Osteopathic Manipulative Treatment as an Adjunct Therapy in Oncologic Supportive Care

Grand Rounds
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Objectives

Define

• Define osteopathic manipulative treatment and understand general principles for its use in cancer patients

Understand

• Understand the differences and similarities between allopathic and osteopathic physicians

Discuss

• Discuss the current and future utilization of OMT at Moffitt cancer center
History of Osteopathic Medicine & General Principles
History of Osteopathic Medicine

- Osteopathic origins
- A.T. Still, founder
- Defining Osteopathy
Osteopathic Training

DO = Doctor of Osteopathic Medicine

All DO’s attend four years of osteopathic medical school which includes allopathic curriculum (MD) alongside additional hands on manipulative training in order to facilitate a more holistic approach.

Upon graduation, DOs enter into ACGME residencies.

DOs practice in all 50 states.

Many DOs train in primary care but are found in all fields of medicine and surgery.
### Comparison of Osteopathic Physicians, Allopathic Physicians, and Chiropractors

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DO</th>
<th>MD</th>
<th>DC*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergrad Training</td>
<td>4 Year Degree</td>
<td>Same</td>
<td>90 Hours College Credit Some Require Degree</td>
</tr>
<tr>
<td>Grad Training</td>
<td>4 Year Osteo Medical Degree (DO)</td>
<td>4 Year Medical Degree (MD)</td>
<td>4 Year Chiropractic Degree (DC)</td>
</tr>
<tr>
<td>Post Grad Training</td>
<td>1 Year Internship 2-8 Years Residency depending upon the specialty</td>
<td>Same</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Same</td>
<td>None</td>
</tr>
<tr>
<td>Licensure/Scope of Practice</td>
<td>Fully Licensed to practice the complete spectrum of Medical and Surgical Specialties in all 50 states</td>
<td>Same</td>
<td>Licensed to practice Chiropractic Manipulation (see below)</td>
</tr>
<tr>
<td>Prescribe Medications</td>
<td>Yes</td>
<td>Same</td>
<td>No</td>
</tr>
<tr>
<td>Manual Medicine Training</td>
<td>Over 500 Hours (see below)</td>
<td>None</td>
<td>Over 500 Hours (see below)</td>
</tr>
</tbody>
</table>

[Link](http://osteopathichealthcareofmaine.com/osteopathy/do-vs-md-and-dc/)
Four Main Osteopathic Principles

- The body is a unit
- The body possesses self regulatory mechanisms
- Structure and function are reciprocally inter-related
- Rational therapy is based upon an understanding of body unity, self regulatory mechanisms, and the inter relationship of structure and function
Defining Osteopathic Manipulative Treatment (OMT)
Osteopathic Manipulative Treatment

- Osteopathic manipulative treatment (OMT) is a gentle, holistic and hands-on approach to help improve dysfunction and discomfort throughout the body.
- It can be used together with medications, surgery and other medical treatments.
Defining Somatic Dysfunction

- A limitation which can affect muscles, fascia, bones, ligaments, joints and nerves throughout body
- Tissue texture changes
- Asymmetry
- Restriction
- Tenderness
Indirect Techniques for Treatment of Somatic Dysfunctions

• Indirect techniques are passive and often do not require patient participation
  o Examples:
    • Mesenteric Lift
    • Counterstrain
Counterstrain
Mesenteric Lift
Direct Techniques for Treatment of Somatic Dysfunctions

• Direct techniques are active and sometimes require patient participation
  o Example: Muscle Energy as a Treatment for Low Back Pain
Muscle Energy
Osteopathy and Oncology
Osteopathy & Oncology

• “Healing a person can occur while losing a battle to disease...Although treatment of the whole person is the foundation of the physician’s interactions with the patient, it is especially important to emphasize this aspect of the relationship when you can no longer treat the disease”

• “Simple, Gentle, soft tissue manipulation without any pressure or thrust can be effective, especially in late stage, inactive, and bedbound patients”
Contraindications

- High Velocity Low Amplitude (HVLA) AKA “cracking”
- Lymphatic Pumps and Effleurage
- Batson Venous Plexus involvement
Research
Osteopathic Manipulative Treatment Effect on Pain Relief and Quality of Life in Oncology Geriatric Patients: A Nonrandomized Controlled Clinical Trial

• Study from Integrative Cancer Therapies published in 2018
• Oncology Rehabilitation Unit in Milan, Italy
• Goal to study effects of Osteopathic Manipulative Therapy (OMT)
  • Pain relief
  • Quality of life
• 23 hospitalized geriatric oncology patients
• Nonrandomized controlled trial with two groups
  • OMT in addition to physiotherapy
  • Only physiotherapy
Osteopathic Manipulative Treatment Effect on Pain Relief and Quality of Life in Oncology Geriatric Patients: A Nonrandomized Controlled Clinical Trial

• Results

  • OMT in addition to physiotherapy
    • Significant decrease in Numeric Rating Scale (NRS) scores at T2 (P = 0.004) and T4 (P = 0.002)
    • OMT significantly decreased pain levels after only 2 treatments and continued after 4 weeks
  
  • Physiotherapy (PT) alone
    • Similar results, as above, except NRS differed after 4 weeks of treatments
    • NRS score difference minor compared with OMT
  
  • OMT effective on management of pain in short and medium time periods compared with PT
Osteopathic Manipulative Treatment Research

- Various other studies demonstrating benefits of Osteopathic Manipulative Treatment (OMT)
- Extended research will be beneficial to capture benefits of OMT
Rollout
Osteopathic Manipulative Treatment At Moffitt Cancer Center

- Currently scheduling and treating our own clinic patients
- Plan to offer OMT appointments to all Supportive Care patients in near future
- Eventually will expand to offer appointments to all Moffitt patients
- Patients must become established with SCM prior to receiving OMT
References

American Osteopathic Association website: https://osteopathic.org/what-is-osteopathic-medicine/what-is-a-do/  Accessed on 9/1/21

Arienti, C., Bosisio, T., Ratti, S., Miglioli, R., Negrini, S.  Osteopathic Manipulative Treatment Effect on Pain Relief and Quality of Life in Oncology Geriatric Patients: A Nonrandomized Controlled Clinical Trial  Integrative Cancer Therapies  2018  Vol 17(4)  1163-1171


Questions