Promoting Osteopathic Principles and Practice

Every Patient, Every Day…

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Associate Dean for Clinical Education, Heritage College
Chief Academic Officer, CORE
October 2017
Disclosures

• Author of “Promoting Osteopathic Thought in Clinical Education, Every Patient, Every Day…”

• Recovering specialist
  – Pulmonary medicine, private practice

• Developing osteopath

• Chairman, ACGME Osteopathic Principles Committee
Let’s make it interactive!

• For open ended questions:
  Respond at PollEv.com/robertcain899
  or
  Text Robertcain899 to 22333 then enter your response (up to 300 characters)

• For multiple choice questions:
  Respond at PollEv.com/robertcain899
  or
  Text Robertcain899 to 22333 then enter A, B, C, D, or E
How many of you are attracted to the idea of leading or creating change in health care?
A profession with a mission…

“The object of this corporation is to establish a College of Osteopathy, the design of which is to improve our present system of surgery, obstetrics, and treatment of diseases generally, and place the same on a more rational and scientific basis.”

Legal Charter of the American School of Osteopathy, State of Missouri, circa 1894
# Osteopathic Medicine

## Why, How, and What

### Principles and Practices

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<tr>
<th>Why</th>
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<tbody>
<tr>
<td>How</td>
<td>Promotes structural health of the body</td>
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<tr>
<td>What</td>
<td>Incorporates manual manipulation of somatic structures</td>
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Objectives

Upon the completion of this session, attendees will be able to:

1. Reflect upon osteopathic principles and practice as a foundation for holistic health care
2. Describe a thought process for helping patients to achieve their health potential
3. Acknowledge challenges limiting a thought process for helping patients to achieve their health potential
4. Better recognize opportunities to promote osteopathic principles and practice for every patient, every day
“Determinants of Health”

- Structure-function relationships
  - Genetics
  - Immune system function
  - Nutritional state
- Sleep quality/rest-fatigue balance
- Functional state/level of activity and physical conditioning
  - Body habitus
  - Psychosocial health
  - Abuses/Behaviors
“Determinants of Health”

Structure-function relationships
Genetics
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*Psychosocial health*
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“The way we see the problem is the problem...”
Where is the least amount of training offered in most medical schools and residencies?
Where is the least amount of training offered in most medical schools and residencies?

A focus on the determinants of health and promoting or maintaining the health of a patient... *health care*
Developing a Health-oriented Approach to Patient Care

Health Potential

"Determinants of Health"

PATIENT

Initiators

Responses

Disease State (presentation)
Developing a Health-oriented Approach to Patient Care

**Disease Limited Lens**
Returning a patient to health and eliminating illness is focused upon treatment of the disease, the responses to initiators, and the initiators.

“Determinants of Health”

2010 Proactive Health Management, LLC.
Developing a Health-oriented Approach to Patient Care

Disease Limited Lens
Returning a patient to health and eliminating illness is focused upon treatment of the disease, the responses to initiators, and the initiators

“Determinants of Health”

Health Potential

PATIENT

Initiators

Responses

Disease State (presentation)

“Disease Care”

2010 Proactive Health Management, LLC.
Developing a Health-oriented Approach to Patient Care

Host Limited Lens
Maintaining a patient’s health or returning a patient to health and eliminating illness is focused upon the determinants of health

“Determinants of Health”

Health Potential

PATIENT

Initiators

Responses

Disease State (presentation)
Maintaining a patient’s health or returning a patient to health and eliminating illness is focused upon the determinants of health.

“Determinants of Health”

“Health Care”
Host + Disease Lens
Returning a patient to health and eliminating illness is focused upon treatment of both
the host and the disease
Developing a Health-oriented Approach to Patient Care

“Holistic Health Care”
(osteopathic)

Based upon the work of Edward Stiles, DO
# Osteopathic Medicine

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What about structural health?
Structure-Function Relationships

• The model presented potentially allows for rational application of OMT in patient care

Based upon the work of Edward Stiles, DO
Pikeville College-School of Osteopathic Medicine
The Role of Structural Health
Rational Application of OMT

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Pikeville College-School of Osteopathic Medicine
Developing a Health-oriented Approach to Patient Care

Health Potential

"Determinants of Health"

PATIENT

Initiators

Responses

Disease State (presentation)

COPD

Smoking

Airway inflammation
Loss of elastic recoil
Bronchospasm

Guideline-based diagnosis and treatment

"Disease Care"
Indications for OMT

• The presence of somatic dysfunction with the ability to impair normal human physiology that is amenable to OMT
  – Body systems with a significant musculoskeletal component are at risk for somatic dysfunction and therefore may benefit from OMT

• We should not use OMT simply because we can
• We likely should not apply generic techniques to a diagnosis

Based upon the work of Edward Stiles, DO
Pikeville College-School of Osteopathic Medicine
## A Classification of Somatic Dysfunction and Potential Roles for OMT

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Recognizing somatic dysfunction as a potential contributor to COPD symptoms
No more than 3 words, share your thoughts about the role of OMT for the treatment of COPD.
An Evidence Pyramid

- Personal Observation
- Case Study
- Case Series, Cohort Study
- Randomized-controlled Trial
- Meta-analysis
- Systematic Review

N=1
N=more
N=many

Decreasing Bias
Increasing Quality (Generalizability)
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N=1 → N=many

Increasing Quality (Generalizability)
Decreasing Bias
Scholarship

• Ernest L. Boyer, Scholarship Reconsidered, Priorities of the Professorate, The Carnegie Foundation for the Advancement of Teaching, 1990
  – Discovery
  – Integration
  – Application
  – Teaching
THE SCHOLARSHIP OF INTEGRATION

“In proposing the scholarship of integration, we underscore the need for scholars who give meaning to isolated facts, putting them in perspective. By integration, we mean making connections across the disciplines, placing specialties in a larger context, illuminating data in a revealing way, often education non-specialists too.”

“The connectedness of things is what the educator contemplates to the limit of his capacity. No human capacity is great enough to permit a vision of the world as simple, but if the educator does not aim at the vision, no one else will…”
References


Rib Dysfunction

"Extrinsic" Restrictions

Pulmonary Architecture
Mucociliary Escalator

Impaired clearance of secretions can occur arising from any event or dysfunction that disturbs normal airway clearance mechanisms.
- Chronic Bronchitis predominant
- Airway obstruction is the main problem

Airway supported by connective tissue

Elastic Recoil

Normal

Increased airway resistance due to thickened wall and secretions

Elastic Recoil

Chronic Bronchitis

Movement in 6-minute walk distance associated with treatment with tiotropium bromide is approximately 20m longer.
Functional improvement following use of an inhaled bronchodilator

- Cazzola M, Biscione, G, Pasqua F, Crigna G, Appodia M, Cardacci V, Ferri L, Use of 6-min and 12-min walking test for assessing the efficacy of formoterol in COPD, Respiratory Medicine, 102 (10), 1425-1430, 2008
  - 22 stable patients
  - Stage II to stage IV (predominantly GOLD stage III)
  - Increased 6 minute walk distance by a mean of 54 meters at 6 weeks

  - 32 patients
  - Severe COPD (GOLD)
  - Increased 6 minute walk distance by a mean of 57 meter at 6 weeks (Tiotropium)
Using Scholarly Questions to Promote Osteopathic Principles and Practices for Every Patient, Every Day…

- In a patient with COPD, does the addition of OMT to pulmonary rehabilitation (as compared to standard pulmonary rehabilitation) improve exercise tolerance?

Movement in 6-minute walk distance associated with pulmonary rehabilitation plus OMT is approximately...
Functional Improvement Associated with Application of OMT

  - 20 stable patients treated with standard bronchodilator therapy
  - Stage III, severe COPD (GOLD)
  - Treatment group increased 6 minute walk distance by 49 meters compared to control group
Creating a Personalized Best Practice: The Components of Evidence-based Practice

Best Evidence

Clinical Expertise

Clinical Circumstance

Patient Interest

Personalized Best Practice

Best practice as represented by a level stool with four equal legs


Brunner-La Rocca et al., Challenges in personalized management of chronic diseases—heart failure as prominent example to advance the care process, The EPMA Journal (2016) 7:2
Promoting Osteopathic Principles and Practice

3 Steps for Success

1. Approach patients from the perspective of delivering holistic health care, not disease care
   – Ask about and understand the patient’s determinants of health

2. Set expectations
   – Think about the role of structural health
   – Look for and treat somatic dysfunction

3. Demonstrate inquiry and improvement
   – Use scholarly questions as a development tool
Osteopathic medicine stands at the crossroads of what was, is, and will be...
Because of the osteopathic profession’s common philosophy, principles, and practices, we have an opportunity to make a difference for the public we serve…
IATP

You can’t find somatic dysfunction if you don’t look for it…