CHAPMAN’ S REFLEXES AND Modern Clinical Applications

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WITH A THEORETICAL AND CLINICAL INTRODUCTION TO CHAPMAN´S REFLEXES

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NORWEGIAN SCHOOL OF HEALTH SCIENCES

"Lymph is Life"
- J. Gordon Zink
OBJECTIVES OF LECTURE:

• To present additional concepts of viscerosomatic reflexes and Chapman’s Reflexes with clinical applications in an Osteopathic Medical practice.

• To describe the neurolymphatic reflex system of Chapman and its modern significance in clinical diagnosis and treatment.

• To discuss the concepts that consideration of theses are neurophysiologically valid and are distinct, and useful in Diagnosis and Treatment.

• To provide an OMT Lab- teaching typical reflex points.
Key Concepts:

• Nerve “Ganglion Formed Contractions” within the fascia as localized congested points, secondary to visceral dysfunction.
• Described as neurolymphatic points that are usually deep to the skin and subcutaneous tissue, most often in deep fascia or periosteum.
• Points are diagnostic & treated by vibratory stimulation, OR after other OMT is given to related segment or organ.
Frank Chapman, D.O.

1871-1931

ASO Grad. 1899
CHAPMAN’S REFLEXES

- Frank Chapman, D.O. — graduated from the American School of Osteopathy in 1899, (Kirksville, Missouri) with Dr. Sutherland
- He was influenced by A.T. Still, MD, DO and J.M. Littlejohn, DO, MD
- Practiced with his wife Ada, also an osteopath, in Chattanooga, TN
- Brother-in-law, Charles Owens, DO
- Owens discovered Dr. Chapman was using a system of points about 1920 and later published an “Endocrine” Interpretation of Chapman’s Reflexes
CHAPMAN’ S REFLEXES- History

• In 1920, Chapman discovered and recorded “Neurolymphatic reflexes” as palpable 2mm sites in the somatic soft tissues with a Reflex Linkage to the Visceral Tissues including the lymphatics, organs and endocrine systems.

• Published, as a chart in his text: Lymphatic Reflexes, a Specific Method of Diagnosis and Treatment (Frank Chapman 1929)

• Owens wrote 2nd Ed. in 1937 as an Endocrine Interpretation of Chapman’s Reflexes

• Published by Owens, 1937, 1943 and 1980 by the AAO
Chapman’s Reflexes- History

• After the untimely death of Dr. Frank Chapman, his partner, Charles Owens developed postgraduate seminars describing viscerosomatic reflexes that reflect “lymph stasis” in the viscera that can cause organ dysfunction.

• Owens described a cascade of Somatic Dysfunctions from the pelvis affecting a “pelvic-thyroid-adrenal” axis, or “PTA Syndrome”
Chapman’s Reflexes- History

• Owens’ approach believed that the thyroid was central and incomplete oxidation of the cells would cause stasis of lymphatic fluids, retaining “toxins”.

• He believed that OMT though the autonomic nervous system, the lymphatic system, and the endocrine glands would release inhibited centers.
Chapman’s Reflexes- History

• However, Paul E. Kimberly, DO, FAAO of Kirksville, in 1970s correlated the neurolymphatic points at sites with the cutaneous-lymphatic vascular bundles reflexed from visceral sites by the anterior and lateral cutaneous nerves-all related to the facilitated segment concept of Korr and Denslow of KCOM.
Chapman’s Reflex- History

• Later in 1990s, more information confirmed that the Chapman reflexes are primarily correlated with the sympathetic nervous system with a lymphatic response, consistent with the sympathetic innervation of the dysfunctional organ – Michael Kuchera, DO, FAAO
Inspired by the medicine of the day and the training in physiology, neurology and lymphatic system primarily by CM Littlejohn, DO

Observation of over 25 years of osteopathic medical practice

The original publication was: *Lymphatic Reflexes: A Specific Method of Osteopathic Diagnosis and Treatment* (1928)

"Impaired or altered function of related components of the somatic system, skeletal, arthrodiyal, and myofascial structures and their related vascular, lymphatic and neural elements."

Somatic Dysfunction: Mirror of Aberrant Body Physiology

Somatic Dysfunction

- Biomechanical & Postural
- Neurological – ANS
- Respiratory – Circulatory
- Metabolic
- Behavioral

Unit of functions: body, mind and spirit

Effects

Neumann
ORGANIZATIONAL MODEL

PRIMARY MACHINERY OF LIFE (KORR)

SYSTEM TO ENABLE ACTIVITIES OF DAILY LIVING

2/3 OF THE TOTAL BODY MASS ALLOPATHIC TENDS TO DISCOUNT

SECONDARY MACHINERY

ROLE: TO MEET THE METABOLIC DEMANDS OF THE PRIMARY MACHINERY

COUNTERSTRAIN

INTEGRATED MODEL OF CHAPMAN’S REFLEXES

SOMATO

VISCERAL
Peripheral Input and Its Importance for Central Sensitization

Ralf Baron, MD, PhD,1 Guy Hans, MD, PhD,2 and Anthony H. Dickenson, BSc, PhD, FMedSci3

Many pain states begin with damage to tissue and/or nerves in the periphery, leading to enhanced transmitter release within the spinal cord and central sensitization. Manifestations of this central sensitization are windup and long-term potentiation. Hyperexcitable spinal neurons show reduced thresholds, greater evoked responses, increased receptive field sizes, and ongoing stimulus-independent activity; these changes probably underlie the allodynia, hyperalgesia, and spontaneous pain seen in patients. Central sensitization is maintained by continuing input from the periphery, but also modulated by descending controls, both inhibitory and facilitatory, from the midbrain and brainstem. The projections of sensitized spinal neurons to the brain, in turn, alter the processing of painful messages by higher centers. Several mechanisms contribute to central sensitization. Repetitive activation of primary afferent C fibers leads to a synaptic strengthening of nociceptive transmission. It may also induce facilitation of non-nociceptive Aβ fibers and nociceptive Aδ fibers, giving rise to dynamic mechanical allodynia and mechanical hyperalgesia. In postherpetic neuralgia and complex regional pain syndrome, for example, these symptoms are maintained and modulated by peripheral nociceptive input. Diagnosing central sensitization can be particularly difficult. In addition to the medical history, quantitative sensory testing and functional magnetic resonance imaging may be useful, but diagnostic criteria that include both subjective and objective measures of central augmentation are needed. Mounting evidence indicates that treatment strategies that desensitize the peripheral and central nervous systems are required. These should generally involve a multimodal approach, so that therapies may target the peripheral drivers of central sensitization and/or the central consequences.
Pain: "The psychical adjunct of a protective reflex" (Sherrington, 1900)

Psychological and Behavioral Responses

Signal Transmission and Modulation

Tissue Injury: "Sensitizing soup"

The hypoalgesia from joint manipulation appears to involve the descending pain inhibitory systems: PAG, serotonergic and noradrenergic pathways.

Reduced afferent input from peripheral nociceptors

Segmental and descending modulation of nociceptive signal transmission

Changes in fluid flow physiology:

Alteration of the biochemical environment around nociceptors
To Appreciate the Development of Chapman’s Reflexes We Need to Go Back to the Early Osteopathic Concept in the Mind of Dr. A.T. Still

• "When Harvey solved by his powers of reason a knowledge of the circulation of blood, he only reached the banks of the river of life”

• Still’s concept of the relationship with living anatomy and health was influenced by the notion of natural body resistance and with this, several generalizations:
  • “The blood, the lymph and all other body fluids contained the chemical and biological healing properties”
  • Free tissue circulation (arterial) and elimination (venous and lymphatic) was important in curing disease
  • The importance of cellular drainage and the part played by the fascia in aiding or obstructing such elimination
  • “A failure of tissue cells to function because of inefficient capillary, lymph and intercellular fluid circulation was Dr. Still’s explanation of Virchow’s theory that disease begins in the cell”
    • Dr. Still fully appreciated that lymphatic circulation, cellular elimination, cellular metabolism and the free circulation of intercellular fluid were important
    • His theory of venous and lymphatic drainage fully explains the mechanism by means of which stasis causes a perversion of the physiological environment of tissue cells

Deason W.J. Bldy fluids: the original osteopathic concept. The Osteopathic Profession, April 1940
”To any person born above the condition of an idiot, who has familiarized himself with anatomy, in working with the machinery of life, knows that all diseases are mere effects and the cause being a partial or complete failure of the nerve to properly conduct the fluids of life”
"To any person born above the condition of an idiot, who has familiarized himself with anatomy, in working with the machinery of life, knows that all diseases are mere effects and the cause being a partial or complete failure of the nerve to properly conduct the fluids of life"
Definitions Evolved:

• The original description of “Ganglion-formed” became “Ganglia formed contracted lymphoid tissue nodules” - Frank Chapman, D.O. 1928

• "It seemed to me that the lymphatic system had much more profound influence on bodily functions than it had been given credit for ... my special plea is on behalf of the lymphatic aspects of disease, which I regard of paramount importance whether they originated in bony lesions, infections, toxins, or other cause.” - Frank Chapman, D.O. 1937

• “A Chapman lesion is the result of a lymph stasis in the viscus. This lymph stasis is responsible for the dysfunction of the organ. Both the lymph stasis and the resultant dysfunction are reflexly responsible for the Chapman lesion, due, in part, to nerve impulse and also to a chemical reaction of the lymphoid tissue in which the lesion is found” - Charles Owens, D.O. 1944

• “I believe that it is an autonomic nerve reflex, and that the lesion or nodule is a granulation tissue reaction” - H.L. Samblanet, D.O. 1944
What is a Chapman’s Reflex*?

• Chapman’s Reflex Points are small, discrete tissue texture changes located just deep to the skin. The Chapman point is an outward physical representation of internal dysfunction or pathology of an organ system.

• **Chapman Reflex Definition**: 1. A system of reflex points that represent as predictable anterior and posterior fascial tissue texture abnormalities (plaque-like changes or stringiness of the involved tissues) assumed to be reflexions of visceral dysfunction or pathology. Owens

*Note: “**Reflex**”: An automatic instinctive unlearned reaction to a stimulus.
**WHAT IS CHAPMAN’S REFLEXES?**

<table>
<thead>
<tr>
<th>DEFINITION</th>
<th>AUTHOR</th>
</tr>
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- Discrete clinical findings in the form of predictable palpatory changes on the body’s surface considered to relate to systemic dysfunction and pathophysiology: can be considered the peripheral and neurolymphatic component of a viscerosomatic reflex

- CR has traditionally been considered the end organs for lymphatic and sympathetic changes associated with the pathophysiological changes in the viscera

- The changes in the viscera which initiates the CR may be inflammation, spasm and / or distention of the organs
Chapman Points - General Characteristics

• Chapman felt the points were neural, endocrine, and lymphatic manifestations of visceral disease
• Chapman felt 80% of illness related to lymphatic blockage and 20% to bony dysfunctions
• Dissections by Fred Mitchell, Sr., DO of the points have not shown good histological correlation
• Today it is believed they are viscerosomatic reflexes
Chapman Points
General Characteristics

• Points are located all over the body
• The location of specific point and related organ are consistent with good interoperator reliability
• Anterior and posterior points occur for the same organ
• Anterior points are primarily diagnostic with posterior point usage focused on treatment
• The points are located at free nerve endings
• The points develop secondary to irritation/inflammation relative to specific organs
Chapman Points: General Characteristics

• Chapman described them as small nerve ganglion formed contractures
• Located in the deep fascia (or periosteum) below the skin
• Palpated as small, edematous, tense, and tender areas
• Described as stereo-topically as a BB, or tapioca
• Size variable with time dysfunction present and severity
Distinguishing Characteristics

- Small (2-3mm Diameter)
- Smooth
- Firm
- Discretely palpable
- Partially fixed
- Can not be displaced
- **Painful** with dysfunction of the segment
Chapman Points: General Characteristics

• Thought to be a result of CSF or lymphatic deposition/congestion from nerve sheaths at the nerve ending

• Related principally to the sympathetic fibers of the autonomic nervous system

• There is overlap with Jones’ Counterstrain, Travel’s Trigger Points and Chinese Acupuncture points-Kuchera 2012 (Meyers/Devine; Clinical Counterstrain)
Speransky (1944) published research that demonstrated that CSF (Cerebrospinal Fluid) travels through the lymphatic structures to all the body.

Erlinghauser (1959) published research that further proved the CSF travels through tubular connective tissue fibrils to lymphatic sites via nerve axons.

1996 - Willard shows neurolymphatic, neuro-immune and neuro-endocrine relations.
Chapman’s Reflexes - Research

- Biopsy has not identified tissue change

- Philadelphia study in 2003 found predictive value in lung Chapman’s points in hospitalized pneumonia patients

- Hypertension study in 1979 found increased aldosterone levels with stimulation of adrenal reflex

- Case study reports from various sources including testimony from Chapman, Owens, Mitchell Sr., and Sutherland
Diagnostic Methodology

• Palpation of the points is done before any other manipulation is done
• Anterior points are used for diagnosis because they are more spread out and more tender
• Posterior points can also be used for diagnosis and to correlate with anterior points
• Refer to the charts for the exact location and learn the points most useful to your practice
Diagnostic Methodology (cont.)

- Take a good history of the presenting problem
- Palpate the anterior points and identify the related organ(s)
- Another option is to palpate first, then investigate Review of Systems (ROS) questions related to palpatory findings
Treatment Methodology

• Identify the corresponding posterior point to the anterior point found
• Apply firm, gentle pressure to the point in a circular fashion
• Continue the pressure until point softens and reduced tenderness
• Treatment time is usually 10 – 30 seconds
Treatment Methodology (cont.)

• Recheck the tenderness of anterior point
• If the anterior point is still tender, treat the anterior point
• Recheck tenderness of both points
• Change of the organ function is not normally observed for 24 hours
• Treatment can be repeated until changes of organ function are noted or more needed
Unlocking the Secret’s of the Thoracic Cage: Chapman’s Reflexes

Pragmatic Lecture Points

Look for:
- Very Tender
- Tissue Texture Changes
- Ganglion-Formed
- Gritty to Tapioca-like
- Part of “Pattern” of SD
- Specific Locations
- Correlation with H&P

Grade 1-2-3
More KEY CONCEPTS OF CHAPMAN’S REFLEXES:

- Today’s use of the anterior and posterior reflex points are primarily for diagnosis, but may be increasingly used in treatment.
- Distinguishing characteristics and similarities to other somatic reflex systems.
- How to palpate and treat Chapman’s
- Locations and uses of Chapman’s Reflexes
- Goal is to “rebalance” rather than “stimulate” or “inhibit” reflex areas in most clinical applications
PALPATORY CHARACTERISTICS

• Are located deep to skin and the deep fascia or on periosteum.
• Are usually paired and found on the anterior and posterior surfaces of body and correspond to the same viscus.
• A Chapman’s point is fixed in its anatomic location.
• The sites are more tender to palpation than expected by the patient as well as the examiner.
What is the Chapman’s Reflex Site?

• Is a neurolymphatic ganglion formed structure not identifiable by ordinary histological biopsies.

• Appears to be a concentration of ionized fluid or edema and can be identified by palpation and thermography.

• Typically are viscerosomatic representations in or on somatic structures.

• Sympathetic nervous system generates and maintains the reflexes.

• May show up chemically on microsampling of palpated sites
Tender and Trigger Points go to viscera too!

*Palpation and Treatment:*
How do we locate and palpate Chapman’s Reflexes?

- Palpation is the primary method of diagnosis and the actual palpatory technique vary with the localization of the point(s)

- CR points is in most cases deep to the subcutaneous fascia towards the deeper fascia and periosteum (sometimes they are even under muscles)

- The size can vary from a BB pellet to an almond

Palpatory Qualities:
- Gangliform (“ganglion”)
- Oedematous, stringy, ridgy, ropy, fibrotic, spongy
Anterior points very good for diagnosis
Posterior points primarily therapeutic

Diagnostic
Posterior TTA
Treat ‘til Change

Post. nerve ramus
Ant. nerve ramus or intercostal nerve
Int. intercostal membrane
External intercostal

Dorsal root ganglion
Rami communicantes
Recurrent meningeal nerve
Transversus thoracis

Ant. intercostal artery
Int. mammary artery
Perforating (cutaneous) arterial branch
Pragmatic Big Picture for Chapman’s Reflexes (ANS Distribution)

- EENT Points
- Heart-Bronchus -Lungs
- Stomach - Pylorus
- GU System
- Gonadal
- Colon-Prostate
Anterior Points
1. EENT and Neck
2. Cardiopulmonary
3. Upper Gastrointestinal
4. Genitourinary
5. Lower Gastrointestinal

Posterior Points
6. EENT and Neck
7. Arm
8. Cardiopulmonary
9. Upper Gastrointestinal
10. Genitourinary
11. Lower Gastrointestinal
12. Leg

Regions where you find system-groups of Chapman’s Reflex Points
All are bilateral except where indicated as \( R \) for right and \( L \) for left.
30-second Chapman’s Screen

- not usually tested in 30-second screen

Chapman’s reflexes you did NOT test:

- URI (But you could—see chart marked ENT)
- Cerebellum
- Tongue
- Middle ear
- Neck
- Thyroid
- Upper limb

45-second Chapman’s Screen

- not usually tested in 45-second screen

You have tested:

- ENT
- Cardiovascular
- Pulmonary
- Upper GI Tract, (stomach, liver, gall bladder, spleen spleen, pancreas)
- Adrenals
- Urinary Tract (urethra, ureters, bladder, kidneys)
- Pelvic Viscera (ovary, and broad ligaments)
- Lower GI Tract (ascending and descending colon and sigmoid colon)
- Broad Ligament or Prostate
Chapman’s reflexes: Upper Respiratory Tract
Cardiovascular and Pulmonary

Rotatory stimulation of the posterior Chapman's points (T11-12) depicted above have been shown to effectively lower blood pressure and decrease serum aldosterone levels.
Upper and Lower GI

Ganglia: Nerve Root: Function and Symptom:
- Celiac T5-T9 Digestion
  heartburn/reflux
- Sup Mes T10-T11 Absorption
  gas/bloat/cramp
- Inf Mes T12-L2 Elimination
  diarrhea/constip

CHAPMAN'S REFLEXES
Visceral Reflex

Viscerosomatic Reflex

Peritoneocutaneous Reflex

Collateral Ganglion

Paraspinal & Chapman’s Guarding - Rebound

Pattern of Increasing Severity
Comparisons

Chapman

- Mostly in Deep fascia or periosteal tissue
- Discrete, fibrospongy, ropy
- Usually very painful and localized, sharp pain that does not radiate

MF Trigger Point

- In deep muscle fibers or myotendinous junctions
- Taut band in muscle
- Localized pain that refers on myofascial pattern
How to Treat with Chapman’s Reflexes:

- “Normalize the pelvis” first with OMT as part of a treatment sequence.
- Treat Anterior Points first, then Posterior, then recheck the Anterior- if down stop.
- Treat the points with firm pressure from the volar-distal finger pad of one finger.
- Apply moderate and even uncomfortable pressure to the ganglion formed mass.
- Use slow circular motion to flatten the fluid site.
- Continue rotary pressure for 10-30 seconds until the mass softens or too much pain.
- Do not “numb” the site with over treatment!
VIEWS OF THE VARIOUS CHAPMAN REFLEX POINTS (look to charts)

• **FOR DIAGNOSIS**: Note the cardiac, pancreas, small bowel, stomach, gall bladder and appendix sites.

• **For Treatment**: note the nasal, sinusitis, tonsillitis, bronchitis, upper and lower lung, colitis, otitis media, neurasthenia (for chronic fatigue), kidney, bladder, cardiac for arrhythmias.
Upper GI, Liver and Pancreas Chapman’s Sites

Anterior Sites

Liver
Liver, Gall B
Pancreas

Stomach acid
Stomach peristalsis

Posterior Sites

Pylorus
Common Treatment Expectations – Symptomatic Relief: Lower GI System

**Patient with Irritable Bowel Dysfunction**

- Bilateral iliotibial band tenderness and TTC (Chapman's)
- Thoracolumbar SD and TTC
- Left SI TTC
- Post. Chapman's, lumbar TTC, (low-back pain)
- Lower rectus abdominis muscle TP and pain pattern
- Inferior mesenteric ganglion TTC
- Sigmoid loop palpable

**Pattern of Multiple Somatic Dysfunctions Associated with 1° (Viscerosomatic) or 2° (Somatovisceral) Irritable Bowel Syndrome**
Intestine Chapman Reflex Diagnosis and Treatment Sites

Large Intestines

- Cecum
- Sigmoid
- Ascending Colon
- Descending Colon
- Hepatic Flexure
- Splenic Flexure

Anterior Points

Posterior Points
Colon “flipped” anatomically on this axis

Ileocecal area
Ascending colon
Hepatic flexure
Right half of transverse colon

Iliotibial bands

Sigmoid colon
Descending colon
Splenic flexure
Left half of transverse colon

Chapman's reflex areas for the colon
<table>
<thead>
<tr>
<th>Location</th>
<th>Palpatory Quality</th>
<th>Pain Characteristics</th>
<th>Association</th>
<th>Classic Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapman reflex</td>
<td>Granular feel of tissues overlying the CR. The CR itself is gangliaform, contracted, edematous, ridge-like or ropy, fibrospony, or shotty. Varying in size from a pinhead to that of an almond</td>
<td>Tenderness ranging from slightly painful to almost unbearable. It is well localized under the finger and has an almost sharp quality. No pain radiation.</td>
<td>Viscerosomatic tissue reflex with definite relationship to viscus or gland; pattern of associated somatic dysfunction includes somatic dysfunction in related collateral ganglion, paraspinal tissues (same facilitated segment) and perhaps cranial or sacral referral site of viscus</td>
<td>Rotary stimulation for 20–60 s</td>
</tr>
<tr>
<td>MTrP</td>
<td>Distinct nodules (contraction knots) at the MTrP felt in the muscle and a rope-like induration (taut band)</td>
<td>Localized pain in taut band of muscle with referred pain to a characteristic distant region based on myofascial referral maps</td>
<td>Local pathophysiology in the muscle exhibiting the MTrP. May cause motion restriction in associated joints; often stimulation of point causes taut band twitch</td>
<td>Injection, dry needling, ischemic compression, postisometric relaxation (MET), spray and stretch, counterstrain</td>
</tr>
<tr>
<td>Tender point</td>
<td>Discrete, small, tense, and edematous, about the size of a fingertip</td>
<td>Exquisitely tender, very localized with no pain radiation. Typically at least four times as tender as the adjacent tissues</td>
<td>Specific muscle or joint somatic dysfunction</td>
<td>Counterstrain</td>
</tr>
</tbody>
</table>

Fossum, Kuchera and Devine (2010)
<table>
<thead>
<tr>
<th>Posterior Counterstrain Point Location</th>
<th>Potential Visceral Relationship</th>
<th>Similar Chapman's Point Location (ACR=Ant Chapman Reflex; PCR=Post Chapman Reflex)</th>
<th>Comments or Other Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1C lateral</td>
<td>Retina, Conjunctiva, Middle Ear</td>
<td>PCR for Middle Ear &amp;/or Conjunctiva</td>
<td>Acupuncture Point GB-20 (<em>fengchi</em>) associated with blurred vision, red eyes &amp; night blindness; also used for dizziness &amp; vertigo</td>
</tr>
<tr>
<td>P1C (inion)</td>
<td>Migraine Headache; Pain behind eye</td>
<td></td>
<td>GV-16 (<em>fenglu</em>) used in migraines, eye pain, nosebleeds</td>
</tr>
<tr>
<td>P2C lateral</td>
<td>Sinuses; Pharynx</td>
<td>PRC for Sinuses &amp;/or Pharynx</td>
<td>BL-10 (<em>tianzhu</em>) used for stuffy nose &amp; sore throat</td>
</tr>
<tr>
<td>P2T &amp; P3T lateral</td>
<td>Bronchus; Upper Lung; Esophagus; Myocardium</td>
<td>PCR in tissues over T2 and T3 lamina (between spinous &amp; transverse processes) for Thyroid, Esophagus, Bronchus, Upper Lung, &amp; Myocardium</td>
<td>P2T=BL-12 (<em>fengmen</em>) used for cough/fever of common cold; P3T=BL-13 (<em>teishu</em>) is the most common Acu point used for asthma(^{18}) (also used in coughing, hoarseness, hematemesis, dyspnea &amp; chest pain)</td>
</tr>
<tr>
<td>P3T spinous</td>
<td>Myocardium; Upper Lung</td>
<td>(Sympathetics: T3 facilitated segment to lungs and heart ventricles)</td>
<td>GV-12 (<em>shenzi</em>) used in chest pain, asthma, cough (classically whooping cough) and chronic lung conditions</td>
</tr>
<tr>
<td>P4T lateral</td>
<td>Myocardium; Lower Lung</td>
<td>PCR in tissues over T4 lamina (between spinous &amp; transverse processes) for Lung/Myocardium</td>
<td>Correlation with BL-14 (<em>jueyinshu</em>) used for palpitations, cough &amp; chest pressure</td>
</tr>
<tr>
<td>P5T spinous</td>
<td>Cardiac Arrhythmias</td>
<td>(Sympathetics: T4-6 facilitated segments to heart atria)</td>
<td>GV-11 (<em>shendao</em>) used for cardiac arrhythmias / palpitations, mental stress &amp; panic attacks, cough</td>
</tr>
<tr>
<td>P5T-P6T lateral</td>
<td>Arrhythmias; Stomach (L); Liver/GB (R)</td>
<td>PCR in tissues over T5-6 lamina (between spinous &amp; transverse processes) for stomach (left) &amp; liver/gall bladder (right)</td>
<td>BL-15 (<em>xinshu</em>) for heart palpitations &amp; hematemesis; and BL-16 (<em>dushu</em>) for chest pain &amp; stomach ache</td>
</tr>
<tr>
<td>P6T spinous</td>
<td>Stomach; Spleen</td>
<td>(Sympathetics: T5-9 facilitated segments to upper gi including spleen; stomach-asthma connection?)</td>
<td>GV-10 (<em>lingtai</em>) used for infectious processes (immune system) and for asthmatic cough</td>
</tr>
<tr>
<td>P7T lateral</td>
<td>Spleen (L), Pancreas (R)</td>
<td>PCR in tissues over T7 lamina for spleen (lt) &amp; pancreas/pylorus (rt)</td>
<td>BL-17 (<em>geshu</em>) used for vomiting, dysphagia, hematemesis; also for hiccups (diaphragm)</td>
</tr>
</tbody>
</table>
**Pathophysiological Processes in the Viscera with Associated Neural, Vascular and Lymphatic Elements**

**Facilitation**

<table>
<thead>
<tr>
<th>Viscerosomatic Reflexes</th>
<th>Chapman's Reflexes</th>
<th>Jarricot Reflexes</th>
<th>Fascial Reflexes</th>
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<tr>
<td>TTA’s in the metameric related segments of the spine</td>
<td>Approximately 200 reflex points on the anterior and posterior body surface</td>
<td>Zone of maximum tenderness within a dermatome</td>
<td>Specific and localised changes in the superficial fascia</td>
</tr>
<tr>
<td>Restricted ROM and TTAs in the subcutaneous tissue and fascia</td>
<td>Very Specific: Diagnostic, DD or to establish a priority</td>
<td>Increased sensibility of skin (hyperalgesia).</td>
<td>Test in sitting: Skin &amp; subcutaneous tissue through skin drag</td>
</tr>
</tbody>
</table>
DERMALGIES - REFLEXES
THORACO-ABDOMINALES
(projection schématique)

FASCIAL REFLEXES
Dr. Addison O'Neill
Daytona Beach, FLA
June 2, 1934
### Table: Examples of palpatory technique for various Chapman’s Reflex points

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<thead>
<tr>
<th>Chapman’s Reflex Point</th>
<th>Palpatory Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad ligament (female) and prostate (male)</td>
<td>Deep kneading pressure with lift (should be longitudinal), fingers flexed towards palm of hand</td>
</tr>
<tr>
<td>Colon</td>
<td>Deep pressure with longitudinal rotary movement</td>
</tr>
<tr>
<td>Ovarian</td>
<td>Gentle rotary movement</td>
</tr>
<tr>
<td>Kidneys</td>
<td>Deep firm rotary movement</td>
</tr>
<tr>
<td>Adrenals</td>
<td>Deep firm rotary movement</td>
</tr>
<tr>
<td>Duodenum</td>
<td>Gentle but firm rotary movement</td>
</tr>
<tr>
<td>Stomach</td>
<td>Firm rotary movement</td>
</tr>
<tr>
<td>Spleen</td>
<td>Firm rotary movement</td>
</tr>
<tr>
<td>Small intestine</td>
<td>Gentle but firm rotary movement</td>
</tr>
<tr>
<td>Eye</td>
<td>Gentle but firm rotary movement</td>
</tr>
<tr>
<td>Ear</td>
<td>Gentle rotary movement</td>
</tr>
<tr>
<td>Throat, nasal, bronchial, pharynx, larynx, Esophagus, Tongue</td>
<td>Firm rotary movement</td>
</tr>
<tr>
<td>Upper and lower lung</td>
<td>Deep firm rotary movement</td>
</tr>
<tr>
<td>Arms</td>
<td>Deep firm rotary movement</td>
</tr>
<tr>
<td>Neuritis of the upper limb</td>
<td>Deep firm rotary movement (sometimes steady pressure)</td>
</tr>
<tr>
<td>Cerebellar</td>
<td>Firm but gently rotary movement</td>
</tr>
<tr>
<td>Cerebral</td>
<td>Gentle rotary movement</td>
</tr>
<tr>
<td>Heart</td>
<td>Firm gentle rotary movement</td>
</tr>
<tr>
<td>Neurasthenia</td>
<td>Firm deep rotary movement</td>
</tr>
<tr>
<td>Atonic constipation</td>
<td>Deep firm rotary movement</td>
</tr>
<tr>
<td>Appendix</td>
<td>Gentle rotary movement</td>
</tr>
<tr>
<td>Urethral</td>
<td>Deep but gentle rotary movement</td>
</tr>
<tr>
<td>Cystitis</td>
<td>Deep but gentle rotary movement</td>
</tr>
<tr>
<td>Sciatic – neuritis</td>
<td>Firm and deep rotary movement</td>
</tr>
<tr>
<td>Wry neck</td>
<td>Firm rotary movement</td>
</tr>
<tr>
<td>Thyroid</td>
<td>Deep rotary movement</td>
</tr>
<tr>
<td>Gallbladder and liver</td>
<td>Firm but gentle rotary movement</td>
</tr>
</tbody>
</table>

Fossum, Kuchera and Devine (2010)
Sometimes the CR points are very deep and it may be necessary to relax the superficial muscles to get to them.

This especially applies to the posterior paravertebral Chapman’s reflex points.
For a Chapman’s Reflex to be positive, BOTH the anterior and posterior points needs to be present.

Because the anterior points are more widespread (more distance between points) they are more often used for diagnostic screening than the posterior points.

This eliminates possible confusion as to which points and organs are involved.

The positive anterior CR point is ALWAYS confirmed with the presence of a posterior CR point.
TREATMENT APPROACHES USING CHAPMAN’S

- Traditional approach based on patterns of Chapman’s Reflexes combined with the PTA – syndrome (Pelvic – Thyroid – Adrenal Syndrome)
  - Chapman, Owens, Arbuckle, Lippincott

  **Modern Interpretation:**
  The clinical integration of CR following the improvement of respiratory hydrodynamics using the respiratory – circulatory model of care treating the (1) four diaphragmatic regions and (2) augmenting venous and lymphatic return

- Selected use of Chapman’s Reflexes based on clinical presentation and other OM techniques to target related autonomic and lymphatic dysfunctions
  - Kimberly, Kuchera and Kuchera

  **Modern Interpretation:**
  The application of CR following a regional approach targeting the autonomic and lymphatic components of the pathophysiologic process in the systemic dysfunction
Using Chapman’s Reflexes is not a stand-alone “push buttons” system where you just locate and treat the points.

It needs to be integrated in the overall management plan of the patient and integrated with other methods of treatment in order to potentiate their effect.
CR AND CLINICAL INTEGRATION
Pelvic – Thyroid – Adrenal Syndrome (PTA – Syndrome)

Triggering a cascade of endocrine responses

Impairment of AVL and ANS involving the gonads

Metabolic dysfunction
Incomplete oxidation in the cells
Impaired circulation (AVL) with retention of toxins
Area causing reduced capacity
Chemical reaction involving acetylcholine in lymphoid tissues
Nerve impulses

Somatic dysfunctions
Pelvic girdle

CR (receptororgan)
# Examples of Patterns of Chapman’s Reflexes (CR) in Clinical Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Chapman’s Reflexes Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma, Hay Fever and Sinusitis</td>
<td>Colon, Duodenal and small intestines. Treat gonadal and thyroid for endocrine balance. In hay fever and sinusitis, the sinus CR will be positive. In asthma the bronchial CR will be positive. Treatment may place load on organs of elimination: diagnose and treat CR of spleen, liver and kidney in preparation for this. The duodenal CR is invariably present in cases of sinusitis, asthma, common colds, influenza, sore throat and tonsillitis.</td>
</tr>
<tr>
<td>Allergy</td>
<td>Treat the whole PTA – syndrome. Invariably the adrenal CR will be involved. For food allergies, check the pancreas CR. In cases where patient regurgitates food, the pyloric CR will be involved.</td>
</tr>
<tr>
<td>Diabetes</td>
<td>PTA – syndrome, Adrenals, pancreas, and duodenum CR is constantly involved. In addition, look for stomach, colon and kidney CR.</td>
</tr>
<tr>
<td>Eyes</td>
<td>In all eye affections, the sinus CR will be involved. In eye strain and conjunctivitis, do additional examination of liver, small intestines, stomach and bladder CR.</td>
</tr>
<tr>
<td>Digestive Disturbances</td>
<td>If present, CR of the gonads, thyroid and adrenals should be treated first. Then special attention is given to the entire digestive tract, CR of the stomach, duodenum, pancreas, small intestines, colon and liver as well as to organs of elimination, kidneys, spleen and colon. Mesenteric releases may support treatment.</td>
</tr>
<tr>
<td>Inflammatory Arthitides</td>
<td>Address the PTA – syndrome that is invariably present. CR of the pancreas and duodenum often present, as well as other digestive and eliminative organs. Re-establishing proper lymphatic drainage in conjunction with CR is very important in these cases.</td>
</tr>
<tr>
<td>Headaches</td>
<td>If caused by menstrual or menopausal symptoms, treatment to the uterine and ovarian CR may give relied. In blinding, dizzy headache, treatment of the duodenal CR may support the treatment. Often in cases of vertigo, steady pressure to the cerebellar CR may give relief.</td>
</tr>
</tbody>
</table>

Fossum, Kuchera and Devine (2010)
This algorithm offers the most complete clinical integration of the reflexes using both the principles of the respiratory-circulatory model of care, addressing the PTA – syndrome and regional considerations.
30-second Chapman’s Screen

Not usually tested in 30-second screen

45-second Chapman’s Screen

You have tested:

- ENT
- Cardiovascular
- Pulmonary
- Upper GI Tract, (stomach, liver, gall bladder, spleen, pancreas)
- Adrenals
- Urinary Tract (urethra, ureters, bladder, kidneys)
- Pelvic Viscera (ovary, and broad ligaments)
- Lower GI Tract (ascending and descending colon and sigmoid colon)
- Broad Ligament or Prostate

Chapman’s reflexes you did NOT test:

<table>
<thead>
<tr>
<th>URI (But you could—see chart marked ENT)</th>
<th>Cerebellum</th>
<th>Tongue</th>
<th>Thyroid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Middle ear</td>
<td>Neck</td>
<td>Upper limb</td>
</tr>
</tbody>
</table>

- not usually tested in 45-second screen
<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CR TO PAINFUL TO TREAT</strong></td>
<td>Treat the myofascial tissues overlying and surrounding the CR with gentle direct or indirect myofascial release. This may help the local drainage of the tissues reducing the sensitivity of the CR. Somatic dysfunctions, if present, in segmentally related areas may also be treated to influence the reflex arc involved in the CR and thereby the sensitivity of the CR.</td>
</tr>
<tr>
<td><strong>LITTLE RESPONSE IN THE CR TO TREATMENT</strong></td>
<td>Be sure to treat only clinically significant CR’s. That is, both the anterior and the posterior for any given structure should be present for it to be a positive CR. If they are both present, but there is still little response in the CR to treatment, evaluate for contributing factors, such as somatic dysfunctions in areas segmentally related to the CR, impaired lymphatic drainage of the area or region where the CR is found</td>
</tr>
<tr>
<td><strong>THE EFFECT OF THE CR TREATMENT IS SHORT-LIVED</strong></td>
<td>When treating CR, the sequencing of the treatment is important. The overall biomechanical and postural pattern of somatic dysfunction should ideally be treated first, together with OMT strategies to improve respiratory and circulatory dynamics. Then the PTA – Syndrome may have to be addressed specifically with CR before attending to the CR correlated with the presenting complaint.</td>
</tr>
<tr>
<td><strong>HOSPITALIZED PATIENTS</strong></td>
<td>When treating hospitalized patients, the primary objective is to support the body’s physiology through the process of illness and disease. Extensive OTM may not be possible in order to minimize the energy expenditure of the patient. Treat the CR correlated to the areas of chief complaint and possibly those that impede the normal homeostatic processes.</td>
</tr>
</tbody>
</table>

Fossum, Kuchera and Devine (2010)
CR AND THE REGIONAL APPROACH
PROPOSED EMPIRICAL TREATMENT PROTOCOL

- Rib-Raising T1 – T4: SNS ➔ EENT structures
- Terminal drainage: Release the thoracic inlet
- Venous drainage SPG: Anterior cervical fascias
- Soft tissue: cervical paravertebral muscles
- Suboccipital inhibition: ANS ➔ EENT structures
- Mandibular pump (pterygoid plexus around SPG)
- Inhibition sphenopalatine ganglion
- Manual decompression: Face and Frontal Bone
- Chapman’s Reflexes for Sinuses

Specific somatic dysfunctions can be given individualized attention within the protocol
**CHAPMAN’S REFLEXES AND THE RESPIRATORY SYSTEM**


- **Lymphatic**
  - Terminal drainage: Thoracic inlet
  - Thoracic Lymphatic Pump (TLP)
  - Liver and Splenic Pump
  - Abdominal Lymphatic Pump
  - Pedal Pump

- **Autonomic**
  - Rib raising: sympathetic nervous system
  - OAA: Vagus Nerve

- **Chapman’s Reflexes**
  - Lungs og bronchus
  - Kidneys (elimination of toxins)
  - Thyroid and gonads (PTA – syndrome)
Chapman’s Diagnostic Methodology

• Palpation of the points is done before any other manipulation is done
• Anterior points are used for diagnosis because they are more spread out and more tender
• Posterior points can also be used for diagnosis and to correlate with anterior points
• Refer to the charts for the exact location and learn the points most useful to your practice
Diagnostic Methodology (cont.)

- Take a good history of the presenting problem
- Palpate the anterior points and identify the related organ(s)
- Another option is to palpate first, then investigate Review of Systems (ROS) questions related to palpatory findings
Treatment Methodology

- Identify the corresponding posterior point to the anterior point found
- Apply firm, gentle pressure to the point in a circular fashion
- Continue the pressure until point softens and reduced tenderness
- Treatment time is usually 10 – 30 seconds
Treatment Methodology (cont.)

• Recheck the tenderness of anterior point
• If the anterior point is still tender, treat the anterior point
• Recheck tenderness of both points
• Change of the organ function is not normally observed for 24 hours
• Treatment can be repeated until changes of organ function are noted or more needed
Be careful not to over treat...
VISCERO-SOMATIC REFLEXES

- Are referred from a viscera to a related somatic segment.
- Travell myofascial points, Jones Tenderpoints, and Chapman’s Reflex points all have a commonality in treating and diagnosing viscero-somatic dysfunction.
- Louisa Burns, D.O. -- early major researcher.
- Janet Travell, M.D.--et al, later research.
Diagnostic Reflex abdominal areas.

- Oesophagus
- Stomach
- Gall bladder
- Solar plexus
- Spleen
- Ilium
- Ovary and descending colon
- Caecum and appendix
- Colon
- Bladder
- Ureter
Pain Distribution from Acute Myocardial Infarction
Spinal cord as organizer of disease processes.
Pectoralis trigger points and associated reflexes. SA, sinoatrial node of the heart.
Outcomes of Acute Myocardial Infarction
from work of Dr. Ed Stiles
EENT OMT is Very Effective When:

- Treating the cervicals with any OMT
- Treating the thoracic outlet
- Cranial manipulation
- Counterstrain manipulation
- Chapman’s reflexes

All by treating the autonomies!
Chapman Points to Remember

- Heart
- Upper Lung
- Lower Lung
- Sinus
- Eye
- Liver
- Pancreas
- Small Bowel
- Kidney
- Adrenal
- Bladder
- Uterus
Chapman’s Value Today:

- **Differential Diagnosis of Disease**
- Treating the autonomic system balance
- May improve immune system efficiency
- May improve the lymphatic flow rate
- Of value in treating some asthma, cardiac arrhythmia, functional colitis, immune disorders, renal and bladder dysfunctions.
- Part of an Osteopathic physical examination
Chapman’s Reflexes in the Future:

Look for an increase in use ---as a part of physical diagnosis, and as part of a holistic and cost efficient treatment program.
Summary:

- Chapman’s Reflexes are manifestations of viscerosomatic reflexes.
- On Physical exam they are to be documented first, and treated toward the last of an OMT encounter.
- Referred visceral symptoms or myofascial pain are generalized and not discrete.
- A knowledge of both is important to the Osteopathic Clinician.
Future Clinical Research:

You are Next!
See you in OMM Lab!

ADVENTURE
Keep living life like there’s no tomorrow and you’ll be right sooner than you think.
Suggested References:

- *Foundations for Osteopathic Medicine, 3rd Ed.*; Chapter on Autonomics, Viscerosomatic Reflexes.

- *Foundations for Osteopathic Medicine* Chapter 52G, Chapman’s Approach (start Page 853), by Drs. Fossum, Kuchera, Devine and Wilson