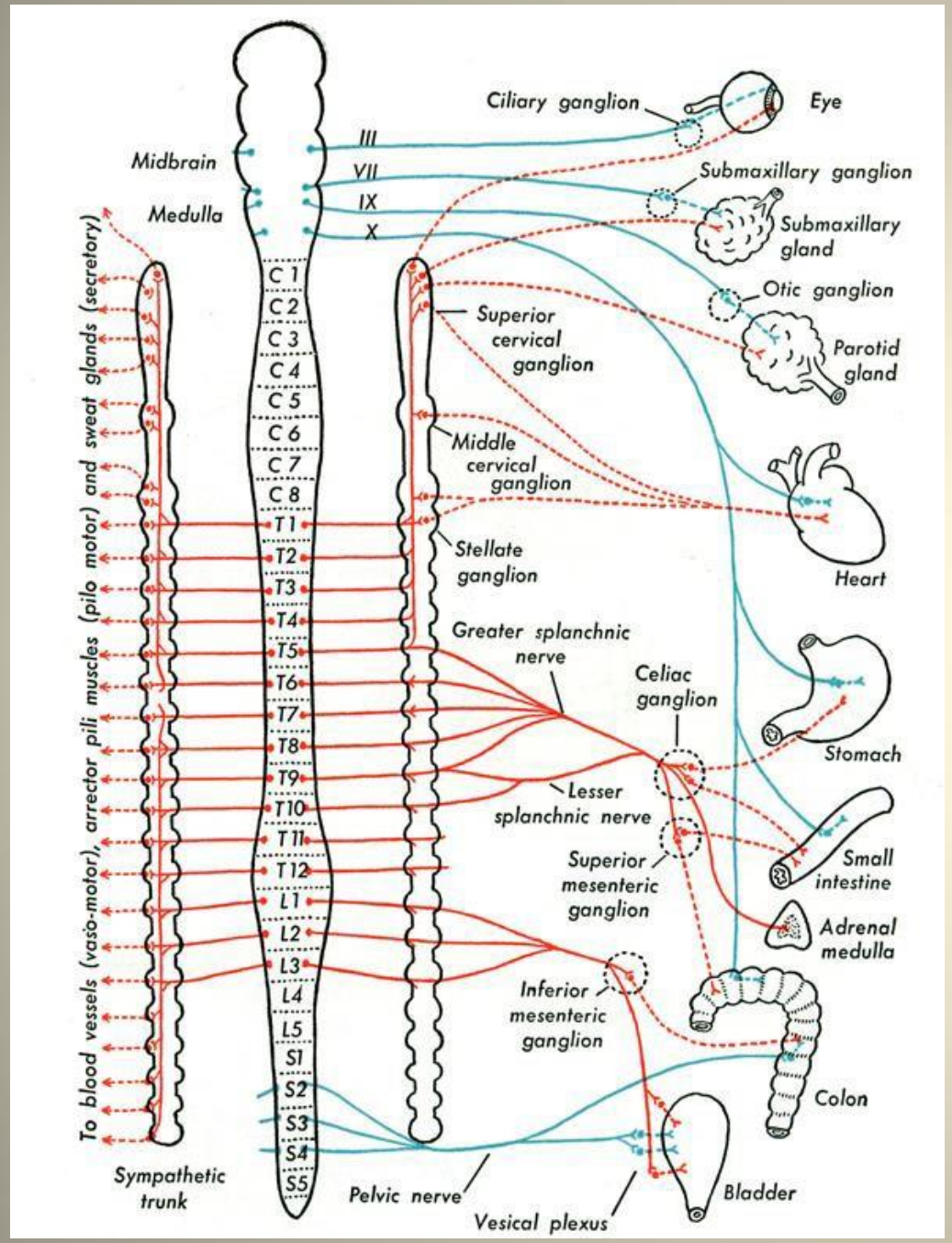
- **The ABC's: Autonomics, Breathing, & Circulation**
- **Adjunct treatment**
- **Common G.I. complaint**
- **Cautions**
- **Documentation**
  - **Osteopathic Musculoskeletal Examination of the Hospitalized Patient**
  - **Consent**
  - **Procedure Note**
- **Coding**
- **Consulting an OMM service**

Review Of Terms

- Myofascial Release (MFR)
  - System of diagnosis and treatment that engages continual palpatory feedback to achieve release of myofascial tissues
- Balanced Ligamentous Tension (BLT)
  - A variant of myofascial release in which the ligaments are poised between physiologic neutral and the tension created by the strain. This pathologic neutral point is held while the body resolves the strain and a release is felt.

Think ABC's

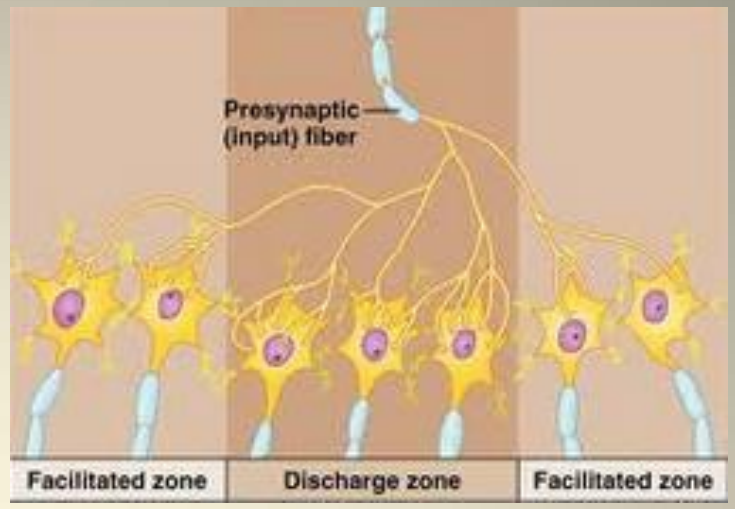
- Patient is hospitalized for acute problems
- Focus exam & treatment on the acute needs
- Autonomics
  - Sympathetics
  - Parasympathetics
- Breathing
  - Ribcage
  - Associated respiratory structures
- Circulation
  - Lymphatics
  - Vascular
- Not exclusive from each other or the rest of the body



Autonomics

- Acute insult increases sympathetic activity
- Imbalance between the sympathetics & parasympathetics interferes with healing process
- Mechanisms:
  - Viscerosomatic reflexes:
    - Facilitation
    - Chapman's reflexes
  - Psychosomatics
  - Somatosomatics

Facilitation



- Facilitation is the maintenance of a pool of neurons in a state of partial or subthreshold excitation needing less additional stimulation to discharge impulse
- Heightened nervous system arousal can cause non-harmful stimuli to be perceived as a threat
- Acute on chronic facilitation can cause chronic problems to flare

Finding Facilitation

Levels of Facilitation

- HEENT
  - T1-4; CNs III, VII, IX
- Heart
  - T1-5; CN X
- Lungs
  - T2-7; CN X
- Foregut
  - T5-9; CN X
- Midgut
  - T10-11; CN X
- Hindgut
  - T12-L2; S2-S4
- Adrenals
  - T10
- Kidneys
  - T10-11 ; CN X
- Bladder
  - T11-L2; S2-S4
- Gonads
  - T10-11; CN X
- Uterus & cervix
  - T10-L2
- Prostate
  - T12-L2
- Upper Extremity
  - T2-T8
- Lower Extremity
  - T11-L2

Gently drag fingers along the paravertebral area looking for TART

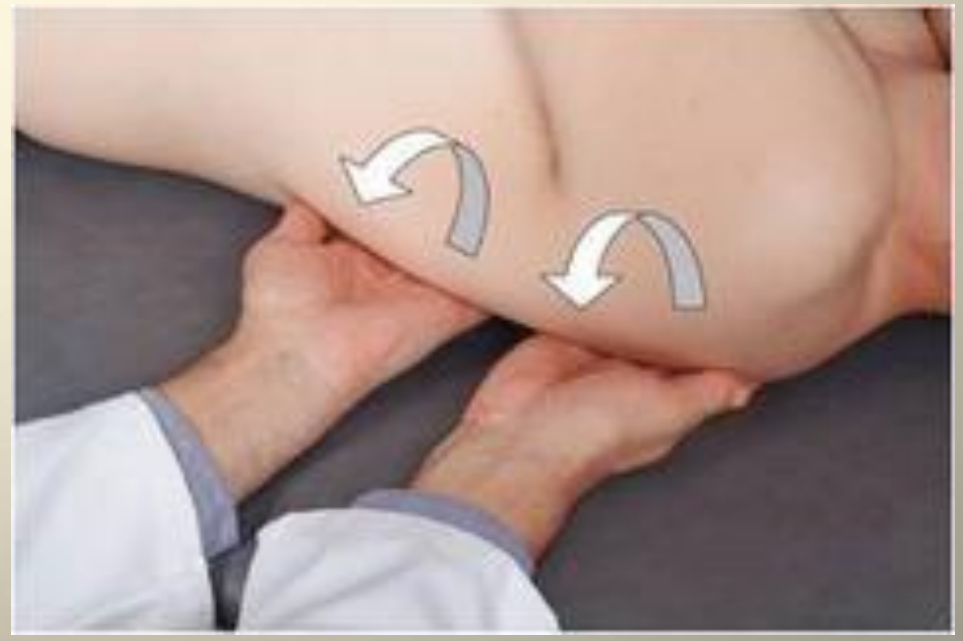
Acute facilitation:

boggy, warm,moist

Chronic facilitation:

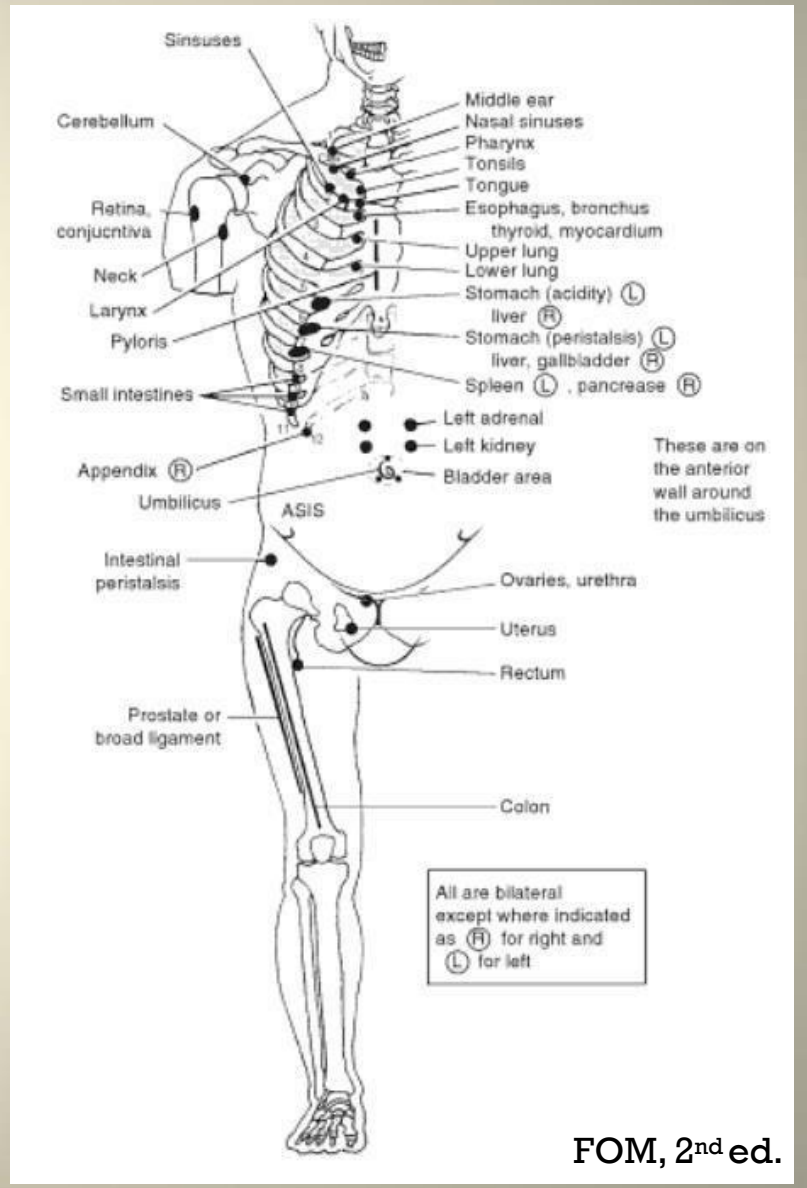
condensed, cool,dry

Treat with MFR or rib raising



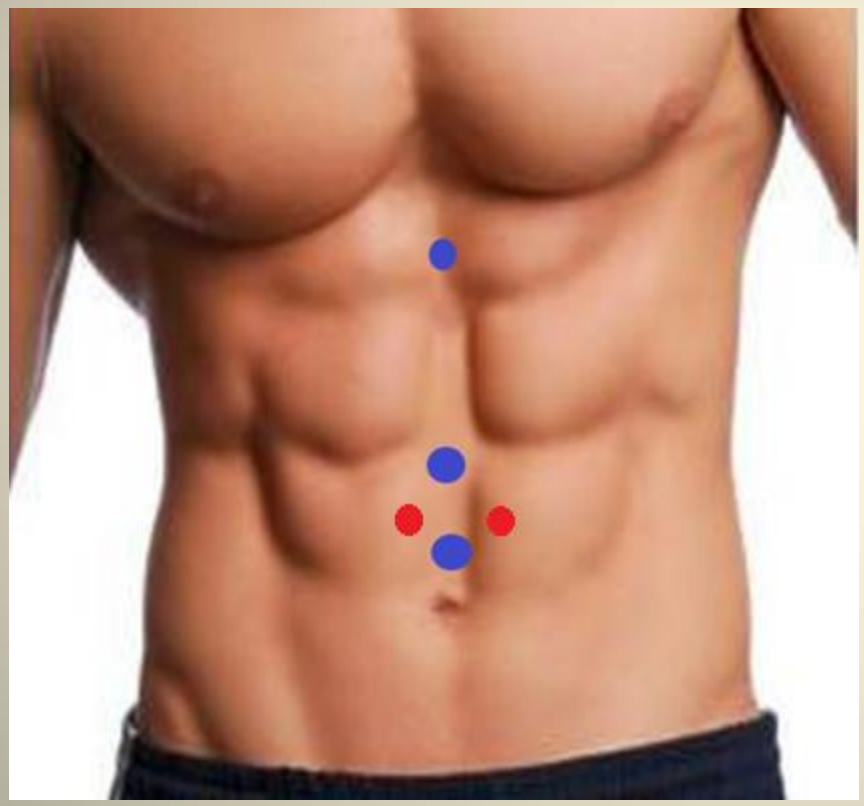
Chapman's Reflexes

- Visceral, afferent-induced reflexes that can be specifically mapped out
- Anterior & posterior points
- Gangliform contractions
  - Deep to the skin & subcutaneous alveolar tissue
  - On the deep fascia or periostium
  - 2-3mm smooth, firm cyst-like structure
  - Can be grouped in to patches
- Tender to palpation
- Most often treated with gentle rotary MFR



FOM, 2nd ed.

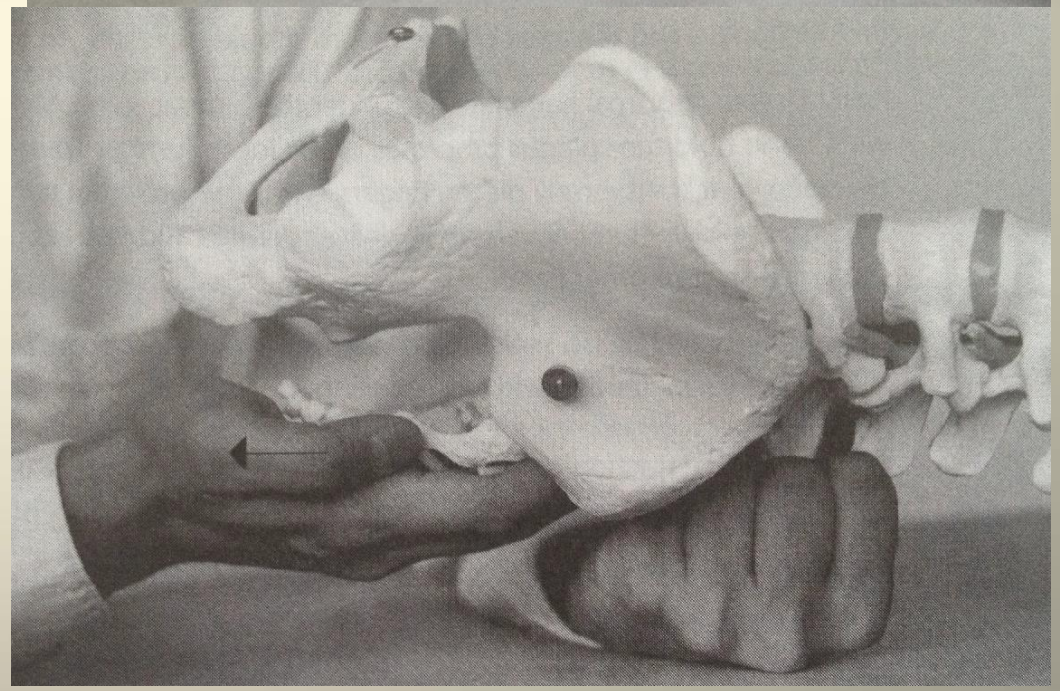
Collateral Sympathetic Ganglia & Adrenal Points



- Ganglia points:
  - Contraction overlying the linea alba
  - Celiac ganglion
    - Foregut
    - Spinal level= T5-T9
  - Superior Mesenteric Ganglion
    - Midgut
    - Spinal level= T10-T11
  - Inferior Mesenteric Ganglion
    - Hindgut
    - Spinal level= T12-L2
- Adrenal points:
  - Lateral to linea alba & 2-2.5 inches above umbilicus
  - Spinal level= T 10

Parasympathetics

- Cranial:
  - Vagus (CN X) exits the skull at the jugular foramen between the occiput & temporal
  - Eliminate restrictions at the occipital-mastoid sutures & OA
  - Suboccipital release
- Sacral:
  - Eliminate sacral restrictions
  - Lumbosacral decompression
- Treat the sympathetics before the parasympathetics



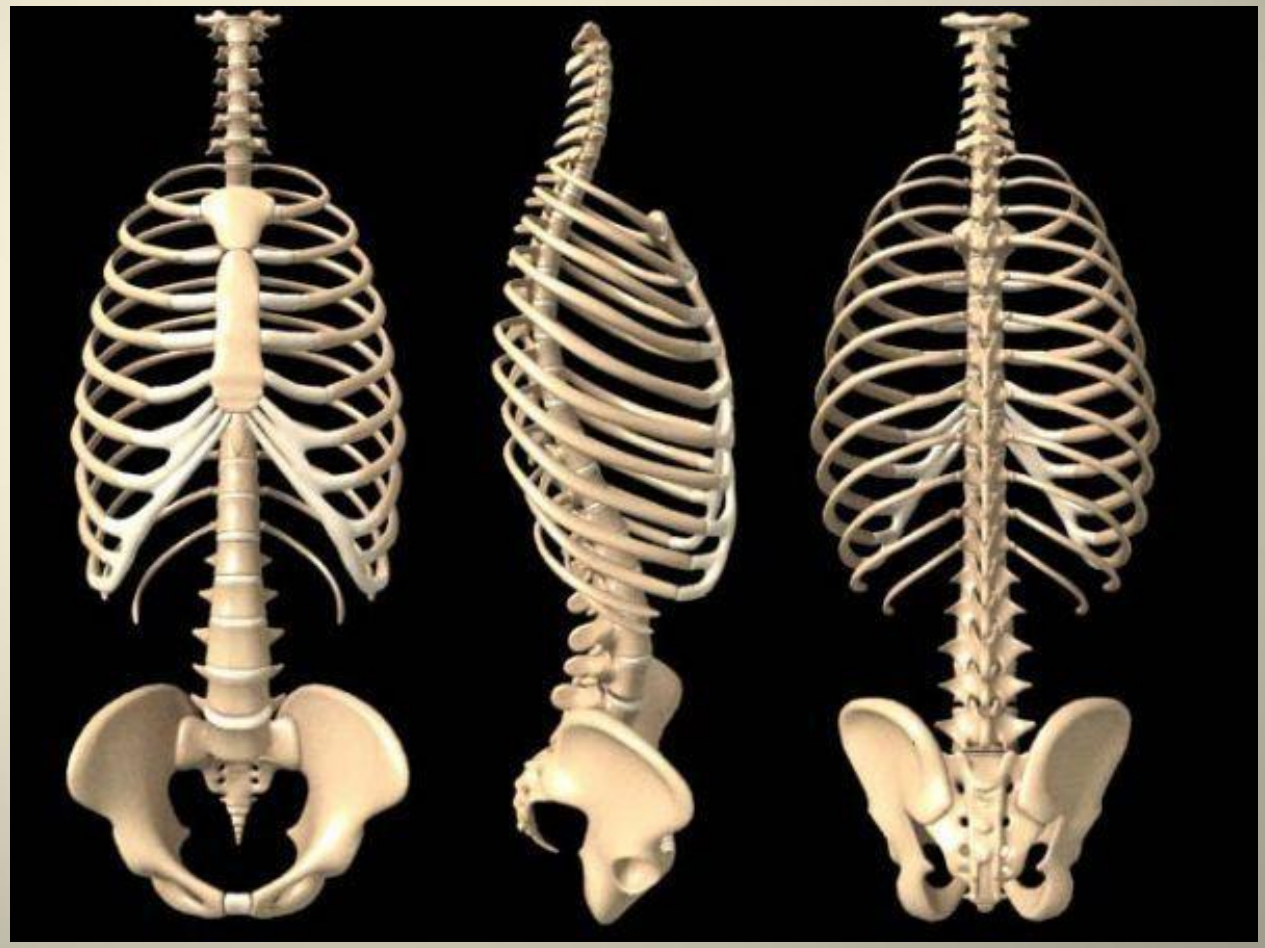
Cranial Osteopathy- A PracticalTextbook

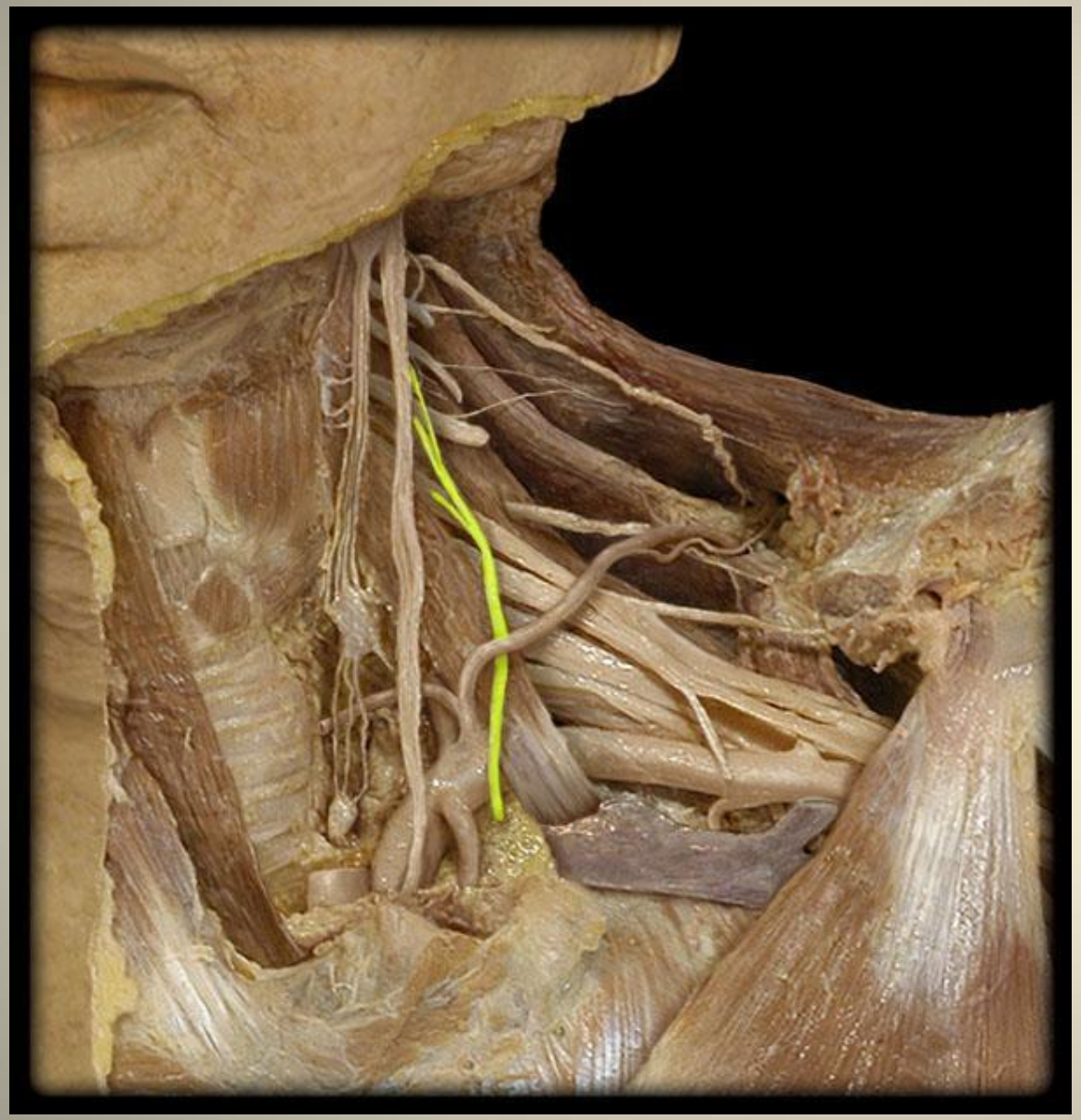
The Importance of Optimizing Breathing Mechanics

- Acquisition of Oxygen
- Release of CO2
- Discourage atelectasis & pulmonary infections
- Alternating intrathoracic pressures assist venous return & lymphatic flow
- Sympathetic chain ganglia "massage"
- Important structures either pass through or reside within the thorax

Optimize Breathing Mechanics

- Bones
  - Ribcage
    - 1-5:Pump handle
    - 6-10:Bucket handle
    - 11-12: Pincer
  - Thoracics
  - Junctional Zones
    - OA
    - CT
    - TL
    - Sacrum





Optimize Breathing Mechanics

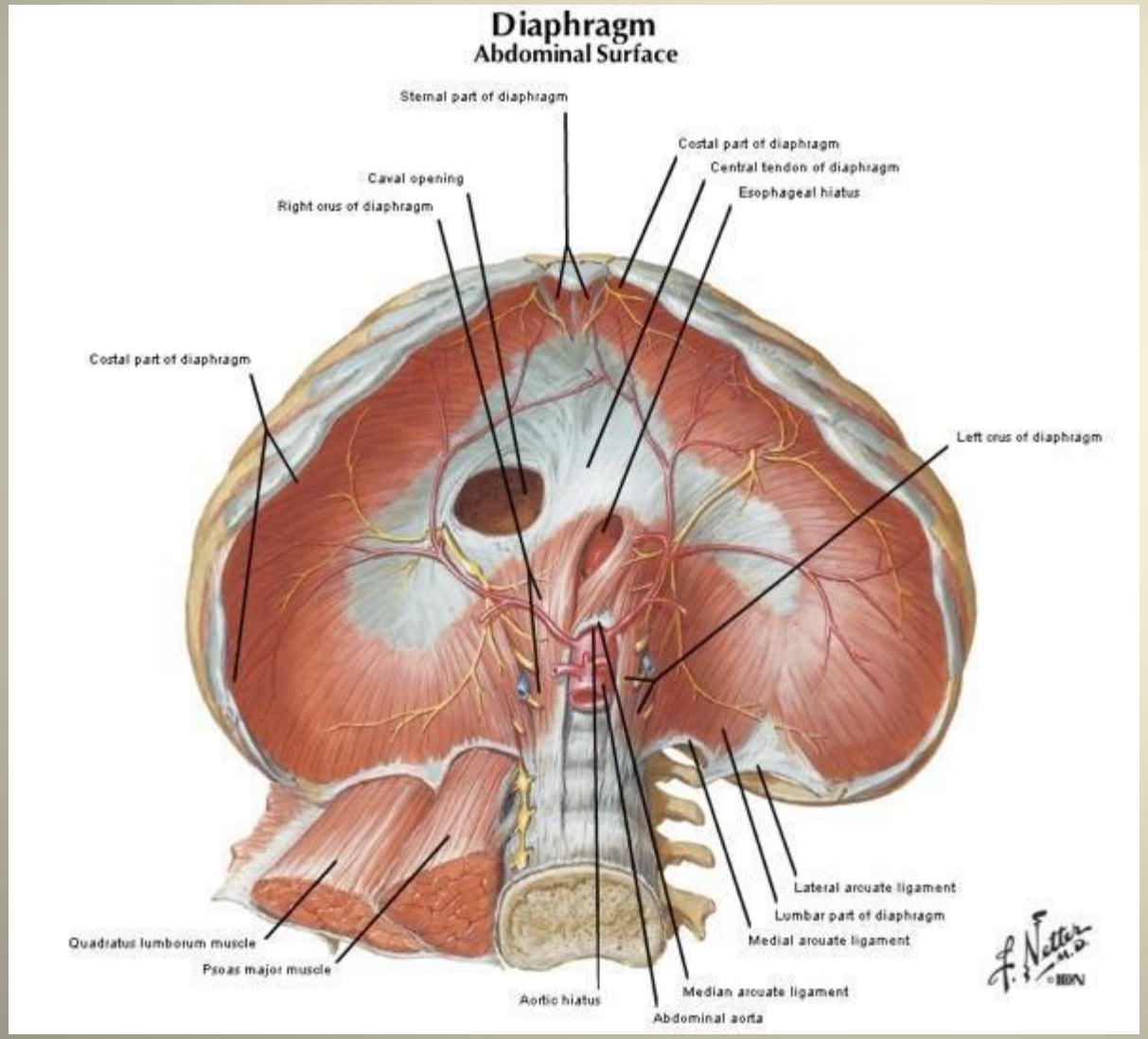
Nerves

- Phrenic
  - C3-5
- Autonomics
  - T2-7; CN X

Muscles

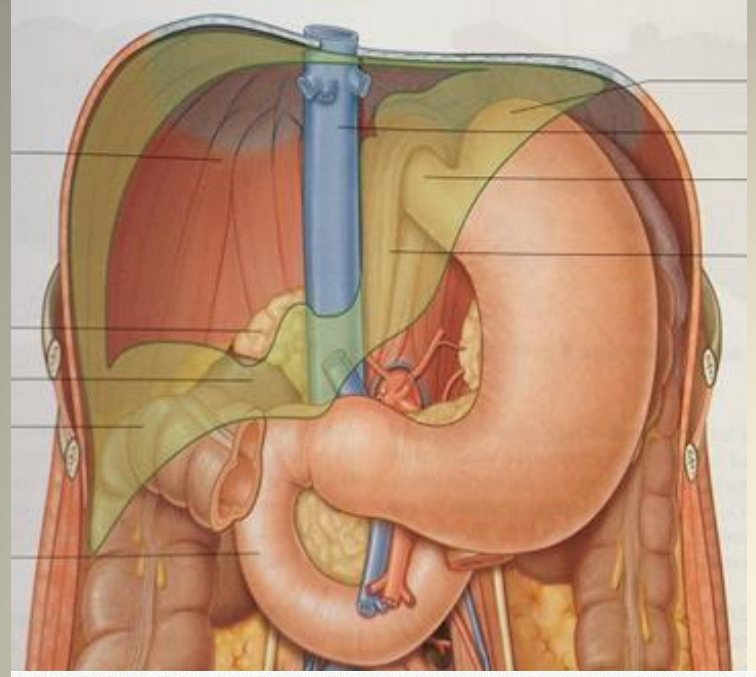
- Scalenes & Levator Scapula
- MFR, BLT,or Muscle Energy

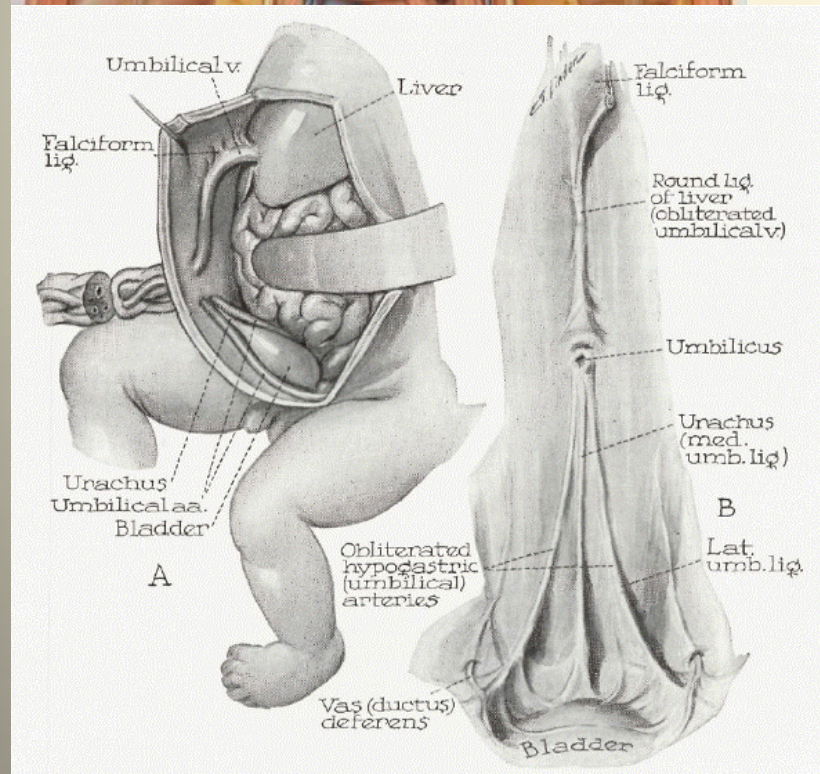
Inferior Thoracic Outlet- Diaphragm



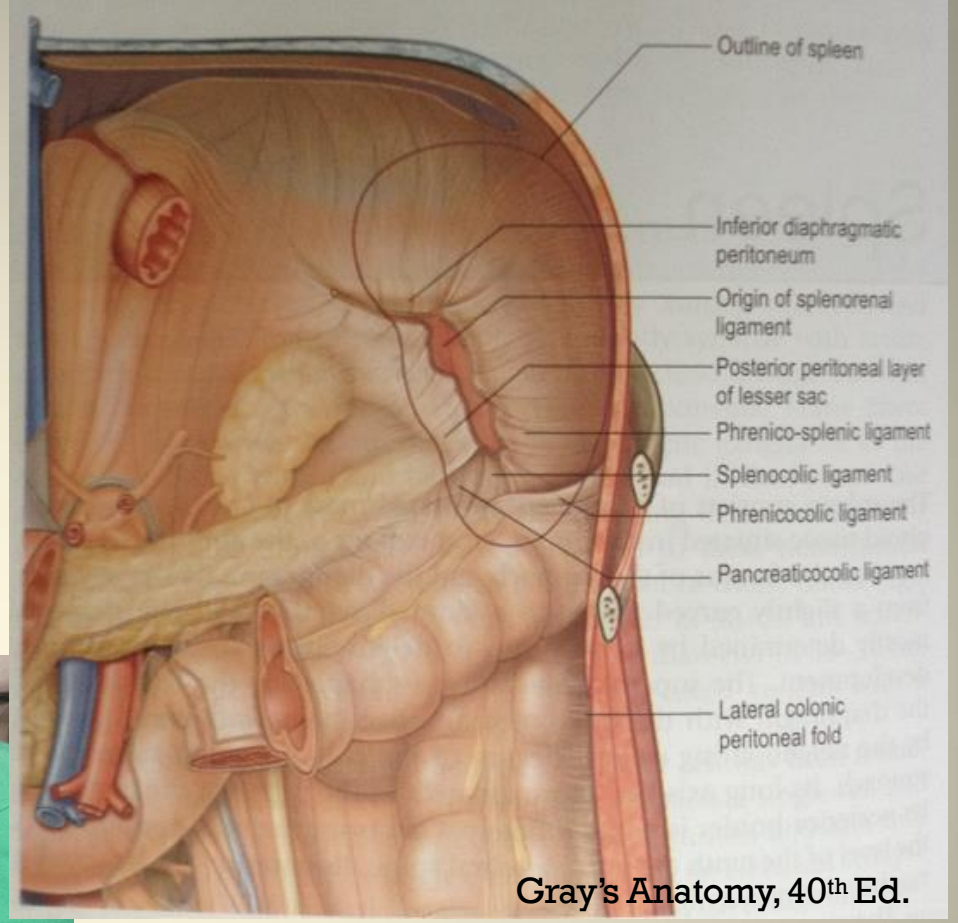
- Attachements:
  - Xiphoid process
  - Costal arch= Ribs 7-12
  - Transverse process of L1
  - Anterior bodies of:
    - Left= L1-L2/3
    - Right= L1-L3/4
- Treatment:
  - Doming the diaphragm

BLT of Right Hypochondrium



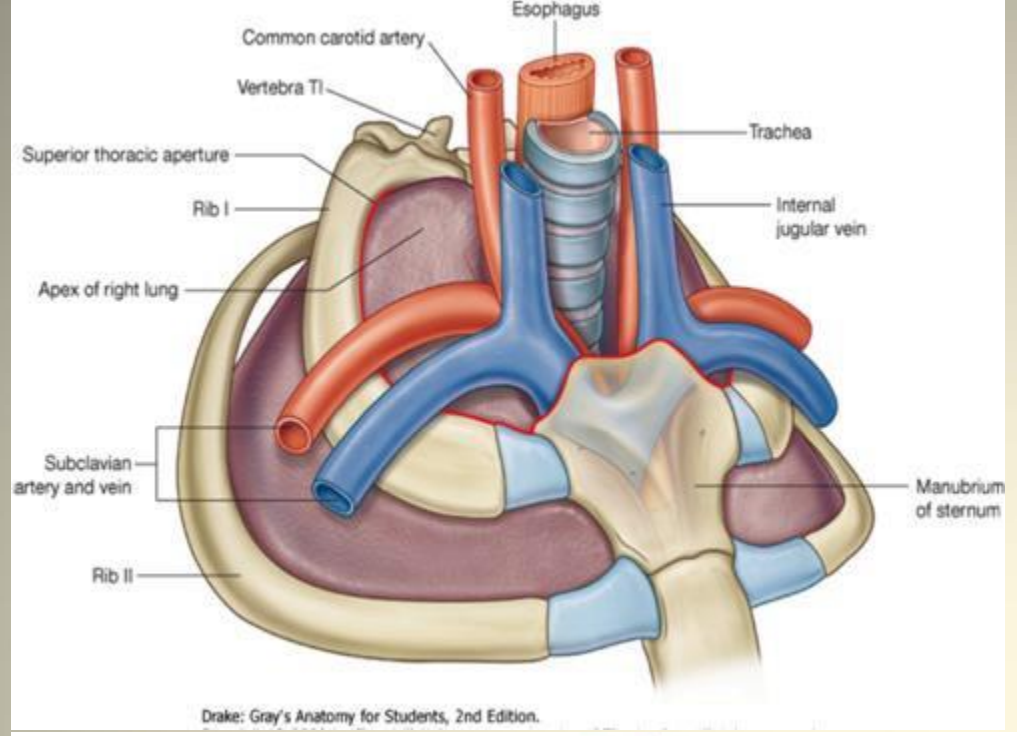


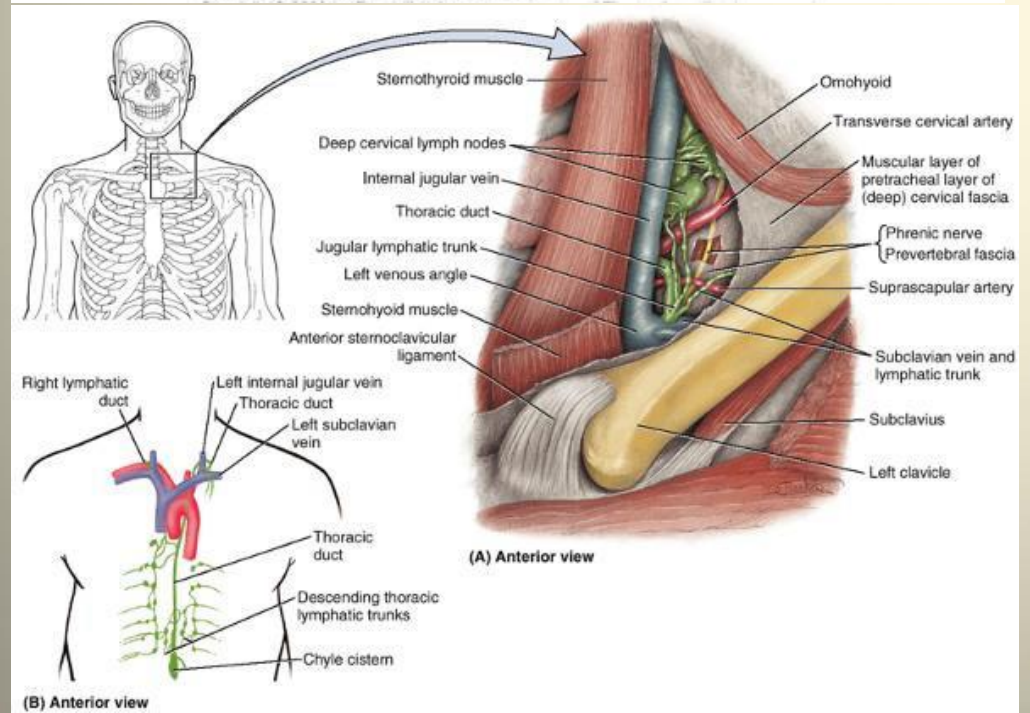
BLT of Left Hypochondrium



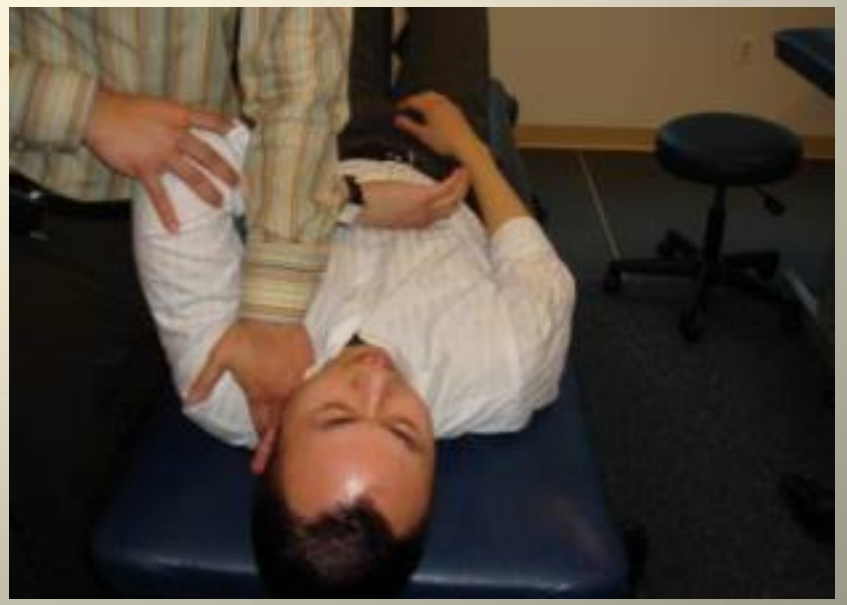
Gray's Anatomy, 40th Ed.

Thoracic Inlet

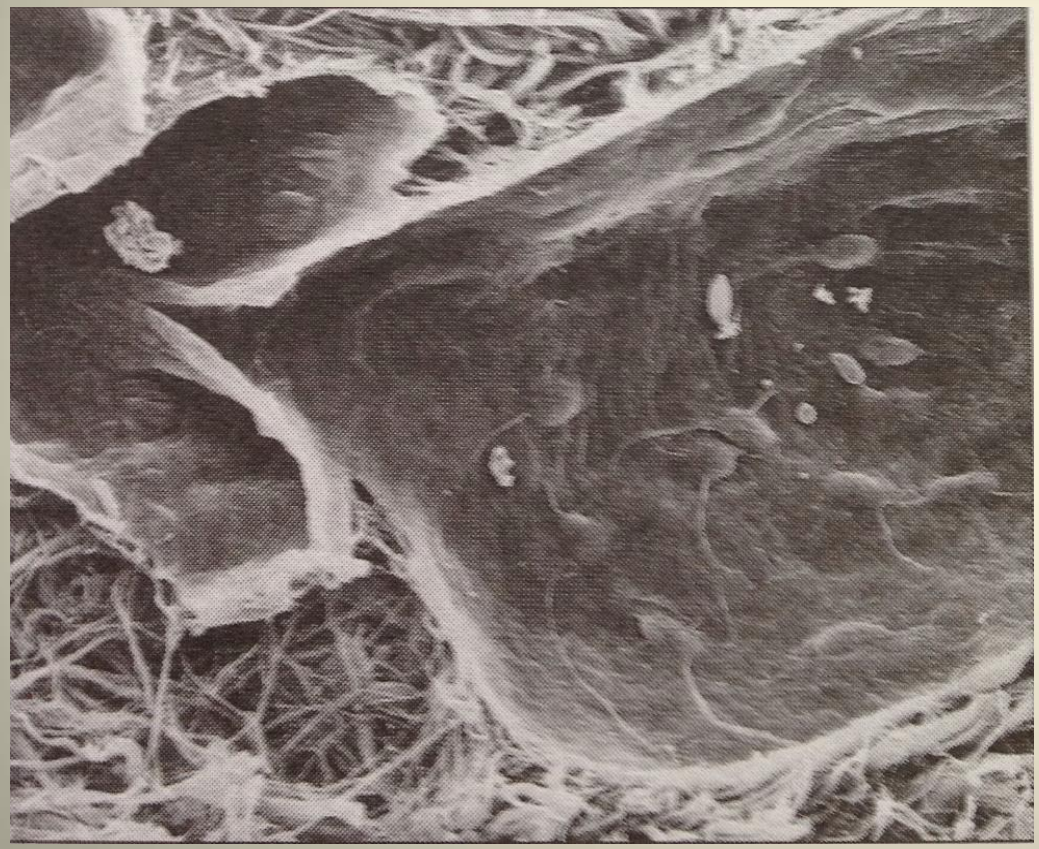




- Bones
  - T1
  - 1st ribs
  - manubrium
- Angulus Venosus
- Treatment
  - BLT using the UE



Lymphatics



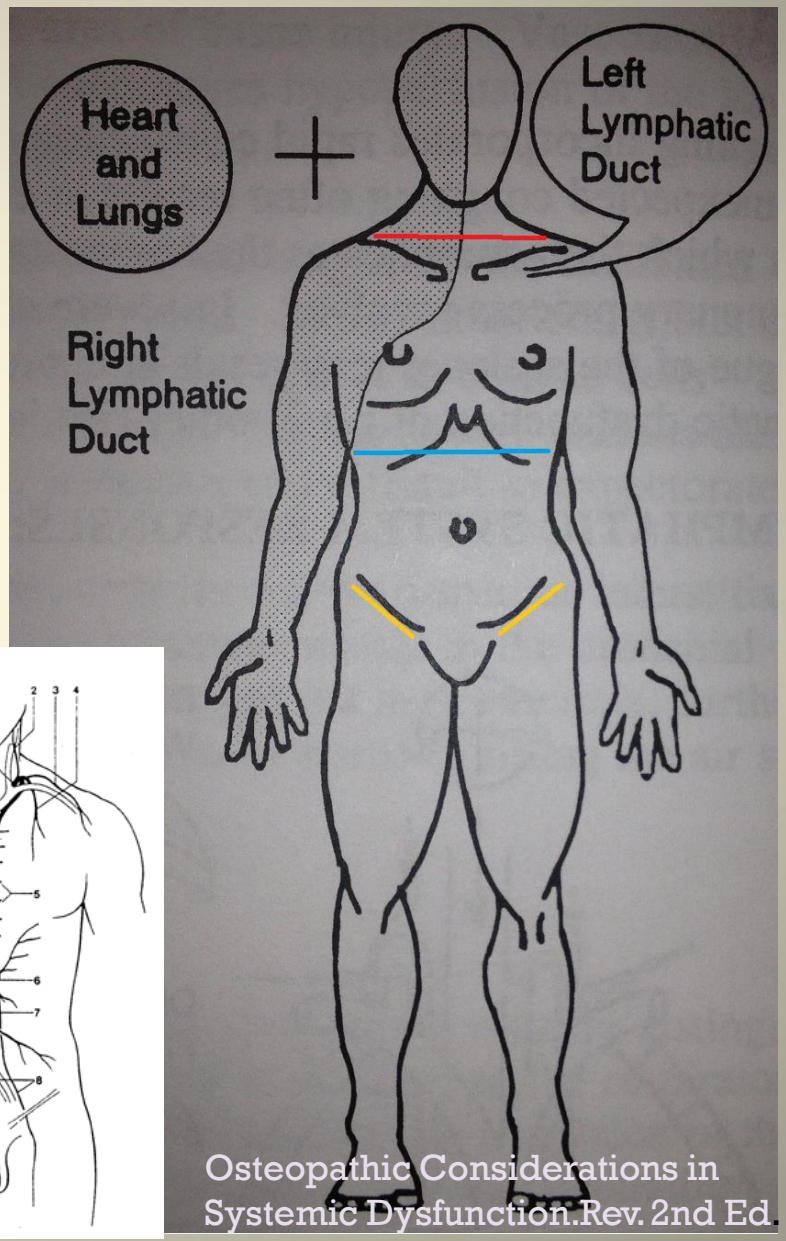
Silent Waves- Theory and Practice of Lymphatic Drainage Therapy. Second Ed.

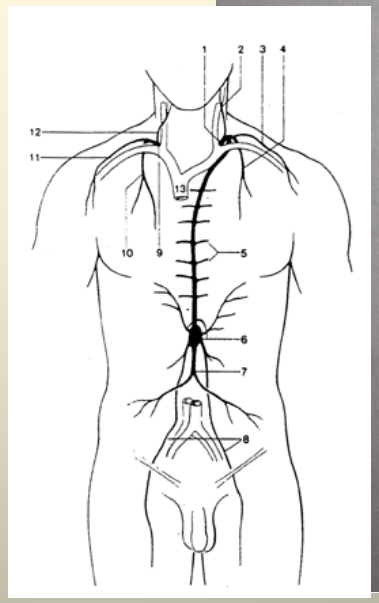
Lymphokinetics

- Pressure Gradients
- Active Pumps
  - Heart
  - Lymphangions
    - 2-3 layers of spiral muscles
    - Contract at a rate of 5-8/min at rest
- Passive Pumps
  - Respiration
    - Negative intrathoracic pressure during inspiration
  - Skeletal muscle contractions affect the deep circulation, but not the superficial lymph just below the dermis
  - Active or passive limb motion
  - Peristaltic contractions of smooth muscles (viscera & adjacent arteries)
  - External compression

Lymphatic Drainage

- Thoracic Inlet
  - Thoracic/Lymphatic Duct
- Diaphragm
  - Thoracic duct lies by the right crus & passes through the aortic hiatus
  - Peritoneal lymph can travel through the diaphragm itself
- Femoral Triangle

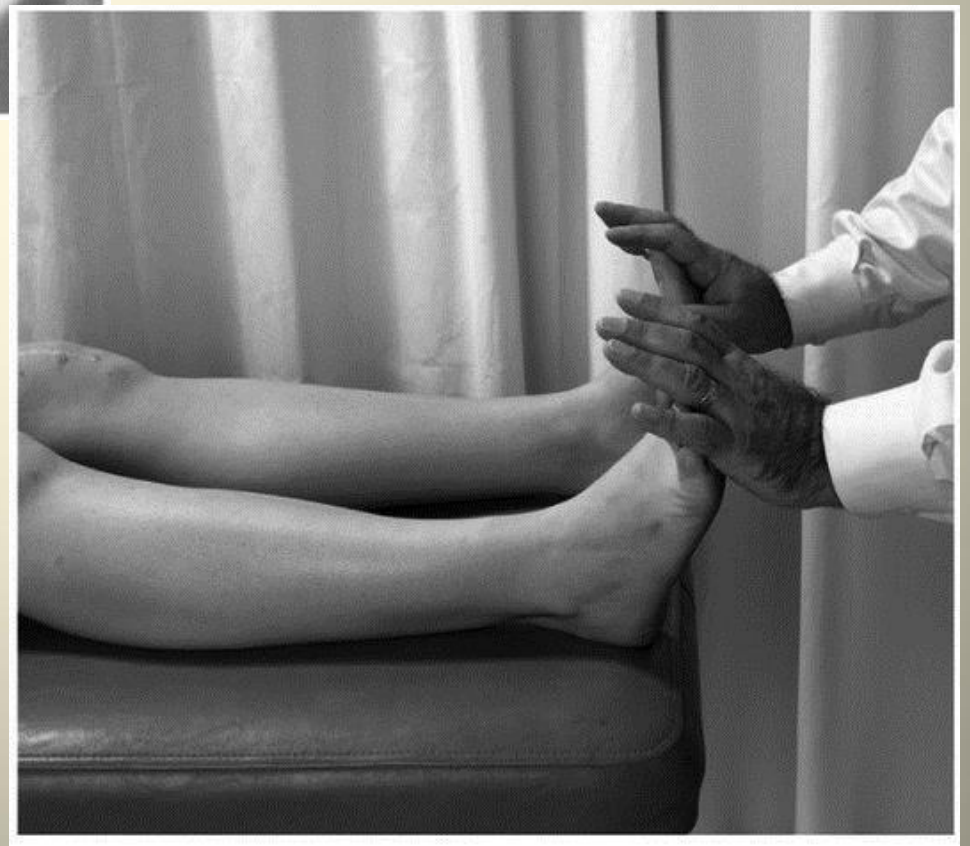




Traditional Lymphatic Techniques

- Thoracic Pump
- Pedal pump
  - Aka

    Dalrymple Maneuver



Adjunct Treatment

Keep vascular-lymphatic circulation moving

- –Encourage ambulation
- –Ankle pumps
- –Elbow pumps
- –Breathing devices: incentive spirometry & flutter valves
- –Lower extremity compression devices

Supplementation

- –Magnesium
- –Vit. C & zinc
- –Vit. D
- –Probiotics

Aggressive Magnesium Sliding Scale

Normal magnesium blood level (at our lab)= 1.6-2.8 Only 1% of total body magnesium is in the plasma Essential for proper nerve & muscle functioning

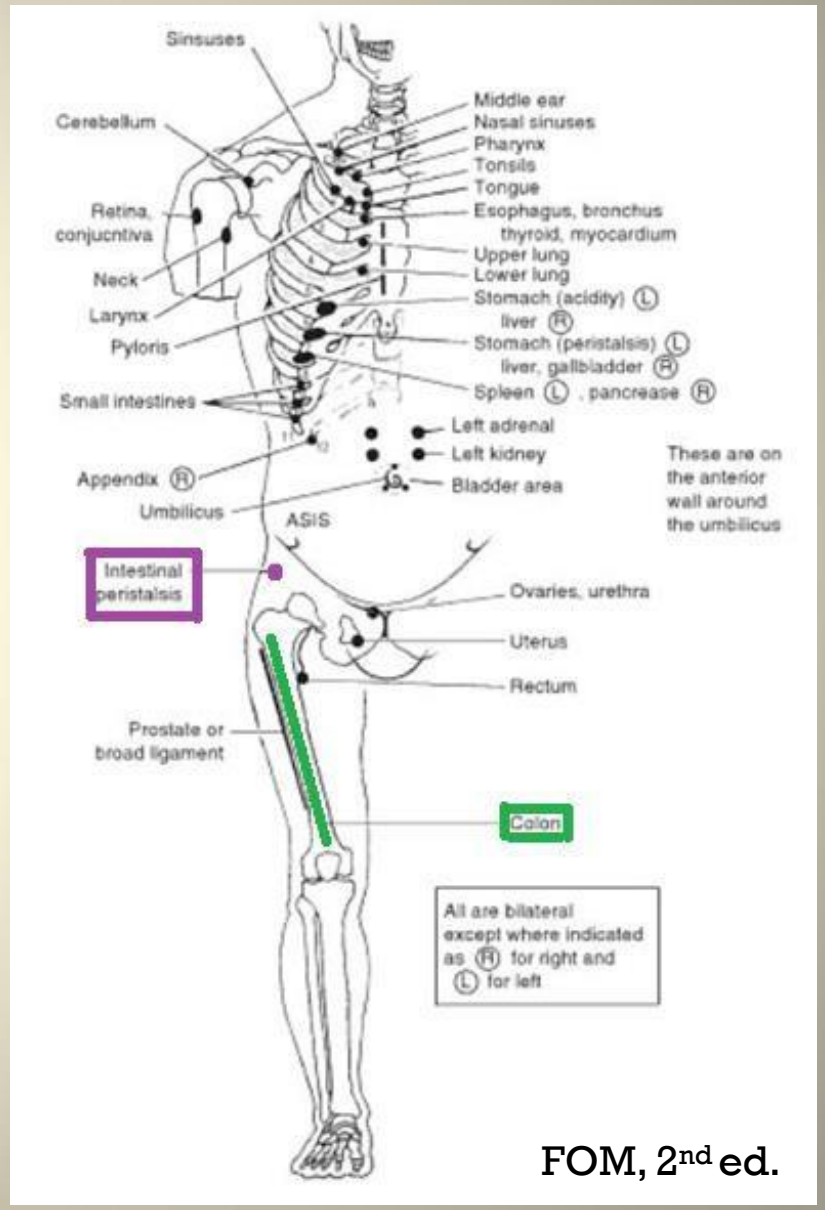
Magnesium plasma level (mg/dL)	Magnesium sulfate / normal saline
</= 1.5	8 grams/500 mL
1.6-1.7	6 grams/250 mL
1.8-1.9	4 grams/250 mL
2.0-2.1	3 grams/150 mL
2.2-2.3	2 grams/100 mL
2.4-2.5	1 gram/50 mL

•Give IV at rate of 1 gram/hour

Do NOT use this scale in pregnant patients, children, or those withrenal insufficiency

Constipation

- Can be contributing factor to back pain
- Many hospital patients are on narcotics
- May see evidence of it on imaging
- Feel along the length of the colon and find where it is full of stool
- Viscerosomatic reflexes:
  - Facilitation:
    - T12-L3 & S2-4
  - Chapman's points:
    - Colon
    - G.I.peristalsis
    - Superior Mesenteric ganglion
    - Inferior Mesenteric ganglion
- Consider:
  - Lumbosacral decompression
  - MFR at bottleneck
  - Mesenteric release



Mesenteric Release

- Intestines are gently moved at right angles to the attachment of its mesentery
- Use ulnar aspect of hands
- Direct techniques:
  - Direct MFR with respiratory assist
  - Direct MFR with recoil

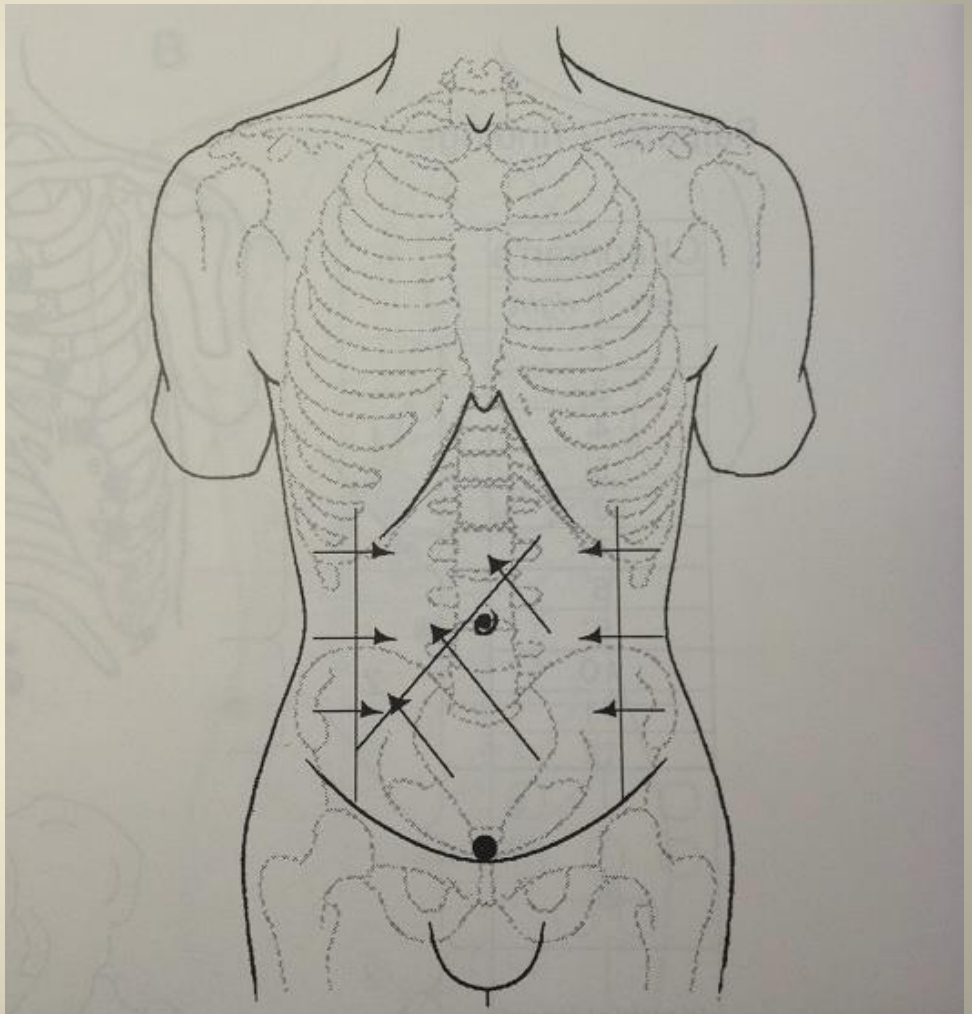


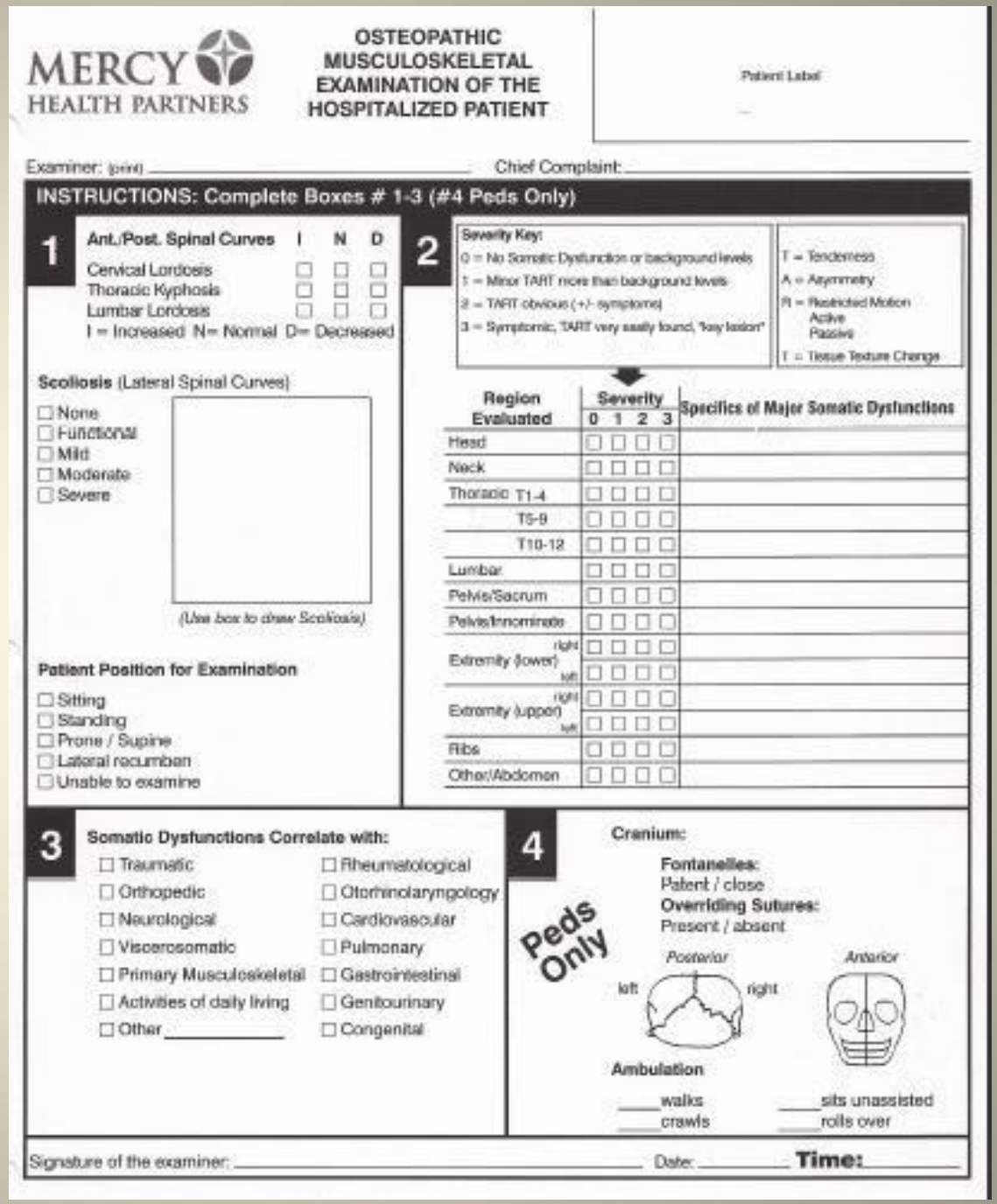
FIGURE 51.14. Direction of hand movement for treatment of abdominal mesenteries.

Cautions

- HVLA & ME in sick patients
- Direct MFR near recent incisions
- Manipulation in area of known or suspected thrombus
- Cranial manipulation in a patient with stroke or head trauma
- Cancer (theoretical)
- Workplace ergonomics: Don't hurt yourself
  - Adjust the bed
    - Vertical & horizontal
    - Bed rails & headboard
  - Reposition the patient
- Pay attention to what is under your hands
  - Lines
  - Tubes
  - Wounds
  - Anatomical parts

* This is not an inclusive list

Osteopathic Musculoskeletal Examination of the Hospitalized Patient



MERCY HEALTH PARTNERS

OSTEOPATHIC MUSCULOSKELETAL EXAMINATION OF THE HOSPITALIZED PATIENT

Patient Label

Examiner: (print) _____ Chief Complaint: _____

INSTRUCTIONS: Complete Boxes # 1-3 (#4 Peds Only)

1

Ant./Post. Spinal Curves	I	N	D
Cervical Lordosis	☐	☐	☐
Thoracic Kyphosis	☐	☐	☐
Lumbar Lordosis	☐	☐	☐

I = Increased N= Normal D= Decreased

Scoliosis (Lateral Spinal Curves)

- ☐ None
- ☐ Functional
- ☐ Mild
- ☐ Moderate
- ☐ Severe

(Use box to draw Scoliosis)

Patient Position for Examination

- ☐ Sitting
- ☐ Standing
- ☐ Prone / Supine
- ☐ Lateral recumben
- ☐ Unable to examine

2

Severity Key:
0 = No Somatic Dysfunction or background levels
1 = Minor TART more than background levels
2 = TART obvious (+/- symptoms)
3 = Symptomic, TART very easily found, "key lesion"

T = Tenderness
A = Asymmetry
R = Restricted Motion
Active
Passive
T = Tissue Texture Change

Region Evaluated	Severity 0	1	2	3	Specifics of Major Somatic Dysfunctions
Head	☐	☐	☐	☐	
Neck	☐	☐	☐	☐	
Thoracic T1-4	☐	☐	☐	☐	
T5-9	☐	☐	☐	☐	
T10-12	☐	☐	☐	☐	
Lumbar	☐	☐	☐	☐	
Pelvis/Sacrum	☐	☐	☐	☐	
Pelvis/Innominate	☐	☐	☐	☐	
Extremity (lower) right	☐	☐	☐	☐	
Extremity (lower) left	☐	☐	☐	☐	
Extremity (upper) right	☐	☐	☐	☐	
Extremity (upper) left	☐	☐	☐	☐	
Ribs	☐	☐	☐	☐	
Other/Abdomen	☐	☐	☐	☐	

3

Somatic Dysfunctions Correlate with:

- ☐ Traumatic
- ☐ Orthopedic
- ☐ Neurological
- ☐ Viscerosomatic
- ☐ Primary Musculoskeletal
- ☐ Activities of daily living
- ☐ Other _____
- ☐ Rheumatological
- ☐ Otorhinolaryngology
- ☐ Cardiovascular
- ☐ Pulmonary
- ☐ Gastrointestinal
- ☐ Genitourinary
- ☐ Congenital

4

Peds Only

Cranium:

Fontanelles:
Patent / close
Overriding Sutures:
Present / absent

Posterior *Anterior*

left right

Ambulation

____walks ____sits unassisted
____crawls ____rolls over

Signature of the examiner: _____ Date: _____ **Time:** _____

OMT is a Procedure

- Informed consent required
  - Does not need to be written consent
- Procedure note required
  - What was done and were there any complications
- Example Note:
  - OMT discussed with patient & verbal consent obtained prior to treatment. All questions addressed. Gentle osteopathic manipulation applied in the following manner: For X region(s), Y OMT type(s) were performed. OMT tolerated without complication.

ICD-9 Codes- Diagnosis

- ICD-9 Codes Body Regions
  - 739.0 Head region
  - 739.1 Cervical region
  - 739.2 Thoracic region
  - 739.3 Lumbar region
  - 739.4 Sacral region
  - 739.5 Pelvic region
  - 739.6 Lower extremities
  - 739.7 Upper extremities
  - 739.8 Rib cage
  - 739.9 Abdomen and other sites

CPT Codes- Evaluation & Management

- Code encounter & procedure separately based on their own merit
- CPT Codes for OMT
  - 98925: OMT; one to two body regions involved
  - 98926: OMT; three to four body regions involved
  - 98927: OMT; five to six body regions involved
  - 98928: OMT; seven to eight body regions involved
  - 98929: OMT; nine to ten body regions involved
- 25 modifier to bill for a procedure on the same day as an evaluation

Appropriate Hospital NMM/OMM Consult

- Who can be consulted?
  - Any licensed physician comfortable with OMM & OMT
- What is the consult for?
  - Specific problem or evaluate and treat
  - Any medical condition- not just pain!!
  - Chronic pain ***may*** be an appropriate reason for consultation
- If you are a D.O. consulting another physician for OMM/OMT:
  - What somatic dysfunction did you find?
  - What OMT was attempted?

References

- Chila, Anthony G., et. al. *Foundations For Osteopathic Medicine, 3rd Ed.* Baltimore: Lippincott Williams & Wilkins. 2011.
- Ward, R. C., et. al. *Foundations For Osteopathic Medicine, 2nd Ed.* Baltimore: Lippincott Williams & Wilkins. 2003.
- Baltazar, G.A. et. al. "Effect of osteopathic manipulative treatment on incidence of postoperative ileus and hospital length of stay in general surgical patients." J Am Osteopath Assoc. 2013 Mar;113(3):204-9.
- Degenhardt, Brian. "OMT and The Treatment of Pneumonia." PowerPoint Presentation. AOA 2011 Scientific Conference
- Multicenter Osteopathic Pneumonia Study in the Elderly (MOPSE)
- Walden, Steven D. *Atlas of Interventional Pain Management. Third Ed.* Philidelphia: Saunders Elsevier, 2009.
- Rhoades, Rodney A. & Bell, David R. Medical Physiology: Principles for Clinical Medicine. Baltimore: Lippincott Williams & Wilkins. 2013.
- Marchand, P. *THE ANATOMY AND APPLIED ANATOMY OF THE MEDIASTINAL FASCIA*. Thorax 1951; 6: 359-368
- http://www.caromonthealth.org/wp-content/uploads/2011/03/Microsoft-Word-DVT-PE-Prophylaxis-Pre-Op-Orders_PO0020_1377_1378.pdf
- Owen, Charles. An Endocrine Interpretation of Chapman's Reflexes, 2nd Ed. Indianapolis: American Academy of Osteopathy, 2002
- Liem, T. Cranial Osteopathy- A Practical Textbook. Seattle: Eastland Press. 2009

References Cont…

- Chikly, Bruno. *SilentWaves- Theory and Practice of Lymphatic Drainage Therapy.Second Ed.* Scottsdale; I.H.H. Publishing, 2004
- Savarese, R. G., et. al. OMT Review- A Comprehensive Review In Osteopathic Medicine. Third Ed.2003
- Jorgensen, D. J. OMT Strategies To Boost Your Bottom Line. ACOFP.org
- Kuchera, M. L. & W.A. Osteopathic Considerations in Systemic Dysfunction. Revised Second Ed. Columbus: Greyden Press, 1994
- Netter, F.H. Atlas of Human Anatomy, 4th Ed. Philidelphia; Saunders Elsevier, 2006
- Parungo, C. P. *Lymphatic Drainage of the Peritoneal Space: A Pattern Dependent on Bowel Lymphatics* Ann Surg Oncol. Feb 2007; 14(2):286–298.
- Gray's Anatomy, 40th ed.
- Shore, A. C. *Capillaroscopy and the measurement of capillary pressure* Br J Clin Pharmacol. Dec 2000; 50(6): 501–513.
- Dakwar, E., et. al. *The anatomical relationship of the diaphragm to the thoracolumbar junction during the minimally invasive lateral extracoelomic (retropleural/retroperitoneal) approach*. J Neurosurg Spine. 2012 Apr; 16(4):359-64
- http://clinicalcenter.nih.gov/ccmd/cctrcs/pdf_docs/Bronchial%20Hygiene/02-Incentive%20Spirometry.pdf
- http://www.henleysmed.com/sites/default/files/acapella_protocol.pdf

Parting Thoughts

- “No man ever steps in the same river twice, for it's not the same river and he's not the same man.” - Heraclitus
- **“It is good to have an end to journey toward; but it is the journey that matters, in the end.” – Ernest Hemingway**

Feel free to contact me at:
chloe13413@aol.com