An Approach to Inpatient OMM

Darren Grunwaldt, D.O.

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Slides expurgated - - Supplement with images for lymphatics in general and for lungs in particular, side view anatomy of inhalation and exhalation, Schematics for parasympathetic and sympathetic innervation

Some unofficial reports…

- In years 1 and 2, we mostly treated people who were well, yet we found FRS's and ERS's to treat in the OMM lab
- Signs of Somatic Dysfunction can be found on practically any body at any given time (BUT they are often INSIGNIFICANT)
- However, someone sick enough to be admitted to a hospital who has "no somatic dysfunction" should give one pause

Some unofficial reports…

- Some things just don’t add up right.

BUT…

- We are not looking for any old signs of somatic dysfunction.
- We need to screen for pertinent positives and pertinent negatives just like we do with any other system on physical exam.

An Approach to OMM Screening

- Screening's one main goal…
  - FIND THE IMPORTANT SPOTS
    - AGR, Key Lesions
    - Myofascial Screen
    - Zink Patterns
    - Global and local listening
- With inpatients, we are NOT looking for the sources of their 20 year bout of intermittent sciatica. We are looking for the changes that tipped the scales and contribute to their hospitalization.

An Approach to OMM Screening

- Screen via Thinking
  - Look for the HIGH YIELD stuff!!!
  - Guiding thought processes?
  - Framework?

An Approach to OMM Screening

- Look for the HIGH YIELD stuff!!!
- Guiding thought processes?
- Framework?

- The 5 Models!

The 5 Models

- Keep in mind
  - All models are arbitrary simplifications on reality.
  - “5 Models” has evolved over time as a way to organize our thought processes.
    - (Check out each edition of Foundations to see some evolution in progress)

5 Models

(From Foundations page 5)

- **Biomechanical Model**
- **Respiratory-Circulatory Model**
- **Metabolic-Energy Model**
- **Neurological Model**
- **Behavioral Model**

5 Models

Model	Anatomical Correlates	Physiological Functions
Biomechanical	Postural muscles, spine, and extremities	Posture and motion

Goal: to remove restrictive barriers or forces and to enhance motion

5 Models

Model	Anatomical Correlates	Physiological Functions
Respiratory-Circulatory	Thoracic inlet/outlet, lower thoracic and pelvic diaphragms, tentorium cerebelli, costal cage (“Transition Zones” / Diaphragms and the “Thoracic Pump”)	Respiration, circulation, venous and lymphatic drainage

Goal: to improve all of the diaphragm restrictions of the body

5 Models

Model	Anatomical Correlates	Physiological Functions
Metabolic-Energy	Internal organs, endocrine glands	Metabolic processes, homeostasis, energy balance, regulatory processes; immunologic activities and inflammation and repair; digestion, absorption of nutrients, removal of waste; reproduction

Goal: to enhance self-regulatory and self-healing mechanisms, balance energy use, enhance immune, endocrine, and organ function

5 Models

Model	Anatomical Correlates	Physiological Functions
Neurological	Head (organs of special senses), brain, spinal cord, autonomic nervous system, peripheral nerves	Control, coordination, and integration of body functions; protective mechanisms; sensation

Goal: to attain autonomic balance, remove facilitation, decrease afferent signal “noise”, and relieve pain

5 Models

Model	Anatomical Correlates	Physiological Functions
Behavioral	Brain	Psychological and social activities, e.g., anxiety, stress, work, family; habits, e.g., sleep, drug abuse, sexual activities, exercise; values, attitudes, beliefs

Goal: to improve biological psychological, and social components of health

5 Models

(From Foundations page 5)

- **Biomechanical Model**
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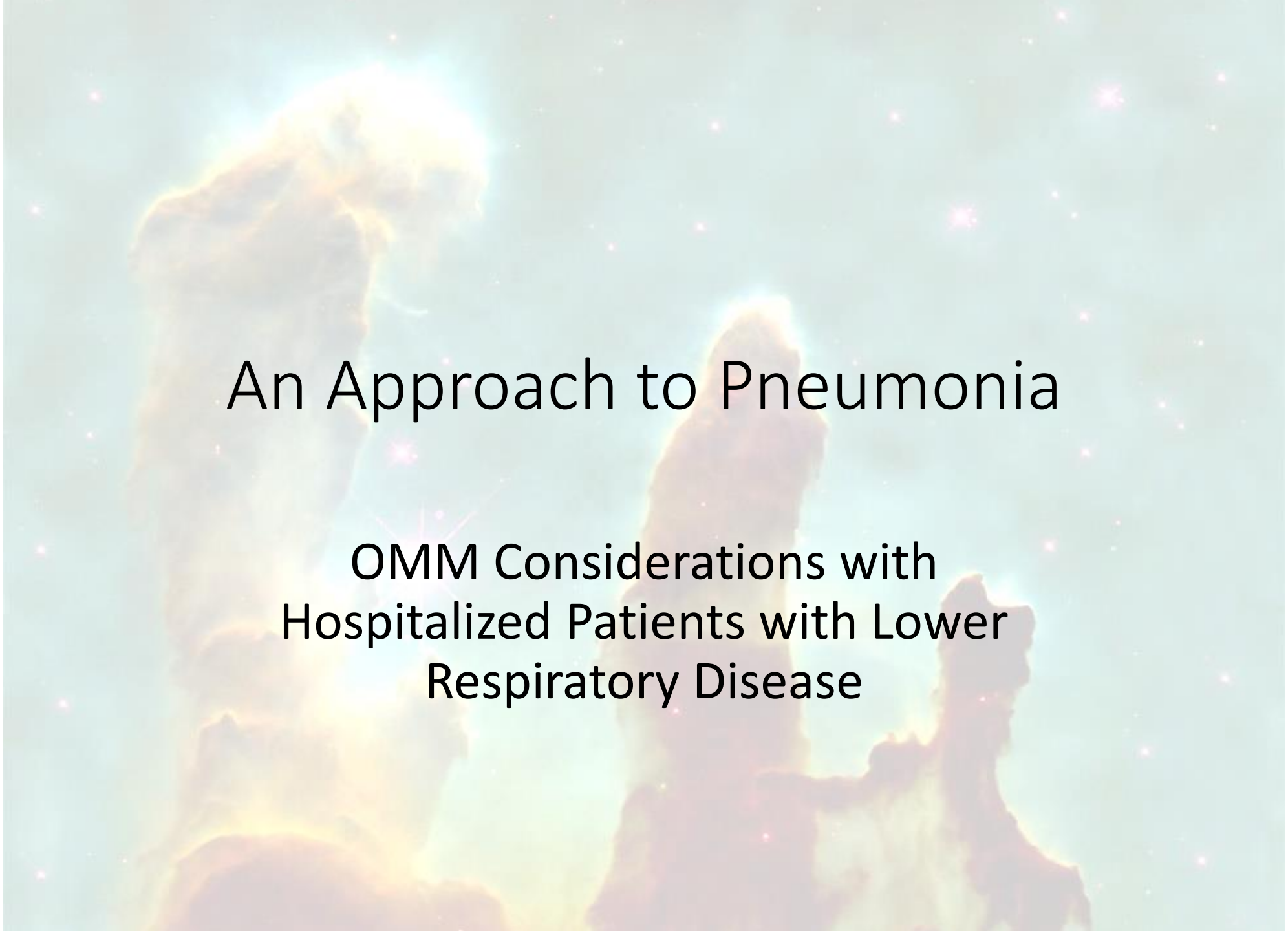
Apply these to thought process for Inpatient OMM

Thoracic Piston:
an overlap in the models

- Gross, large scale respiration requires many parts to work in harmony flexing, extending, internally and externally rotating.
- Takes energy
- Aids Lymphatics!
- What are the odds you will mess with something along T1-L2 when helping this?
- What happens when a person can take bigger, deeper, easier breaths?

Overlap in models: Lymphatics and Sympathetics

- Diameter of large lymphatic channels, including the thoracic duct, are under sympathetic control
- Hypersympathetic activity can reduce lymphatic flow



An Approach to Pneumonia

OMM Considerations with Hospitalized Patients with Lower Respiratory Disease

Approach to Pneumonia:

- Respiratory-Circulatory: Lymphatics
  - Drainage Pathways

Approach to Pneumonia: Lymphatics

- Drainage Pathways
  - Thoracic Duct and Right Lymphatic Duct
    - Netter Plate 197

Is that the end of the line of the lymph?

Respiratory-Circulatory Model

- Lymphatics
  - BEWARE CHF!
    - Ensure good UOP
    - Small dose
      - Passive opening of flood gates
      - Active assist in moving the flood

Respiratory-Circulatory Model

- Lymphatics
  - Baffles / Diaphragms
    - Ease of flow from one region to the next
    - Zink Compensatory Pattern
      - OA, CT, TL, LS (or Pelvis)

Approach for Pneumonia: Lymphatics

- Drainage Pathways
- Baffles / Diaphragms
- Thoracic Piston
  - Ribs, Diaphragm, Accessory mm,

Approach to Pneumonia: Neurologic

- Diaphragm C3-5 Phrenic Nerve
- Sympathetics T2-7 (8?)
- Parasympathetics Vagus (think OA, AA, OM area)

High Yield Areas
Based on the Respiratory-Circulatory and the Neurologic Models for Pneumonia

- What are the high yield places to examine on these patients???

High Yield Areas
Based on the Respiratory-Circulatory and the Neurologic Models for Pneumonia

- Upper and Lower Thoracic Aperture
  - C/T and T/L junctions
- ~OA
- Cervicals (especially “C0”, C3-5)
- T2-7
- Diaphragm
- Ribs

High Yield Areas
Based on the Respiratory-Circulatory and the Neurologic Models for Pneumonia

- “Treat what you find”
- “Know where to look”

The New OMM Screen

- When a patient comes in for Pneumonia and you're doing the H&P…
  - Look for the big whopping dysfunctions
  - Think about the high yield, likely areas
  - Treat PART of these quickly, gently, and probably indirectly
    - **Inpatient OMM is in small frequent doses!**

Sample of Early OMT for Inpatient Pneumonia (but base on the screens)

- OA jxn
  - ST decompression
- UTA (or C/T jxn)
  - Indirect stacking
- LTA (or T/L jxn)
  - Indirect stacking

To-do list

- Pick an inpatient diagnosis
- Use 5 Models to generate list of high yield areas
- Overlay list with findings from:
  - Zink Pattern / Myofascial Screen
  - Respiratory Screen
  - MET / Compliance and Motion Testing Screen
- Find top three spots within the choices you left yourself via the 5 models

References

- Atlas of Human Anatomy, 2nd Ed., Frank Netter. Novartis 1999.
- Ostepathic Considerations in Systemic Dysfunction, Revised 2nd Ed., Michael and William Kuchera. Greydon Press 1994.
- Google (images)
- Assorted lectures including with Michael Carnes, D.O.