OSTEOPATHIC MANIPULATIVE TREATMENT OPTIONS FOR COMMON CONDITIONS

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SAILING ON THE NEW HORIZONS OF MEDICINE
OBJECTIVES

• Describe OMT treatment modalities for common office complaints

• Discuss challenges faced when including OMM in a busy clinic setting

• Present some options to assist with these challenges

• Present research in support of using OMM

• Provide OMT resources for clinicians

OMT

• Treatment please!

• Times are changing...
  • Beliefs
  • Medicine

• Fry LJ in 1996, Johnson SM in 1997, Aguwa MI in 1999, and Johnson SM in 2005 all report a decline in the use of OMM
WHAT DO WE KNOW?

- Attitude and training is important.
  - Spaeth DG, Pheley AM. Evaluation of osteopathic manipulative treatment training by practicing physicians in Ohio. Published 2002 in JAOA.
    - 871 survey responses
    - 53% had used OMT once during week prior to survey
    - 60% thought their rated their training as acceptable
    - 40% were using less OMT now than when they started their practice
    - Strong negative correlation between OMT training satisfaction in residency and current use of OMT
  - Allee BA, Pollak MH, Malnar KF. Survey of osteopathic and allopathic residents' attitudes toward osteopathic manipulative treatment. Published in JAOA in 2005
    - Survey to residents in Oklahoma, Arkansas, Missouri, and Texas
    - 149 D.O.s, 233 M.D.s
    - 68% of osteopathic residents in AOA programs used OMT frequently
    - 40% of osteopathic residents in ACGME programs used OMT frequently
    - 90% of allopathic residents believed OMT was effective for treating somatic dysfunction
    - 71% of allopathic residents believed had interest in learning OMT.

CHALLENGES

- Time constraints
- Reimbursement
- Benefit
- Patient unfamiliarity
- Physician insecurity and skill level
TIME

- Time management
  - Quality of care (Fiscella et al. 2004),
  - Patient trust (Fiscella et al. 2004),
  - Malpractice suits (Levinson et al. 1997),
  - Possible payment basis (Hsiao et al. 1988)
- Lack of time - reported by osteopathic ER physicians as the biggest hindrance to using OMM
- How much do we really have?
  - Yawn et al. 2003 - found that primary care physician office visits lasted about 10 minutes.
  - Tai-Seale M et al. 2007 - Time Allocation in Primary Care Office Visits.
    - Average visit time 15.7 minutes covering 6 topics
    - 5 minutes on the longest topic and 1 minute on remaining.
    - Influencing factors: mental health, physician uncertainty, patient gender

TIME MANAGEMENT

- Select your OMM options wisely
- Have a predetermined description of OMM
  - Brochures available through AOA website
- Separate follow up visit for procedure only if needed.
REIMBURSEMENT REMINDERS

- Include TART findings on physical
- Findings of somatic dysfunction
  - "Impaired or altered function of related components of the somatic (body framework) system: skeletal, articular, and myofascial structures, and related vascular, lymphatic, and neural elements."
- Document that based on your findings, OMT was medically appropriate for condition
- List the somatic dysfunction of area treated
  - M99 – M99.09
- Link diagnosis to procedure codes
- E&M can be used in addition but only if applicable
  - 25 modifier with CPT code
- CPT: 98925- 98929

REIMBURSEMENT FOR OMT

<table>
<thead>
<tr>
<th>CPT</th>
<th>DESCRIPTION</th>
<th>OFFICE</th>
<th>HOSPITAL</th>
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</thead>
<tbody>
<tr>
<td>98925</td>
<td>1-2 regions</td>
<td>34.90</td>
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<tr>
<td>98926</td>
<td>3-4 regions</td>
<td>50.58</td>
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<tr>
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<td>9-10 regions</td>
<td>96.45</td>
<td>80.38</td>
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</tbody>
</table>

https://www.cms.gov/apps/physician-fee-schedule

In order to bill for E&M and OMT on same day patient must have presented for another reason and OMT decided upon physician as medical decision making.

Multiple resources for coding:
- ACOFP lecture: 2015 and 2016
- AAO & AOA website
BENEFITS OF OMT

- Research is growing
  - OSTEOPATHIC Trial by Licciardone et al.
    - Benefit of OMT for back pain
    - 455 randomized, double blind, sham-controlled
    - OMT group had more significant pain reduction and less prescription medication use
  
- Accademia Italiana Osteopatie Tradisionale
  - OMT affecting GI distress and length of stay in NICU
  - 633 premature (29-37 week) infants screened between 2005 and 2008 in NICU, Pescara, Italy
  - N = 350, randomize 188 regular tx, 162 regular + 20-30 minutes of OMT twice weekly
  - OMT group: fewer occurrences of GI dysfunction (28 vs 60 daily), shorter NICU (55 vs 28 days; p <0.001)

MOPSE trial
- Multicenter Osteopathic Pneumonia Study in the Elderly
- Prospective randomized trial to evaluate if adding OMT to standard treatment of pneumonia would improve outcomes
- N = 406, 15 mins twice daily, OMT, LT, CCO.
- Improved LOS, need for IV abx, and rates of respiratory failure

<table>
<thead>
<tr>
<th>OMT Technique</th>
<th>Description</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft Tissue paraspinals (1 min)</td>
<td>Soft kneading of paraspinals</td>
<td>Relax muscles, aid breathing</td>
</tr>
<tr>
<td>Rib Raising (2 mins)</td>
<td>Rhythmic traction to rib angles</td>
<td>↑ rib cage motion, stimulate sympathetic ganglia</td>
</tr>
<tr>
<td>Dome the Diaphragm (1 min)</td>
<td>Indirect MFR</td>
<td>↑ rib cage motion</td>
</tr>
<tr>
<td>Soft Tissue cervicals (1 min)</td>
<td>Soft kneading of paraspinals</td>
<td>Relax 2nd muscles of respiration. Improve autonomic flow through neck.</td>
</tr>
<tr>
<td>OAD (1 min)</td>
<td>Outward cephalad traction on occipital condyles</td>
<td>Improve parasympathetics. Release restricted tissue around vagus nerve.</td>
</tr>
<tr>
<td>Thoracic inlet release (1 min)</td>
<td>Indirect MFR</td>
<td>↑lymph drainage and function</td>
</tr>
<tr>
<td>Thoracic pump (2 mins)</td>
<td>Pump during exhalation and maintain pressure at end of breath, repeat, release.</td>
<td>↑lymph drainage and function, corrects atelectasis, ↑ chest wall compliance.</td>
</tr>
<tr>
<td>Pedal pump (1 min)</td>
<td>Gentle rhythmic dorsiflexion of feet.</td>
<td>↑lymph drainage, affects intrathoracic and abdominal pressure gradients.</td>
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</tbody>
</table>
BENEFITS OF OMT

- Efficacy of OMT of female patients with migraine by Voigt et al in 2011
  - 42 randomized female patients to OMT + routine tx or routine tx only
  - OMT: 5 x 50 min tx over 10 weeks
  - Decreased pain intensity, less disturbance in occupation and number of disablement days, improvement in quality of life.

- Chronic sinusitis symptoms improvement with OMT (Liewong M. 2011)
  - 15 patients received one OMT treatment with 12 reporting moderate to complete relief.

LETS GET STARTED!

- Low back pain
- Neck pain and headache
- URI, Otitis, Sinusitis
- COPD
- GI upset
LOW BACK PAIN

- Most common presenting complaint in pain and orthopedic specialty practices and second most common symptomatic complaint in a primary care setting
- Annual prevalence of 15% to 20% in the United States
- Risk factors: smoking, obesity, age, female gender, physically strenuous work, sedentary work, psychologically strenuous work, low educational attainment, job dissatisfaction, psychologic factors such as somatization disorder, anxiety, and depression

LOW BACK PAIN

**Table 1. Mechanical and nonmechanical causes of low back pain**

<table>
<thead>
<tr>
<th>Mechanical</th>
<th>Nonmechanical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumbar strain or sprain</td>
<td>Neoplasia</td>
</tr>
<tr>
<td>Spondylolisthesis or degenerative</td>
<td>Metastatic carcinoma</td>
</tr>
<tr>
<td>arthritis</td>
<td>Multiple myeloma</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>Lymphoma</td>
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<tr>
<td>Diffuse idiopathic skeletal</td>
<td>Spinal cord tumors</td>
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<tr>
<td>hyperostosis</td>
<td>Retropertioneal tumors</td>
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<tr>
<td>Spondylolisthesis</td>
<td>Infection</td>
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<tr>
<td>Herniated disc</td>
<td>Osteomyelitis</td>
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<tr>
<td>Spinal stenosis</td>
<td>Septic discitis</td>
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<tr>
<td>Osteoporosis with compression</td>
<td>Paraspinal or epidural abscess</td>
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<tr>
<td>fracture</td>
<td>Endocarditis</td>
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<tr>
<td>Fractures</td>
<td>Inflammatory arthritis</td>
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<tr>
<td>Severe kyphosis</td>
<td>Ankylosing arthritis</td>
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<tr>
<td>Severe scoliosis</td>
<td>Reiter’s syndrome</td>
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<tr>
<td>Paget’s disease</td>
<td>Psoriatic spondylitis</td>
</tr>
<tr>
<td>Sacroiliac joint dysfunction</td>
<td>Inflammatory bowel disease</td>
</tr>
<tr>
<td>Myofascial pain</td>
<td>Polymyalgia rheumatica</td>
</tr>
</tbody>
</table>

Neuropathic Low Back Pain • Audette et al.
RADICULAR PAIN

• Ventral nerve root:
  • Efferent motor root of a spinal nerve.
  • Damage may occur from stenosis, osteoarthritis, or post/lat HNP.
  • +SLR, paresthesias, EMG+, radiation to buttocks and LE.

• Dorsal nerve root:
  • Afferent sensory
  • Controls pain and temperature sensations.
  • If pinched or constricted, can intensify or disrupt signals.
  • Trauma, herniations, or DDD with facet ossification may compress dorsal nerve root.
  • Muscle strength and sensation testing often intact.

RADICULAR PAIN

• Sinu vertebral/recurrent meningeal nerve
  • Innervate facets, annulus fibrosis, and posterior longitudinal ligament.
  • Branch from spinal nerve
  • Pain is burning, diffuse, crossing levels and sides.
  • No weakness with compression.

• Communicating rami
  • Connection between spinal nerve and sympathetic trunk.
  • Supplies anterior longitudinal ligament.
  • Dull, belt-like pain radiating to thighs.
  • May be hard for patient to localize.
LOW BACK PAIN

- Typical synovial joint is comprised of an articular cartilage, synovium, and an encapsulating fibrous capsule.
- Clinical states for synovial joints:
  - Synovitis—from strain with possible muscle spasm and guarding.
  - Initiated by twisting while flexed
  - May present as a localized pain with minimal radiation.
- Stiffness—painless but leads to degeneration
- Facet lock or dysfunction secondary to degenerative change

LOW BACK PAIN

- Goals of OMM in 2 minutes:
  - Improve function
  - Reduce pain
- Cannot change spondylosis, stenosis, hemiation
- Can affect
  - Muscular - Psoas, piriformis, Quadratus lumborum, abdominal core, erector spinae
  - Myofascial bind and strain
  - Facet position
  - ROM
  - Home stretch and strengthening
WHAT ARE SOME QUICK OPTIONS?

- Lumbosacral decompression
- Psoas – Muscle energy, Counterstrain
- Facet decompression – alternative
- Piriformis – Muscle energy, Counterstrain
- Lumbar roll – ME / HVLA
- Alternative sacral technique

LUMBOSACRAL DECOMPRESSION

- **GOALS:** reduce myofascial pain, decrease pelvic congestion, improve mechanical function low back and pelvis, improve diaphragmatic function, stabilize autonomic activity in pelvis

- **CLINICAL USES:** low back pain, dysmenorrhea, urinary tract infections, constipation, pregnancy, labor and postpartum

- **APPROACHES**
  - **Prone:** One hand on base of sacrum. The other hand, facing the opposite direction is over lumbar spine. Gentle traction in opposite directions to stretch the paraspinal musculature and the release tension.
  - **Supine:** Patient flexes knees and hips. One hand contacting the lumbar in a semi-fist. The other hand contacting the sacrum is flat or slightly cupped. Patient lies back over both of operator’s hands. Gentle traction is applied with hands in opposite directions
PSOAS

- Origin: T12-L4
- Insertion: Lesser trochanter
- Motion: Hip flexion
- Special test: Thomas test

PSOAS SYNDROME

- Pain in the lumbosacral region when sitting or standing
- Delay or difficulty in achieving a fully standing posture
- Pain in the contralateral gluteal region
- Radiation of pain down the opposite leg

LEFT PSOAS SYNDROME

Consider Psoas Syndrome if Patient Presents With:
- L1 or L2 vertebra rotated left, sidebent right (key dysfunction)
- L3-L5 vertebrae rotated right, sidebent left
- Body flexed at waist and sidebent left
- Right pelvic shift
- Left foot everted
- Left psoas spasm (with restricted hip extension)
- Sacrum rotated on left oblique axis
- Right piriformis spasm or tender point
- Pain radiating down right leg
- Positive result of Thomas test on the left side
- Patient states that he or she was able to quickly assume extended position after being in flexed position for some time (e.g., quickly standing upright after gardening)
PSOAS MUSCLE ENERGY

- Patient prone
  - Flex knee, extend hip
  - Monitor & stabilize sacrum

- Patient supine
  - Patient to edge
  - Extend hip
  - Patient presses anteriorly 3-5 seconds, 3-5 times

- Patient lateral recumbent
  - Stabilize pelvis

PSOAS COUNTERSTRAIN

- Treatment
  - Standard counterstrain
    - Find tenderpoint, establish pain scale, wrap around point, hold for 90 seconds, passively return to neutral.
    - Hip flexion, sidebend towards, rotate away.
  - Alternate
    - Find tenderpoint, flex hip and knee, rest patients knee on your knee, apply traction at ankle coupled with posterior force until pain resolved. Passively return to neutral. Should take no more than 5 seconds.
FACET DECOMPRESSION

- Dr. Pope technique
  - With patient supine, find tender point posteriorly by affected facet.
  - Flex knee and hip coupled with abduction/adduction, and rotation until pain resolved.
  - Apply traction, circle hip out into external rotation and inferior passively while maintaining traction.
  - Recheck tender point

PIRIFORMIS

- Origin: S2, S3, S4
- Insertion: Greater trochanter
- Main Motion: External rotation
- Test
  - Lasègue sign is localized pain when pressure is applied over the piriformis muscle and its tendon. Especially when the hip is flexed at an angle of 90 degrees and the knee is extended.
  - Freiberg sign is pain experienced during passive internal rotation of the hip
COUNTERSTRAIN PIRIFORMIS

- **Indications**: back pain, pelvic pain, sciatic neuritis
- **Point**: Found mid muscle
- **Tx**
  - Patient prone
  - Place hip into flexion, abduction, external rotation
  - Find tenderpoint, establish pain scale, find position, hold for 90 seconds, passively return to neutral.
- **Alt - Patient supine**
  - Knee rests on shoulder

MUSCLE ENERGY PIRIFORMIS
LUMBAR ROLL

- **GOALS**: Increase mobility of the lumbar spine, decrease pain in the lumbosacral region, normalize somatovisceral reflexes of the lower gastrointestinal and the genitourinary tract

- **CLINICAL USES**: lumbar somatic dysfunction, restore normal relationship of L5 to S1 prior to addressing sacral dysfunction, reduce lumbosacral, pelvic and/or lower extremity discomfort, stretch musculature, constipation

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**APPROACH**

- Place patient in lateral recumbent position with posterior transverse process up.
- Grasping the patient's dependent shoulder/arm, rotate the thorax toward the ceiling until motion is felt down to, but not including the dysfunctional segment.
- Flex upper leg until motion is felt at the restricted segment.
- Place forearm on the posterior aspect of the iliac crest and the other hand/forearm in the axilla/pectoral region.
- From this point may either use muscle energy or HVLA.
- Tip for thrust – add traction, make sure not too much flexion in lumbar spine.
**SACRUM**

- Step 1: Forget everything you knew before about sacrum

**APPROACH**
- With patient prone evaluate the tissue texture on either side of the SI joint.
- Find the most restricted point.
- Either abduct or adduct to open joint
- Externally/Internally rotate hip to find area of greatest restriction
- Use muscle energy to treat
- Then repeat treatment on corresponding opposite pole.
- Reset with respiratory sacral rocking

**NECK PAIN & HA**

- 10 percent of the adult population has neck pain at any one time. Prevalence slightly less than LBP and there is less time lost from work.
- Females > Males (neck pain in general)
- Causes: cervical strain, discogenic pain, facet-mediated pain, whiplash, radiculopathy, myelopathy, and myofascial pain.
- Degenerative changes and mechanical disorder (SD) are the most common etiology for axial neck pain.
- Only 1/3 of patients will have complete resolution of pain.
NECK PAIN

- Facet pain: unilateral, dull achy
- Radiculopathy:
  - Incidence: 64 (F)-107(M)/100,000
  - Cause: Degenerative > HNP > trauma
  - Special tests: Spurlings, abduction test (hand on head, + if decrease symptoms), upper limb test
- Red flags: fever, weight loss, night pain, decreased dexterity, urinary urgency.
- SD: OA/AA head pain, C2-7 neck pain
  - C2-3 can be a pain generator in up to 60% of patients
  - Fascial tension can trap greater and lesser occipital nerves
  - Chronic spasm → decreased blood flow, muscle pain, and headache

NECK PAIN AND HA

- Consider treating thoracics first
  - Normalize sympathetics
  - Texas twist, Kirksville, Muscle energy
- OAD – normalize parasympathetics
  - Fingers at base of occiput.
  - Allow weight of head to rest on fingertips
  - Apply a gentle superior and anterior pressure.
  - A few stretches and soft tissue – to loosen things up
  - Bow string, traction
NECK PAIN AND HA

STILL TECHNIQUE

• Principles
  • Place in position of ease
  • Exaggerate
  • Apply compression or traction
  • Arc through barrier
  • Release and return

• Contraindications
  • Severe spondylosis, OA, or RA
  • Joint instability
  • Acute strain or sprain
NECK PAIN & HA

- Fine tune cervicals with Stills techniques
  - Take segment to where it lives and allow tissue to loosen.
  - Apply light traction or compression
  - Circle around to where the segment does not live
  - Release pressure/traction
  - Recheck
- Eg. Dx C 3FSRr
  - Start C 3FSRr
  - Apply traction and hold while moving segment to C 3ESRi
  - Remove traction

THE COMMON COLD

- Self limited viral syndrome with a wide array of supportive measures as options
- Therapies that may be effective
  - Analgesics: Tylenol and NSAID – roughly equivalent in effectiveness
  - Antihistamines – watch for side effects of drowsiness, dry mouth, insomnia
  - Dextromethorphan - cough suppression
  - Intranasal ipratropium bromide – improve rhinorrhea and sneezing however minimal effect on congestion
  - Pseudoephedrine - decongestant
  - Nasal saline
  - Codeine – cough suppressant
  - Guaifenesin – expectorant (2014 systematic review noted not effective)
  - Zinc – decrease symptoms but can be toxic and cause irreversible anosmia
  - Pelargonium sidoides – ? Reduction of symptoms
  - Vitamin C – ? Reduction in duration of cold symptoms
  - Echinacea – ? Reduction in duration of cold symptoms
- Preventive: sleep, exercise, hygiene
URI – OMM OPTIONS

- Open thoracic inlet
- Auricular drainage
- Galbreath technique (Mandibular drainage)
- Trigeminal nerve stimulation
- Sinus drainage

THORACIC INLET

- Bony borders: T1, First rib, manubrium
- Goal: open lymphatics to allow for drainage, release myofascial restriction
- Approach
  - Place palms on shoulders at angle of neck and shoulder
  - Thumbs over posterior rib 1
  - Test ease and bind of tissue in all 3 planes
  - Treat direct (into bind) or indirect (into ease) and hold until release is felt
  - May enhance with respiration
URI

- Auricular drainage
  - Goal: relieve congestion, OM, OE
  - Place hand flat against the side of the head with the ear between the fourth and third fingers
  - Move hand in clockwise and counter clockwise directions

- Galbreath
  - Goal: relieve congestion or dysfunction of the Eustachian tubes. Caution in those with TMJ
  - Drag fingertips along the posterior ramus of the mandible and the hypothenar eminence along the body of the mandible toward the chin

TRIGEMINAL NERVE STIMULATION

- Goal: Stimulating V1 (supraorbital), V2 (infraorbital) and V3 (mental) will increase sympathetics and therefore decrease secretions. Great for rhinitis

- Apply gentle pressure in a circular motion over three foramens
SINUS DRAINAGE TECHNIQUES

COPD

- Affects >5% of population
- Associated with high mortality and morbidity rates
  - 3rd cause of death in US.
  - Frequent office visits and hospitalizations
  - Need for chronic therapy
- OMT beneficial in subtypes as well as other pathologies such as pneumonia
  - MOPSE trial
PHYSIOLOGIC CHANGES

- Chronic inflammation
- Increased numbers of goblet cells
- Mucus gland hyperplasia
- Narrowing and reduction in the number of small airways
- Airway collapse
- Intimal hyperplasia and smooth muscle hypertrophy/hyperplasia of pulmonary vasculature.
- Loss of pulmonary capillary bed and pruning of the distal vasculature
- Possible fibrosis

- Flattened diaphragm
- Inhalation rib dysfunction
- Thoracic inlet/outlet restriction
- Sympathetic input
  - Increased tone will thicken secretions and bronchodiilate
- Parasympathetic input
  - Increased tone will thin secretions and bronchoconstrict
- Scalene hypertonicity
- SCM hypertonicity
- Pec minor hypertonicity
- Serratus anterior hypertonicity
- C3-5 TART (phrenic nerve)

OPTIONS

- Diaphragm release / dome diaphragm
- SNS (rib raising) and PNS (OAD)
- Generalized thoracics & Rib treatment
  - Articulatory (lung viscerosomatics T2-7ish)
  - Rib walking
  - BLT
- Thoracic inlet release
**DIAPHRAGM RELEASE**

- **Goal**: Improve motion and function of diaphragm. Will also assist with any lymphatic congestion
- **Approach**
  - Place thumbs just inferior to the patient's lower costal margin and xiphoid process with the thumbs pointing cephalad
  - Resist motion as patient breathes in.
  - As they breath out, follow diaphragm with a posterior superior and lateral pressure.
  - Repeat until no further gain is made
- **Alternate approach**
  - Myofascial release to one side of diaphragm at a time.
  - One hand above, one below
  - Check three planes of motion
  - Stack either direct or indirect
  - Wait for release

**RIBS**

- **Rib raising and articulation**
  - **Goals**: Improve rib motion, stimulate sympathetics, facilitate lymphatic drainage
  - **Approach**: With patient supine, place pads of fingertips just lateral to thoracocostal margin. Apply repetitive anterior and lateral motion
- **Rib walking**
- **BLT (Balanced Ligamentous Tension)**
  - May use on a specific rib that feels stiff.
  - Apply a medial, anterior, and posterior pressure to disengage rib
  - Allow rib to “float” into position of ease. Hold until release is felt and gently allow rib to return to a neutral position
GI UPSET

Nausea – 4 general pathways
- Stimuli affecting cerebral cortex and limbic system – ICP, emotional
- Chemoreceptor trigger zone located on floor of 4th ventricle – toxins, metabolites, medications
- Vestibular apparatus - motion, triggered by histamine (H1) and acetylcholine receptors
- Peripheral pathways – chemo and mechanoreceptors of GI, heart, kidney

GI tract
- Stimulation from chemoreceptors and mechanoreceptors
- Receptors trigger nausea and vomiting via vagal nerve, glossopharyngeal, splanchnic, and sympathetic afferents
- Afferents travel to brainstem initiating cascade and subsequent effects of nausea and vomiting.

GI UPSET

Approach
- Encourage autonemics in desired direction
  - OAD
  - Ribs / paraspinals
  - Sacrum
- Address viscerosomatic dysfunction and address facilitation
- Check and treat for Chapmans reflexes
• Parasympathetic stimulation increases GI motility and secretions in general
  • OA – vagal for upper GI
  • Sacrum – pelvic splanchnic. parasympathetic control to bladder, ovaries/testes, colon, and rectum.

• OAD
  • Use: Normalizes vagal tone.
  • Indications: Nausea, diarrhea, constipation, Relax post cervical soft tissue
  • Caution: Transient increase in parasympathetic tone prior to normalization
  • Approach:
    • Place fingertips at suboccipital region, fingers flexed with pads contacting the occiput
    • Let the weight of the patients head rest on fingertips
    • As tissues relax, continue pressure in anterior direction
    • Complete technique with a gentle superior force to further disengage the occiput
AUTONOMICS

- Sacral inhibition will inhibit parasympathetics and slow down GI motility
  - Eg. Diarrhea
  - Approach:
    - Patient prone (may also do supine if necessary)
    - Cup sacrum with palm at apex and place other hand on top
    - Place a anterior pressure for >90 seconds.

- Sacral rocking will stimulate parasympathetics, thereby increasing motility and secretions
  - Eg. Constipation
  - Approach
    - Patient prone
    - Cup sacrum with palm at apex and place other hand on top
    - Gently rock the sacrum back and forth, alternating pressure to base and apex for 2-3 minutes

AUTONOMICS

- Sympathetic stimulation- decrease motility and secretions.
  - Rib raising (eg. Gastritis or reflux)
    - Stimulate sympathetics
    - With patient seated, place hands on costotransverse articulation
    - Apply anterior lateral force repetitively
  - Inhibitory pressure (eg. Constipation or ileus)
    - Inhibit sympathetics
    - With patient supine, place hands on rib angles or paraspinals
    - Apply anterior lateral force for more than 90 seconds
VISCEROSOMATICS

- HEENT: T1-T4
- Heart: T1-T5 left
- Lungs: T1-T5/6
- Esophagus: T5-6
- Stomach: T5-T9 left
- Spleen/Pancreas: T7-T9 left
- Liver/Gallbladder: T6/7-T9 right
- Adrenals: T8-10
- Small Intestine: T9-10
- Right Colon: T10-T11 right
- Left Colon: T12-L2 left

CHAPMANS

- Small firm nodule 2-3 mm in diameter
- Non-radiating sharp pain under pressure
- Indicative of visceral somatic reflexes
- Associated with collateral ganglion tenderness
REFERENCES


- Channell MK, Mason DC. The 5-Minute Osteopathic Manipulative Medicine Consult. Philadelphia: Wolters Kluwer Lippincott Williams & Wilkins, 2009UpToDate
- American Family Physician; Non-operative management of cervical radiculopathy, May 1st 2016
- https://www.acofp.org/ACOPFPIMIS/Acofporg/PDFs/ACOPF16/Handouts/Fri_am_0700_NPR_Mancuso_Allison_Effective_Billing_and_Coding_Strategies.pdf
- www.cms.gov
REFERENCES


THANK YOU

- Questions?
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