Everyday Manual Medicine for Every DO
Back to Basics … Plus

Many of us don’t know where to fit it into our day or have lost the original fire & interest – potentially rekindle.

Take Home Points: “Meat & Potatoes” Regional Mobilization of Thoracic, Cervical and Lumbar Spine. Take a step back from all the complexity and detail that lost, disenfranchised or frustrated so many of us

Intended Format for Today is an over-simplification (to build on)
* The Basics and Adjunctive - simplify.
* History and Exam
* History and Exam Red Flags

Few slides for each Thoracic, Cervical and Lumbar/SIJ/Pelvis – in that order
* We can Pair up Just like in Med School – I can float
* Repeat for Cervical and Lumbar 3-5 min active breaks

We do not really have time allocated for Peripheral Joint, Pelvis, Lymphatic, Visceral or Cranial – but .... I will be here and have nothing more to do today and will be around go over anything requested.
Dr. Michael F. Stretanski  “Dr. Mike”, DO, CTR, AME, CDCA
Full Professor of Physical Medicine & Rehabilitation /Pain Management
Certified Chemical Dependency Counselor
Diplomate - American Board of Physical Medicine & Rehabilitation
Diplomate - American Board of Neuroelectrodiagnostic Medicine
Diplomate - American Board of Pain Medicine
Diplomate - American Board of Disability Evaluating Physicians
Diplomate - American Board of Anti-Aging & Regenerative Medicine
Diplomate Fellow –Interventional Pain Practice (International)
Senior Aviation Medical & ATC examiner, HIMS – Independent MS
FAA safety Agent , Actively teaching CFI and CFII, EMT Fire & Rescue (ret)
“Suboxone” MAT certification Level III
PM&R has Much in common with a neurologists, orthopedics, psychiatrists

Very much an academic/author but not here today as an academic or researcher, but in the most basic terms to show what I use and what works every day in a Spine-Dominant Musculoskeletal Spine & Pain Addiction Center – henceforth, my perspective today may be frowned on in strict academic circles. Always wanted to be a DO – left Ivy League PhD Program when accepted to PCOM. MOC project - 87% of my outpatient patients got some form of OMT, 75% inpatient (that % jumps to 95% if considering lymphatic tech – potentially considered PT/OT/Respiratory Therapy)

“Rehab Doc from Ohio with a puppy in the office”
Demystifying Pearls after teaching OMT

- Asymmetric human anatomy is the norm not the exception – We are all hand, eye and foot dominant. Don’t misinterpret that and try to force symmetry
- Restriction does not mean malalignment nor vice versa – scoliosis is the norm
- Imaging still has limited, if any, utility in OMT - other than contraindication (critical stenosis, instability)
- All OMT is best done within the context of other MSK care – TP’s, PT/OT, passive modalities heat, Ultrasound, HEP, lidocaine>Marcaine for Motor B
- Precision diagnosis is not a mandatory requirement in initial regional treatment.
- It’s ok to ask “Does it just feel like it just needs to ‘pop’?”
- Your hands are telling you things whether you are deliberately palpating or not- don’t ignore
- All Osteopathic Dysfunctions are Bilateral/Comp (anterior/posterior innom)
- CHF/Asthma/Lymphatics/ICU – underused
- Spine? We are dealing with predominantly Facets
- All OMT is an interaction between physician/patient and environment – like teaching IV starts – what I DON’T say when teaching a first time IV start
- Not every Dr can do every technique on every patient. Height, Weight, Table, staff (4 hand tech) this is OK – I don’t do TKA … “but I know I guy that does”
- Manual med techniques are like music genres - exist along a spectrum
- (Thrust- lig artic, ME , Counterstain/Cranial)
- There is no DO-Patient interaction where there is zero potential for manual medicine to have some sort if positive impact
- OMT can be exhausting - Mind your own fatigue and your own health. Gain mechanical advantage – stool(s) – reschedule, PLAN, PRN –
- Keep your own core strong
- Protect your hands/wrists/shoulders – paraffin, superglue, epicondylar bands
- Bio freeze, Therapeutic Ultrasound as part of myofascial technique – empty glass local anesthetic bottle
Preliminary Evaluation / History and Exam

• Your Exam before OMT
• My Simple Demo – Timed (63 s)
• ASIA points -standardization
• Upper motor Neuron Findings
  • Upper Extremities
  • Lower Extremities
• New Onset? Progressive?
• Advanced Imaging and/or Referral

• ACDF or Posterior C, T or L scars
• Newer SIJ Fusions techniques
• MYOPATHY
• Autoimmune work-up
• Focal weakness, Painless Weakness -
• Loss of Bowel and/or Bladder
• MS/Chiari symptoms
• Often Misunderstood Role of EMG/NCS
• Yes, You can bill. 14$-35$ in addition to the EMR codes, plus trigger point 40-60$ and J-codes on injectable (at cost or less)
• This is potentially 54 to 95$ per visit, in addition to current E&M billing -

GEMSTONE: Severe peripheral neuropathy – regardless of etiology, will NOT manifest upper motor neuron findings due to absent afferent loop! MSR’s will NOT detect critical CT stenosis/myelopathy of any etiology if there is afferent block. IDDM/Critical C- stenosis-0/4
Red Flag Exam: LMN – Atrophy, C Myelomalacia (H2O, T2, Water-White, W2)
L Laminectomy with Rods/Screws
S/P Chiari Malformation Decompression
Hoffman’s Sign Video Clip

• Clonus

• Babinski Sign
Brief Words about Implantable Pain Technologies
Spinal Cord Stimulator and Pain Pumps

Anchors –
Sutures –
Anchor Points.
Almost immediately able to take L roll or K ville

If recent implant, Protect like any other surgical wound
SCS placement: Thoracic 8.3, Retrograde, C spine (Sweet Spot)
OMT is generally safe and reasonable in any appropriately implanted SCS, Interstim or Pain Pump after 6-12 weeks post-op period, but there may be a higher risk of lead migration in high C-Spine placement. It goes without saying that the practitioner should take the underlying pathology that was the reason for the implantable technology into consideration when choosing and executing their chosen techniques and modalities.
Spine-Based OMT requires us to discuss facet joints

- Facet Joint Internal Anatomy is often oversimplified.
- True Synovial Joint, with menisci, synovial fluid, cartilage and end-plates
- Competing theories on articulatory benefit, central processing at the cord and higher levels
- Sound generation etiology?
- Is it relevant?
- Microtrauma? Synovial Fluid?
Basic Thoracic Mobilization

- Where most medical schools start
- If you had to pick one treatment
- “Kirksville Crunch” – “Crunch Bunch”
- Single Biggest Bang for the Buck
- Gratifying. F.U.E.L. acronym
- 2+ thenar positions, rostral to caudal
- Towel/pillow rolls – underused
- TRACTIONAL technique variation
- Overlaps with “fibromyalgia”
- Corner stretches

- Easiest & Safest but Random/Imprecise
- Potentially dis-elegant
- Often does not get Primary Lesion
- If using Muscle energy - commonly done seated.
- Ribs usually correct with Thoracic correction
- Upright Hug variant – very non P
- Lateral C7-T1 variant – cardiology
- Seldom gets the “Golden C7-T2”
- Prone C7-T1-2 – lip, E is Thoracic
Hydrocollator / Moist Heat / Trigger Point Injection before and/or after OMT

• Bear in mind the soft tissues
• Is it an acute event? Chronic Ischemic? Depo v Lido
• Preparation for HLVA/ME
• What I was told critically in Med School about
  • “Those old-school DO’s putin’ hot packs on em’ then comin’ back and just crunchin’ em’ ”
• Maybe it’s not only not such a bad idea, in fact, maybe it’s a very good Idea.
• Lidocaine greater motor block than Marcaine
• Trigger Point Injections definition vs Motor Point Blocks and their + effect on manual medicine
• Rationale Behind Corner Stretches
Side Note: ongoing challenge to treat CT and T pain and not continue to give people of deposteroids ....

- Average Chronic Myofascial/”fibromyalgia” patient
- Apts: Weekly, Q 2 weeks treatment expected/needed
- Apipuncture / Apitherapy (venom vs. live bees)
- D50
- EAP
- Sarapin
- Bicarb (IA)
- Lidocaine/Marcaine
- Pumice stone extract
- Phenol ...
- Botox
- Twitch Response Technique, 2% lido w/o epi
Go To Video of Lidocaine Motor Point Block during E-Stim
“Hydrocollator” – Pre manipulation and as a Passive Modality
Decreased pain, spasm, & reduced guarding – makes HLVA less traumatic

Dermatographia, relaxes patient – establishes trust
Dogma?
Topical treatments alone of in conjunction with therapeutic ultrasound. 2.2 watts/cm²
Pulse and non-pulse mode

3:1 ratio, (v/v)
Aloe Vera – EMG gel
“Menthol Based Substrate”

Myofascial along PSM’s

Save and protect your hands

Glass local Anesthetic Bottle
50ml
Smooth stone

Time consuming

Safe. Practice Builder – prep for articulatory techniques

+CPT codes for US and Regional OMT
Basic Thoracic Mobilization – “Kirksville Crunch”
More than one thenar position
24 y/o RHD M

Comprehensive care includes
OMT
TP’s
Hydrocollator
ME, Upright C - T Rib and AC joint

Tracheal
One Kidney

Suboxone/MAT
ostomy anal atresia
Basic Cervical Spine Mobilization

• Take a step back from Fryette Mechanics
• Palpate C Pillars first – lift ½”
• Look Straight Down, work side/side
• Start with Side bending ONLY
• Tip Towards – Turn Away
• Avoid Extension
• Short and Long Lever techniques exist along a spectrum

• Not getting OA/AA or C2/3 -
• Direct and Indirect Releases
• Transition to Suboccipital release, CV4
• “Nudging” is ok - bilaterally.
• 30 millisecond delay on H reflex (NCS)
• Double Nudge to Trust during “repolarization” phase
• This Dr has found little utility in direct AA/OA techniques – ME, Resp A
Initial Palpatory Set-Up. Pads rest on Cervical Pillars
Next. Gentle Side-Bending and “averaging”
Transition From the palpatory exam into correction
Thumb along mandible – not over anterior soft tissues
Lumbar Mobilization

- LBP? Low threshold for ESR/CRP
- Plain Films Flex/Ext views
- Consider infectious etiology/peds
- SIJ primary or along for the ride?
- When positioning - L flex/ext.? – do not look to Thor, they will be flexed for L2,3,4,5 to be in neutral or extended
- Sacral Torsions? (time)
- “Walk Around” - “Million Dollar Roll”
- Post partum/ Post MI (post thoracotomy, Lymphadenopathy)
- Wait for ASIS rise, then counterforce
- Hard to really hurt someone
- Imprecise – but global/lymphatic
- Establishes trust –then on to more
- Can stress C Spine and shoulder
Basic Lumbar Roll – a good place to start
Lateral Lumbar Mobilization, (notice non-Popliteal)

Simplify ... Initially

Rotated Left?  Left Side Up
Rotated Right?  Right Side Up

Getting the L Spine into Neutral
almost always requires Thoracic Flexion

When in doubt, position the painful or more painful side up first. Then nudge both sides – again all restrictions are bilateral
Innominate, Pubic, Sacral Torsions & SIJ

- The painful/tender SIJ PSIS is usually the posterior side
- Usually benefits from injection
- Sacrum follows innominate
  - P- “Posterior” - “Popliteal”
- Sacrum wants to return to lowest state of torsion – correct the innominate and it comes back along for the ride
- Leg Pull Techniques, 4 handed?
- Steady uncoordinated pressure

- Sacral Torsions in simplest terms
- On paper for Boards then ...
Posterior Right - Anterior Left Innominate
4 handed Leg-Pull is one Option, ME II easier?
No TKA/ THA. Gaps Knee, Ankle and Hip
Type II Muscle Energy for the Pubic Symphysis component of the Pelvic/SIJ/Innominate Dysf’n
Abduction and Hip/Knee Flexion s/p Pubic Symp Tx

Patients can be taught this as a self manipulation supine or standing.
DISCLAIMER

These are my personal general OMT templates – I modify them often case-by-case and they don’t specify Left/Right. They reflect how I personally document what I feel and perceive and how I verbally express my treatment for documentation. They are not endorsed by any organization, not Iron-Clad and have never been subjected to Medicare Audit, but have been received by and reimbursed in my area by third-party payors within the context of the rest of my NeuroMSKOrtho note.

Happy to email them to anyone in Microsoft word format, to edit.

If you choose to use them, use them as a starting point and make them what YOU feel and perceive.
Multiple areas of common osteopathic dysfunction, with associated rib dysfunctions mostly in inhalation, in addition to restrictions noted in Thoracic and Cervico-Thoracic junction, which had been identified and appreciated on exam, were transition from physical exam into treatment sequence. The hydrocollator was removed from the supine patient. A Standard Kirksville maneuver with Tractional vector and F.U.E.L. acronym technique, approximately T1-4 flexed and T4,5,6 extended, was gently articulated. Specific attention was given to the C7-T1 which was articulated separately with extension hand-up move. Multi-level, bilateral rib dysfunctions reseated with the modified side bending and “K-ville” using the fulcrum more laterally. Lower thoracic mobilized from AP compression as well with side-bending consideration. Additional levels mobilized in neutral and lateral tractional rotational maneuver lifting the shoulder from the back and rolling towards me while placing a counter vector into the ASIS. Type II Muscle energy was used for pubic symphyseal gapping/articulation, following which the legs were ABDucted, the hips and knees flexed to end ROM and then reextended straight well tolerated and subjective improvement was noted.

The lunate/mid-wrist was re-seated and longitudinally gapped with pressure over the mid-wrist and a wrist extension muscle energy and whip technique. Ipsilateral AC joint was reseated with facilitated positional release and shoulder anterior rotation. Radial head was verified without osteopathic restriction. Type II Muscle energy was used for pronation/Supination for ROM symmetry.
Template Exam-OMT dysfnx:

Multiple areas of intersegmental dysfunction are noted - Thoracic and Assoc rib. Approximating T1-4 flexion and 4-6 extension. C4,5,6 RrSl, T1/2 restricted with Assoc 1st rib restriction. Taut banding and trigger areas with tissue asymmetry along thoracodorsal fascial and well up into C spine. Unilateral posterior innominate with contralateral anterior with Assoc pubic symphyseal restriction. Minimal Up slip on posterior innom side, not on contralateral. L5/S1 rotated towards posterior innom and secondary sacral torsion with axis on contralateral side, with additional rostral lumbar dysfunction. No flexion or extension sacral dysfunction is appreciated. L restriction L1-4 is noted with tissue asymmetry and involuntary guarding.

TEMPLATE for OMT Sub-Occiput

Sub-occipital release techniques in a supine position were performed with use of type II muscle energy for rotation and nutation/counter-nutation appreciating the tight sub-occipital side on examination. Direct stretching without Type III muscle energy, V-spread techniques and OA/AA stretching with rocking and nudging but without high-velocity OA AA techniques were employed. Type II muscle energy is used for AA rotation in the direction of the restricted side.
**TEMPLATE  Lumbar Stabilization**

Reviewed basic isometric abdominal stabilization program and core strengthening. Gave tactile and verbal feedback during pelvic tilt. Advised to hold for 10-20 seconds and rest for 10-20 seconds and 5-10 cycles in the evening such as during TV show, doing them during commercials etc. Explained how is it not quite a sit-up but similar, and they can progress to sit-ups. Advised to avoid Lumbar sacral extension, and focus on tightening their abdomen.

**TEMPLATE  Corner Stretches**

Demonstrated “corner-stretches” as a home modality/exercise program for anterior chest stretching for 15-30 seconds and leaning in slowly, not jerking, as part of the myofascial home exercise/stretching program. Using a 90 degree corner and placing hands at or slightly below level of shoulder/GH region. Reviewed then alternating with the posterior rhomboid isotonic contractions with elbows at 90 and shoulder ABDucted, done in-between the corner stretches holding for 10-15 seconds and the corner stretches in between, and a TheraBand or other resistance can also be used. Reviewed that this is approaching myofascial pain as a type of relative deconditioning and is the early portion of a home exercise program.
SUMMARY – Heading Home …

Thoracic is the easiest and a good starting point
2-3 positions of thenar eminence
“pop” is not necessary
Ribs go along for the ride – usually
Top C7-T2 “tractional component” pillows/rolls/prone

Cervical Spine start with pillars
Tip toward/turn away, Direct and Indirect Release
Gentle nudge – articulatory rotation
Upper C spine? ME, LAR and stretching

Lumbar easy to do the roll –after K-Ville
Intimate with SIJ- tender side up
P=posterior innominate =popliteal

Sacral torsions can be a beast of their own, but often correct with Innominate/lumbar corrections and pubic

Get the mechanical advantage – get enough height over your fulcrum, use traction. Plan your day
Take care of yourself
Questions

What else specifically do you want to see?

What do you think I can do better?

MFSTRETANSKI@GMAIL.com

Office (419) 522 - 1100
Cell (614) 975 - 1003