OMT in the Acute Care Setting

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Learning Objectives

• Discuss likely patient presentations to the ER that should include somatic dysfunction in the differential diagnosis.

• Incorporate a strategy for osteopathic evaluation and treatment in the acute care setting

• Apply a screening tool to address patient complaints without neglecting total patient care
Utilization of OMT in the ER

- Ault, Brian, and Levy, David J
  Osteopath Assoc.
  2015;115(3):132-137
  doi:10.7556/jaoa.2015.026
Retrospective Chart Review

- 2868 OMT procedure for 2076 by 70 physicians. (Average 1.02/day)
- Residents more procedures than Attendings
- 11 different techniques (MFR most common)
- More during day than night
Table 2. Osteopathic Manipulative Treatment Techniques Used in the Emergency Department

<table>
<thead>
<tr>
<th>Technique</th>
<th>No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterstrain</td>
<td>213 (7.42)</td>
</tr>
<tr>
<td>Facilitated Positional Release</td>
<td>86 (2.99)</td>
</tr>
<tr>
<td>High-Velocity, Low-Amplitude</td>
<td>185 (6.45)</td>
</tr>
<tr>
<td>Balanced Ligamentous Tension</td>
<td>261 (9.10)</td>
</tr>
<tr>
<td>Lymphatic Pump</td>
<td>80 (2.78)</td>
</tr>
<tr>
<td>Muscle Energy</td>
<td>672 (23.43)</td>
</tr>
<tr>
<td>Myofascial Release</td>
<td>1150 (40.09)</td>
</tr>
<tr>
<td>Myofascial Unwinding</td>
<td>97 (3.38)</td>
</tr>
<tr>
<td>Osteopathic Cranial Manipulative Medicine</td>
<td>34 (1.18)</td>
</tr>
<tr>
<td>Trigger Point</td>
<td>62 (2.16)</td>
</tr>
<tr>
<td>Visceral Manipulation</td>
<td>25 (0.87)</td>
</tr>
</tbody>
</table>

A total of 2868 procedures were performed on 2076 patients during the study period (2005-2013).
409 Different Diagnoses

- Most Common Presentations
  - Back Pain
  - Motor Vehicle Collision
  - Neck Pain

- Most Common Diagnoses
  - LBP
  - Muscle spasm
  - Spasms, Muscle, Back
  - Lumbar SD
  - Cervical SD
  - Head SD
*Under Reporting*

“Osteopathic physicians often perform small or short treatments as part of their diagnostic process, and in these cases, DOs often feel that the treatments do not warrant documentation or billing. This phenomenon has been previously documented in a survey of DOs. This practice is especially likely in a setting such as our ED, where OMT is not billed for or quantified.”
Philosophical Integration of OMM

• Osteopathic Medicine is woven into the fabric of your education
• Do not separate OMM from routine care.
• There are times when Somatic Dysfunction is the root cause of the complaint and when Somatic Dysfunction is secondary to the root cause.
• There are times when Somatic Dysfunction is not the most important issue at hand or present at all.
Have a Routine

• Be sensible
• Have a clear introduction
• Explain technique, goals for treatment
• Indications/Contraindications
Develop a Quick Screen

• As part of your routine history and PE
  – Visualize
  – Listen
  – Palpate
  – Further diagnose

• The right screen for you is the one you develop
Method to look for areas of SD related to patient complaint

• Biomechanical
  – Musculoskeletal
  – Improve respiratory mechanics
  – Improve other systems function

• Fluid management and edema

• Autonomic Nervous system
  – Sympathetic
  – Parasympathetic
Always ask yourself “Where should I look for Somatic Dysfunction”

- Include SD in your differential diagnosis
- Relate SD to other diagnoses
Stratify Your Differential Diagnosis

• What is going to kill them?
• What do I not want to miss?
• What are the most likely causes of presentation?

• Include SD and 10 areas of SD in your SOAP note and Coding
Don’t believe or blame all things on old diagnoses

- Patients often don’t remember accurate dx
- Doctors may be blinded or biased
- Diagnoses change
- Multiple diagnoses can have similar symptoms and physical findings
- Not all doctors are trained to evaluate the whole patient and pay close attention to subtle physical findings
Presentation leg pain
“I have LBP from a Herniated Disc”

• “You may have a herniated disc”
• Review old records, Look at your own films
• Thorough H&P

• “You also have Psoas syndrome and a short right leg.”
Presentation Headache

“I was diagnosed with MS”

• “Your MRI of your brain does demonstrate plaques related to MS”

• “You also have TMJ syndrome and muscle imbalance in your head and neck contributing to your head aches.”

• “How are you dealing with stress?”
Treatment

• Apply principles in treatment models
• Modify for situation
  – Position
  – Duration
  – Areas treated
• Simple techniques can provide remarkable results
Shortness of Breath Case:
Proper Use of Inhalers

- https://www.youtube.com/watch?v=bDHEEV0M62Y
Shortness of Breath Case:

- Pregnant patient comes in for evaluation of her asthma. She is a 24 yo G2P0101 with a history of Asthma now in her 30th week of this pregnancy. She states she is using her albuterol at least twice a day for the past week. This has been increasing since her 26th week of gestation.
Physical Exam

• 124/78 HR 80 RR 24 T 98.8
• HEENT: NL TM, turbs, pharynx clear
• COR: reg at 80 2/5 systolic murmur, no ectopy.
• Pulm: Tachypnic wheezing reduced diaphragm excursion.
• Abd: NL BS, soft ,NT, Gravid uterus nearly to xyphoid process.
• Ext: good pulses, minimal pitting edema B/L.
• Biomech: OA myospasm, C3-5 RSI, T1-8 paraspinal myospasm, Tenderpoint at anterior scalene left and myospasm of pec minor B/L.
A/P

• Diagnoses
  – Moderate persistent Asthma, with Acute Exacerbation(J45.41)
  – Cervical(M99.01), Thoracic(M99.02), Upper Extremity (M99.07), Rib(M99.08), somatic dysfunctions

• Treatment
  – Beta Agonist
  – Inhaled steroids
  – Accessory Muscles of Respiration Assessment and Myofascial Treatment
  – Cervical Muscle Energy C3-5
  – Rib Raising Ribs 1-8
**Asthma**
- A disorder of the tracheobronchial tree characterized by mild to severe obstruction to airflow. The clinical hallmark is wheezing, but cough may be the predominant symptom.
- **Physiology and Associated Somatic Dysfunctions**
  - **Parasympathetics** increased tone = increased volume of secretions and relative bronchiole constriction
  - **Vagus nerve** - OA, AA, C2 -
    - Tenderpoints
    - Tissue texture changes over cervical pillars
    - Rotated vertebrae
  - Compression of occipitomastoid sutures as well as occipito-atlanto joint
  - **Sympathetics** increased tone = decreased secretions and bronchiole dilation
    - T1-5
    - Tenderpoints
    - Tissue texture changes over transverse processes
    - Rotated vertebrae
- **Motor**
  - C3-5 (Phrenic nerve to the diaphragm. Dysfunction due to decreased excursion and overuse)
  - Tenderpoints
  - Tissue texture changes over cervical pillars
  - Rotated vertebrae
- **Other Somatic Dysfunctions**
  - Cranial extension dysfunction
  - **Scalenes** - tenderpoints and hypertonicity
  - Sternocleidomastoid - tenderpoints and hypertonicity
  - Inhalation or exhalation dysfunction of ribs
  - Flattened diaphragm
  - Thoraco-lumbar dysfunction (diaphragm attachment)

**Treatment**
- **The 2 minute treatment**
  - Thoracic- Seated ME 739.2
  - Abd/Other/Visceral-somatic-Chapman’s reflex for lung 739.9
  - 3rd (upper lung) and 4th (lower lung) ICS near sternal border
- **The 5 minute treatment**
  - Upper Extremity- Pectoralis minor- CS, MFR and/or pectoralis traction (for lymphatic treatment) 739.7
  - Thoracic- HVLA 739.2
- **The Extended treatment**
  - Head- Decreased CRI- CV4 hold 739.0
  - Head –Vagus: OA release 739.0
  - Head- Sphenopalatine ganglion stimulation 739.0
  - Cervical-C2, C3-5: MFR, FPR and/or HVLA 739.0
  - Cervical-Scalenes: CS and/or ME 739.1
  - Thoracic- MFR 739.2
  - Rib dysfunction- ME 739.8
  - Rib raising 739.8
  - Abdomen- Diaphragm-
    - Doming technique 739.9
    - Thoracolumbar junction: ME, MFR, HVLA 739.2, 739.3
OMT For Patient with Asthma
Techniques

• Accessory Muscles of Respiration Assessment and Myofascial Treatment
• Cervical Muscle Energy C3-5
• Rib Raising Ribs 1-8
Coding and Billing

• **Dx:**
  – Moderate persistent Asthma, with Acute Exacerbation(J45.41)
  – Cervical(M99.01), Thoracic(M99.02), Upper Extremity (M99.07), and Rib(M99.08) somatic dysfunctions

• **E&M**
  – 99204.25

• **Procedure**
  – 98926
Understand and Explain

• Somatic Dysfunction can be:
  – Primary problem
  – Secondary problem
  – Comorbid problem
Treatment Models

• Biomechanical Model
• Respiratory Circulatory Model
• Neurological Model
• Metabolic-Energy Model
• Behavioral Model
Time Management

• Screen for SD during History and Physical
• Hurry up and wait
  – Ordered some testing, waiting for results
• During other treatment
  – Nebulizer treatment
  – Diuretics
  – Pain meds
  – Antiemetic meds
Use manual skills to diagnose

- Using OMM to diagnose SD can be very comforting to the patient
- Gives them confidence in your skills and your diagnosis
- “I have told three other doctors I have pain and no one ever touched me. No one could find it before”
Modify techniques to fit setting

• Seated techniques
• Hospital beds
• Lines, Drains, Telemetry
• Move equipment
• Adjust bed
• Protect patient and yourself
Dosing of OMT

• Apply adequate amount to area
• Gauge patients tolerance
• Don’t treat every old facilitated segment and recalcitrant dysfunction in acute setting.

• “Find it fix it and leave it alone.”
Want to be a GREAT doctor

• Do what other doctors don’t do
• Listen
  – Listen with your ears, mind, hands, gut.
• Communicate
  – With your patient
  – With your colleagues
• Say “I don’t know….yet. Lets figure this out.”
• Know the results before you order the test
  – Learn how to do an unbelievably thorough H&P
OMT Codes

- 1-2 areas treated  98925
- 3-4 areas         98926
- 5-6 areas         98927
- 7-8 areas         98928
- 9-10 areas        98929
- 10 areas are Cranial, Cervical, Thoracic, Lumbar, Sacral, Innominate, Upper Extremity, Lower Extremity, Rib cage, Visceral.
Modifiers

• .25 separate identifiable service on same day (Patient seen for “Headache” diagnosis muscle tension type HA, Cervical Somatic Dysfunction E&M 99213.25 98925 ICD-9 codes 307.81 739.1)
ICD-10 codes

- M99.00 Head/ Cranial Somatic dysfunction
- M99.01 Cervical Somatic dysfunction
- M99.02 Thoracic Somatic dysfunction
- M99.03 Lumbar Somatic dysfunction
- M99.04 Sacral Somatic dysfunction
- M99.05 Innominate Somatic dysfunction
- M99.06 Lower extremity Somatic dysfunction
- M99.07 Upper extremity Somatic dysfunction
- M99.08 Rib Somatic dysfunction
- M99.09 Abdominal/ Visceral somatic Dysfunction
QUESTIONS?