Evidence Based OMT in the Hospital

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Objectives

• Address common concerns for not doing OMT
• Summarize efficacy of OMT in hospital
• Compare the various OMT protocols
What’s OMT?

- Lack of philosophical environment and facility not physically suitable for OMT
- Insufficient training and lack confidence
- Limited time factors
- Lack of patient interests
- Reimbursement

Top 10 reasons Inpt OMM consults

- Hypertension
- Respiratory failure
- Lower respiratory infection
- COPD
- Gastrointestinal symptoms
- Diabetes
- Cholecystitis
- Renal failure
- Psychiatric disorder
- Respiratory distress/failure
- Urinary tract infection
- Atelectasis

Top 10 final Inpt OMM diagnoses

- Cough
- Spinal pain
- Lower respiratory infection
- Neurogenic claudication
- Intractable disorder
- Neck pain
- Lumbar pain
- Joint pain
- Headache
- Muscle spasm
- Degenerative joint disease
- COPD
<table>
<thead>
<tr>
<th>Study</th>
<th>Effect of OMT on Incidence of Postoperative Ileus and Hospital Length of Stay in General Surgical Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Type</td>
<td>Retrospective Cohort Study</td>
</tr>
<tr>
<td>Techniques</td>
<td>Range from cranial to direct MFR; frequently treat costophrenic, costovertebral areas and cervical spine</td>
</tr>
<tr>
<td>Time</td>
<td>15-35 mins x 1 by surgical resident within 48hrs postop</td>
</tr>
</tbody>
</table>
| Outcome | - Decrease time to flatus 3.1 days (OMT) vs 4.7 days (no OMT)  
  - Decrease LOS 6.1 days (OMT) vs 11.5 days (no OMT) |

<table>
<thead>
<tr>
<th>Study</th>
<th>Effect of OMT on LOS in a population of preterm infants</th>
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<tbody>
<tr>
<td>Study Type</td>
<td>a randomized controlled trial</td>
</tr>
<tr>
<td>Techniques</td>
<td>MFR, BLT/BMT, indirect fluidic and V spread</td>
</tr>
<tr>
<td>Time</td>
<td>Q Tues &amp; Friday x 20 mins by osteopath</td>
</tr>
</tbody>
</table>
| Outcome | - N = 110  
  - Decreased LOS  
    Study group (OMT) 26.1 days  
    Control (no OMT) 31.3 days |
<table>
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<tr>
<th>Study</th>
<th>Multicenter, effect of OMT on preterm infants</th>
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<td>Techniques</td>
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</tr>
<tr>
<td>Time</td>
<td>Q Tues &amp; Friday x 20 mins by osteopath Sham = standing by incubator x 20 mins</td>
</tr>
</tbody>
</table>
| Outcome | - N = 695  
- Decreased LOS  
  Study group (OMT) 13.8 days  
  Control (sham) 17.5 days |

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<table>
<thead>
<tr>
<th>Study</th>
<th>Preoperative IV Morphine Sulfate with Postoperative OMT Reduces Patient Analgesic Use After Total Abdominal Hysterectomy</th>
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</thead>
<tbody>
<tr>
<td>Study Type</td>
<td>Randomized double blinded controlled trial</td>
</tr>
<tr>
<td>Techniques</td>
<td>MFR, Soft Tissue to lower thoracic, lumbar, sacrum</td>
</tr>
</tbody>
</table>
| Time | 3 treatments x 10 mins  
- 4 hrs postop  
- Next morning 8AM after surgery  
- Next afternoon 2PM after surgery |
| Outcome | - Patients in Group 4 used less total morphine than those in Group 3 within first 24 hrs postop and second 24 hrs postop  
- Lower morphine blood concentrations at 24 hrs in Group 4 compared to Group 1 |
Study: Efficacy of osteopathic manipulation as an adjunctive treatment for hospitalized patients with pneumonia

Study Type: Multicenter, randomized controlled trial

Techniques:
- B/L paraspinal thoracic muscle inhibition
- B/L rib raising
- Diaphragmatic indirect myofascial release
- Cervical soft tissue
- Suboccipital inhibition
- B/L myofascial release anterior thoracic inlet
- Thoracic lymphatic pump with activation
- Pedal lymphatic pump

Time: < 15 minutes (10 mins standardized and 5 min nonstandardized)
Twice per day
Outcome | Intention to treat analysis found no difference between groups
Per-protocol analysis
Significant difference in mean length of stay between OMT (3.5 days) and CCO (4.5 days) group but not versus LT (3.9 days).
Significant difference in duration of IV antibiotics between OMT and CCO group but not versus LT.
Significant difference in treatment endpoint of death or respiratory failure between OMT and CCO group but not versus LT.

Patient Perception of Osteopathic Manipulative Treatment in a Hospitalized Setting: A Survey-Based Study

1. Did you feel OMT was helpful in your hospital recovery?
2. Do you feel OMT helped your pain?
3. Do you feel OMT increased your need or frequency for pain medicines?
4. Do you feel manipulative medicine helped your breathing effort?
5. Did you use your incentive spirometer the first 24 hours after surgery?
6. If you did use your incentive spirometer, how often in the first 24 hours following surgery?
7. Do you feel OMT helped your bowel function?
8. Do you feel OMT helped reduce the intrusiveness of the hospital environment?
9. Do you feel OMT helped your overall comfort level while in the hospital?
10. Would you recommend OMT as part of other patients’ recovery and treatment plans?

Table
Perceived Beneficial Effects Among Hospitalized Patients of Osteopathic Manipulative Treatment According to Survey Responses (N=560)

<table>
<thead>
<tr>
<th>Patient Response, No. (%)</th>
<th>Medical* (n=46)</th>
<th>Musculoskeletal* (n=46)</th>
<th>Obstetric* (n=20)</th>
<th>Post-surgical* (n=46)</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Less need for pain medications</td>
<td>18 (39)</td>
<td>1 (2)</td>
<td>2 (10)</td>
<td>2 (4)</td>
<td>24 (44)</td>
</tr>
<tr>
<td>• Less pain</td>
<td>1 (2)</td>
<td>25 (56)</td>
<td>71 (35)</td>
<td>119 (26)</td>
<td>166 (29)</td>
</tr>
<tr>
<td>• Reduced stress and anxiety</td>
<td>30 (66)</td>
<td>13 (29)</td>
<td>27 (100)</td>
<td>144 (30)</td>
<td>194 (34)</td>
</tr>
<tr>
<td>• Improved recovery</td>
<td>31 (67)</td>
<td>2 (4)</td>
<td>36 (18)</td>
<td>10 (2)</td>
<td>60 (11)</td>
</tr>
<tr>
<td>• Improved overall comfort</td>
<td>34 (74)</td>
<td>4 (100)</td>
<td>28 (140)</td>
<td>50 (110)</td>
<td>156 (28)</td>
</tr>
</tbody>
</table>

* Patients admitted for internal medicine conditions comprised the medical group, patients with primary musculoskeletal conditions made up the musculoskeletal group, those admitted to the hospital for labor and delivery were obstetric patients, and patients being examined postoperatively comprised the postsurgical group.
The Health is always present.

To find health should be the object of the doctor. Anyone can find disease. – A.T. Still MD, DO Philosophy of Osteopathy

References