ADDRESSING MENTAL HEALTH WITH OMM

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OBJECTIVES

• Discuss relevant anatomy and their potential correlation to mental health (focus anxiety and depression)

• Briefly discuss high yield potential somatic dysfunctions associated with anxiety and depression

• Demonstrate and practice several techniques designed to treat these issues
OSTEOPATHIC PRACTICES AND PRINCIPLES

• Four Tenets of Osteopathy

1. The body is a unit; the person is a unit of body, mind, and spirit.
2. The body is capable of self-regulation, self-healing, and health maintenance.
3. Structure and function are reciprocally interrelated.
4. Rational treatment is based upon an understanding of the basic principles of body unity, self-regulation, and the interrelationship of structure and function.

• The Original BioPsychoSocial Model of Medicine
HYPOTHESIS OF THE HYPER-REACTIVITY OF THE BRAIN-GUT AXIS

- Bidirectional pathways among
  - Central nervous system (CNS),
  - Autonomic nervous system (ANS), and
  - Enteric nervous system (ENS),
- Links emotional and cognitive areas in the CNS with visceral afferent sensation and intestinal function

Brain-gut axis (with emphasis on the central nervous system (CNS) psychological process).
I Wilhelmsen Gut 2000;47:iv5-iv7
RESEARCH SUPPORTING MIND AND BODY CONNECTION

• Vagal Tone
  • Pupillary constriction, slowed heart rate, increased peristalsis

• Negative Affects
  • Differentiating Fear vs Anxiety
  • Gender Differences

• Visceral Sensitivity
  • Anxiety and GI sx
FOCUSED STRUCTURAL EXAM...
“DOCTOR IT HURTS EVERYWHERE!”

• Physician should
  • Validate patient’s experience
  • Control expectations

• Patient should prioritize
10 BODY REGIONS

1. Head
2. Cervical
3. Thoracic
4. Lumbar
5. Sacrum
6. Pelvic
7. Lower Extremity
8. Upper Extremity
9. Abdomen
10. Rib
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SYSTEMS AFFECTED BY MENTAL HEALTH:

1. Neurological
2. Musculoskeletal
3. Cardiac/Circulatory
4. Pulmonary/Respiratory
5. Gastrointestinal
6. Genitourinary
7. Immune system
8. (All)
<table>
<thead>
<tr>
<th>Neuro</th>
<th>Cardio Pulm</th>
<th>GU</th>
<th>Immune/Lymphatic</th>
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</thead>
<tbody>
<tr>
<td>• Headaches</td>
<td>• Chest pain</td>
<td>• Dyspareunia</td>
<td>• Increase infections</td>
</tr>
<tr>
<td>• Amnesia</td>
<td>• Dyspnea</td>
<td>• Dysuria</td>
<td>(viral/bacterial)</td>
</tr>
<tr>
<td>• Dizziness</td>
<td>• Shortness of breath</td>
<td>• Dysmenoreah</td>
<td>• Slowed recovery from</td>
</tr>
<tr>
<td>• Vision changes</td>
<td>• Palpitations</td>
<td>• Sexual activity</td>
<td>illness</td>
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<table>
<thead>
<tr>
<th>MSK</th>
<th>GI</th>
<th></th>
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<tbody>
<tr>
<td>• Muscle pain, fatigue,</td>
<td>• Abdominal pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>weakness</td>
<td>• Bloating</td>
<td></td>
<td></td>
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<tr>
<td>• Back pain</td>
<td>• Diarrhea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Joint pain</td>
<td>• Dysphagia</td>
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<tr>
<td></td>
<td>• Nausea/vomiting</td>
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PARASYMPATHETIC NERVOUS SYSTEM

• Vagus = CN X
PARASYMPATHETIC INNERVATION

- Parasympathetic
  - Pelvic Splanchnics
PARASYMPATHETIC NERVOUS SYSTEM

- Stimulates secretion of gastrointestinal glands
- Increases peristalsis

Symptoms
- Headache
- Nausea/vomiting
- Diarrhea
- Cramping

"I'm afraid that your irritable bowel syndrome has progressed. You now have furious and vindictive bowel syndrome."
PARASYMPATHETIC NERVOUS SYSTEM

• CN X exits the jugular foramen (comprised of occiput and temporal bones)
• Somatic dysfunctions of
  • Occipito-atlantoid joint (OA),
  • Atlanto-axial joint (AA),
  • C2
  • Compression of occipitomastoid sutures
Neuroanatomy - Sympathetic
SYMPATHETIC NERVOUS SYSTEM

• Decreases mucosal defenses against acids and enzymes via vasoconstriction and alteration of buffers (bicarb and mucous)
• Increases sphincter tone
• Decreases peristalsis

• Symptoms
  • Constipation
  • Abdominal Pain
  • Flatulence
  • Distention
SYMPATHETICS

• Somatic Dysfunctions
  • T1–T4 (cardiac) and/or T5–L2 (gastrointestinal)
  • Fascial restriction of prevertebral ganglion
• The thoracic duct arises from the CC up to the thoracic inlet and can suffer from diaphragmatic or inlet fascial restriction
Diaphragmatic dysfunction is problematic because the cisterna chyli (CC) sits at the right crus of the diaphragm (L1-2).
OSTEOPATHIC APPROACH TO MENTAL HEALTH

• Goals:
  • Address Emotional Stressors
  • Early inclusion and validation of stress/psychiatric component
  • Examine for somatic dysfunction including facilitated segments
  • Normalize autonomic function
    • Balance sympathetic and parasympathetic
  • Relieve lymphatic and venous congestion
    • Correct any joint dysfunctions
OSTEOPATHIC APPROACH TO MENTAL HEALTH

• Current treatment for mental health
  • Fostering a strong relationship between the patient and physician
  • Cognitive behavioral therapy,
  • Psychosocial interventions, and
  • Psychiatric evaluation

• OMT should be considered
  • Vehicle for diagnosis of mental disease
  • Treatment of associated pain
TYPES OF OMT TO CONSIDER

• In general- All
  • Direct inhibition
  • Counterstrain
  • Myofascial release
  • Muscle Energy
  • HVLA etc

• For the more sensitive
  • Osteopathic Cranial Manipulative Medicine (OCMM)
  • Balanced ligamentous tension (BLT)
ADDRESSING THE HEAD

Patient Symptoms
• Patients present with headache
• Poor concentration
• Poor sleep

Physician Findings
• Head feels disproportionately heavy
• Temporomandibular Joint Dysfunction
• OM suture restrictions
• Venous sinous TTC
• Surrounding mm hypertonicity of cervical and thoracic mm
HEADACHE

- TMJ Dysfunction
  - Lateral Pterygoid
  - Medial Pterygoid
HEADACHE

• Trapezius
ADDRESSING SYMPATHETICS

- Sympathetic outflow tract → Rib Raising
- Ganglia → Myofascial Release
  - Celiac
  - Superior mesenteric
  - Inferior mesenteric
ADDRESSING PARASYMPATHETICS

- Vagus Nerve OA-C1-C2
  - Reduce restrictions
  - Condylar decompression
  - Soft tissue/facial release
- Splanchnic Nerves
  - Reduce restrictions
  - Sacral rocking
SUMMARY

• Validation of patient’s experience while managing expectations

• Use of somatic dysfunctions to address psycho social and emotional components

• Consult Psych

• Relationships
  • Sympathetic system and Parasympathetic system
  • Viscerosomatic and Somatovisceral reflexes

• Treatments
  • Sympathetics
  • Parasympathetics
  • Lymphatics
  • Facilitated segments
• Thoracics
  • Seated HVLA (Full Nelson)
  • (BLT to the spine)
• Upper Extremity
  • DIR trapezius
• Head
  • DIR to pterygoids
• Abdomen
  • Celiac ganglion release
  • Pre-sacral fascia release
• Sacrum
  • SI Gapping
  • Froleg sacral articulation
THANK YOU
REFERENCES

1. Wilhelmsen I. Brain-gut axis as an example of the bio-psycho-social model. *Gut* 2000;47:iv5-iv7


