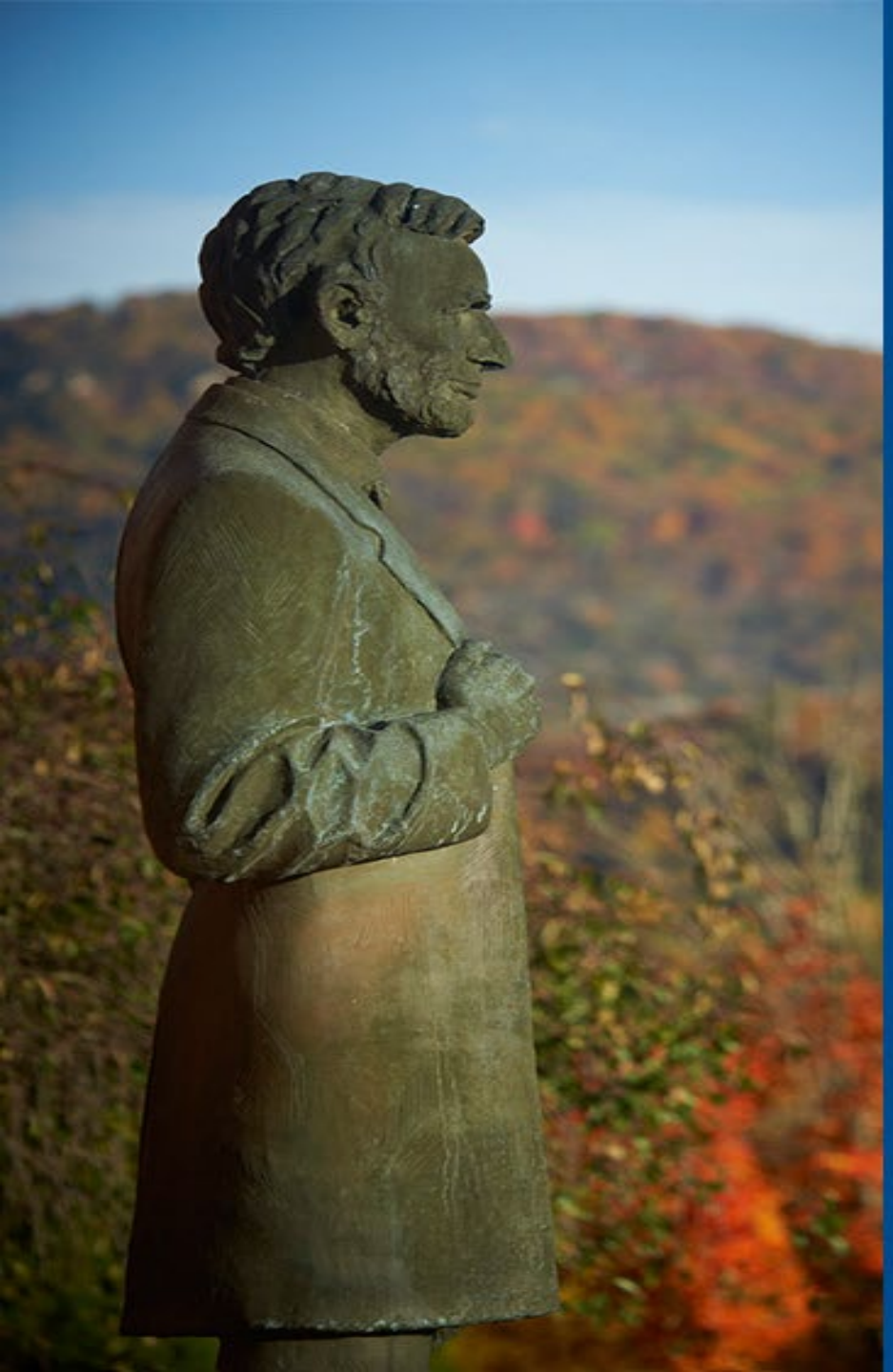

High-Yield Visceral OMT: Efficient Techniques for Everyday Practice

Tyler McCurry, DO

LMU-DCOM

Assistant Professor of OMM

LMU

DeBusk College *of* Osteopathic Medicine

LINCOLN MEMORIAL UNIVERSITY

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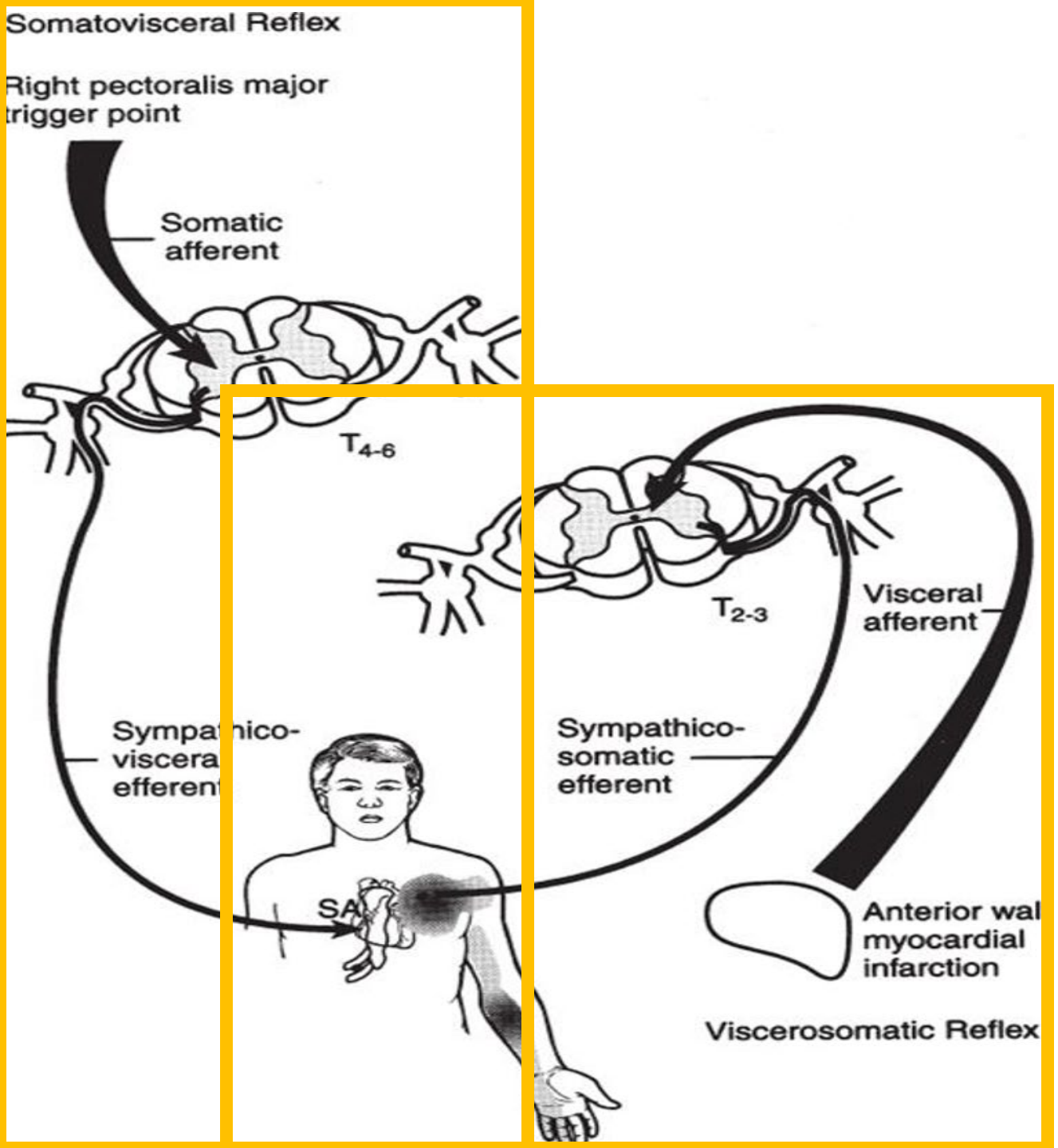
Disclosures

- I have no financial disclosures.

Learning Objectives

By the end of this session, learners should be able to:

- Describe the osteopathic principles underlying **visceral & somatic relationships** and their relevance in common primary care conditions.
- Identify **key anatomical landmarks and palpatory findings** associated with commonly treated visceral structures (e.g. liver, stomach, intestines).
- Demonstrate **efficient, clinic-friendly visceral OMT techniques** that can be performed within typical primary care time constraints.
- **Integrate visceral OMT into clinical decision-making** for common presentations such as abdominal pain, reflux, constipation, and pelvic complaints.
- Evaluate **patient response** to visceral OMT and determine appropriate modifications or follow-up treatment strategies.



Viscerosomatic Reflex [1]

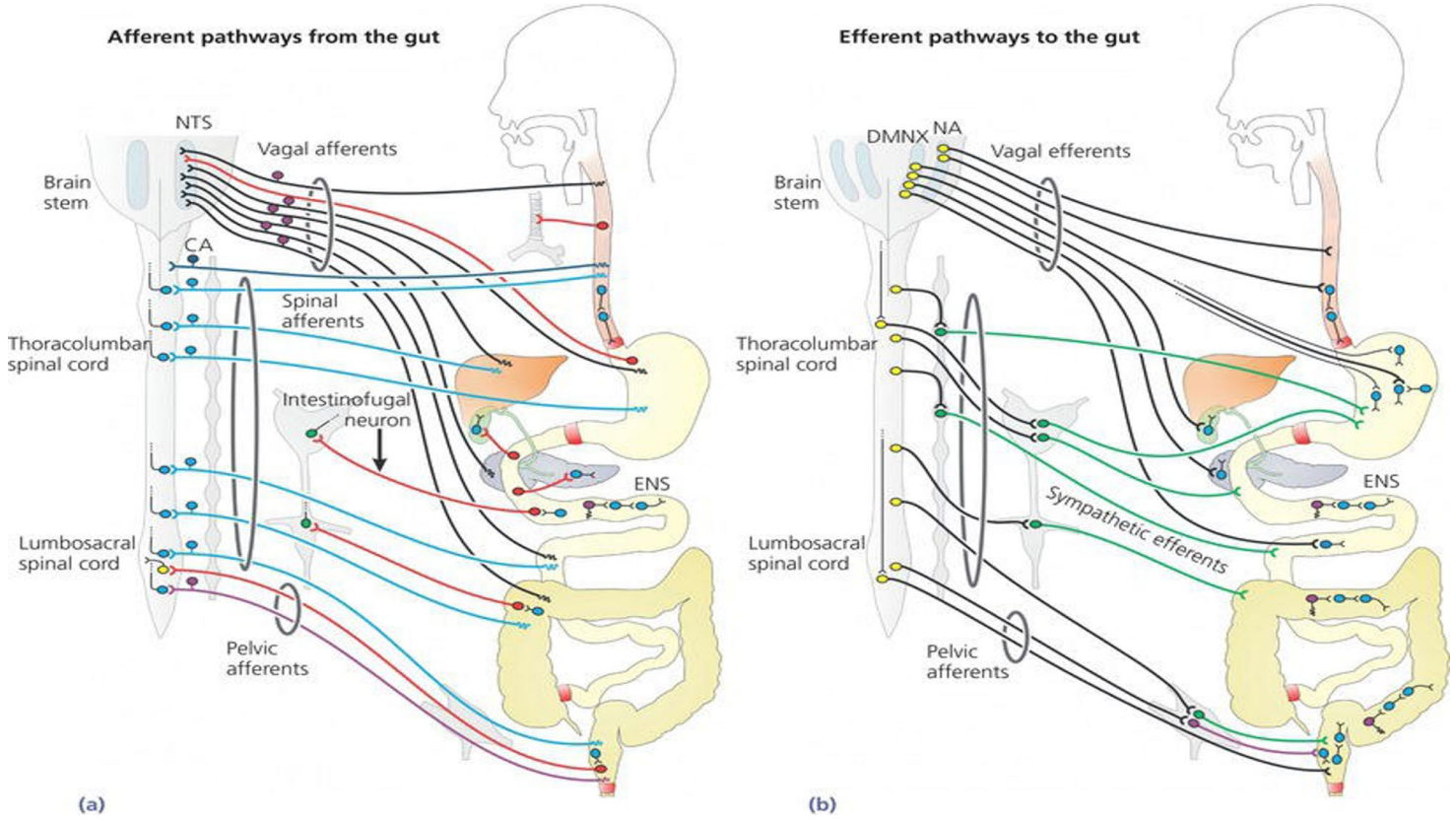
- Visceral pathology → afferent signals → facilitated spinal segment → increased paraspinal muscle tone at corresponding dermatome

Somatovisceral Reflex

- Somatic dysfunction → afferent signals → facilitated spinal segment → increased autonomic activity to target organ

Viscero-viscero Cross-sensitization & Viscerosomatic Convergence

- Visceral and somatic structures in the abdomen and pelvis **share neural pathways**.
- **Persistent visceral nociceptive stimuli** can lead to somatic dysfunction (e.g., paraspinal hypertonicity)
- Conversely, **persistent somatic input** can produce visceral symptoms such as constipation or bladder urgency.



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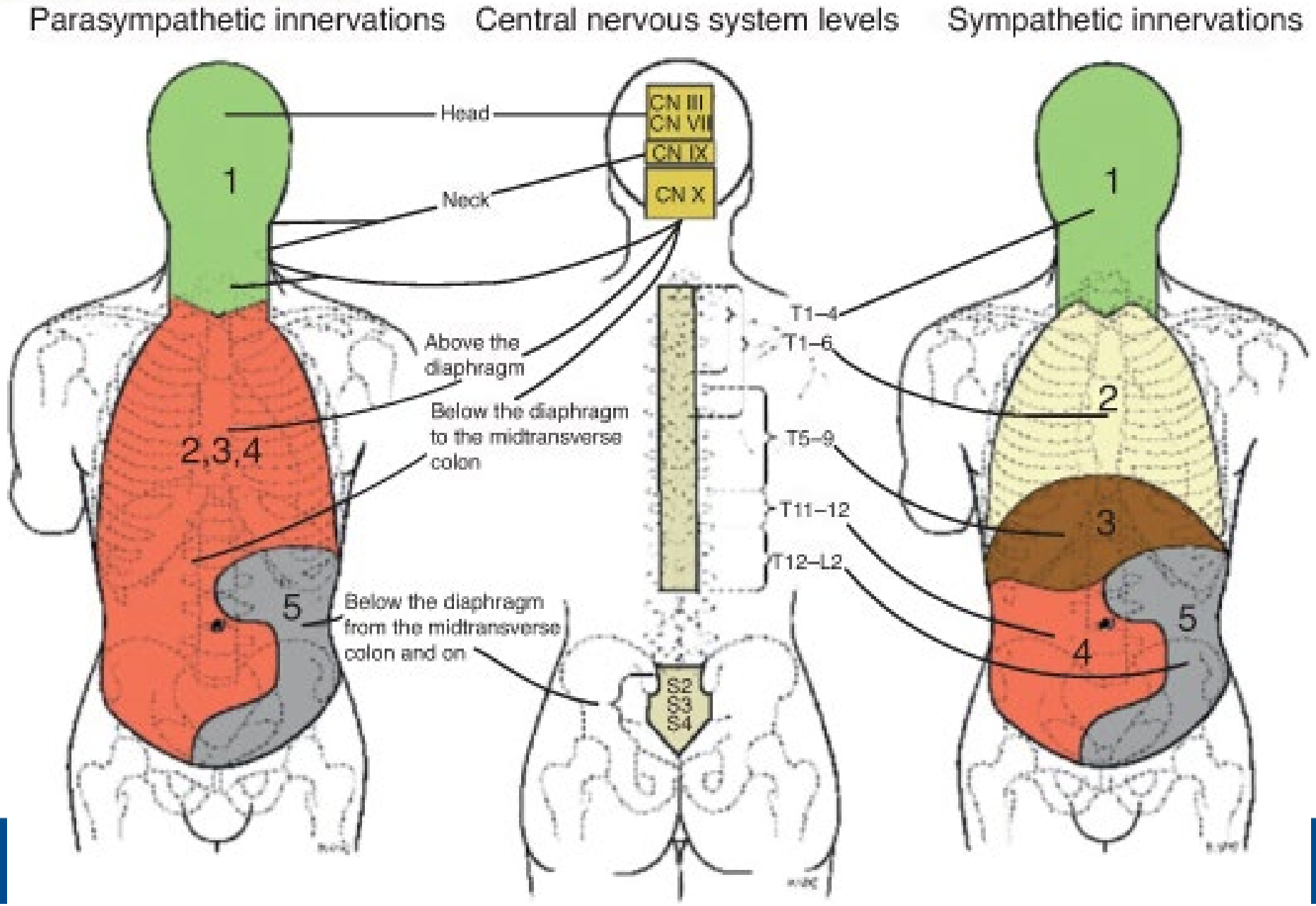
Segmental Innervation Reference Chart [3]

Organ(s)	Sympathetic Segments	Parasympathetic Supply
Liver/Gallbladder	T5–T9 (R)	Vagus (CN X)
Stomach	T5–T9 (L)	Vagus (CN X)
Duodenum (before ligament of Treitz)	T5-T9	Vagus (CN X)
Jejunum/Ileum	T10-T11	Vagus (CN X)
Ascending colon, proximal 2/3 of transverse colon (between ligament of Trietz and splenic flexure), & appendix	T10-T11	Vagus (CN X)
Distal 1/3 of transverse colon, descending colon, sigmoid colon, & rectum	T12-L2	S2-S4
Gonads	T10-T11	S2–S4
Uterus, cervix, erectile tissue, & prostate	T10-L2 (erectile tissue/prostate start at T11)	S2-4



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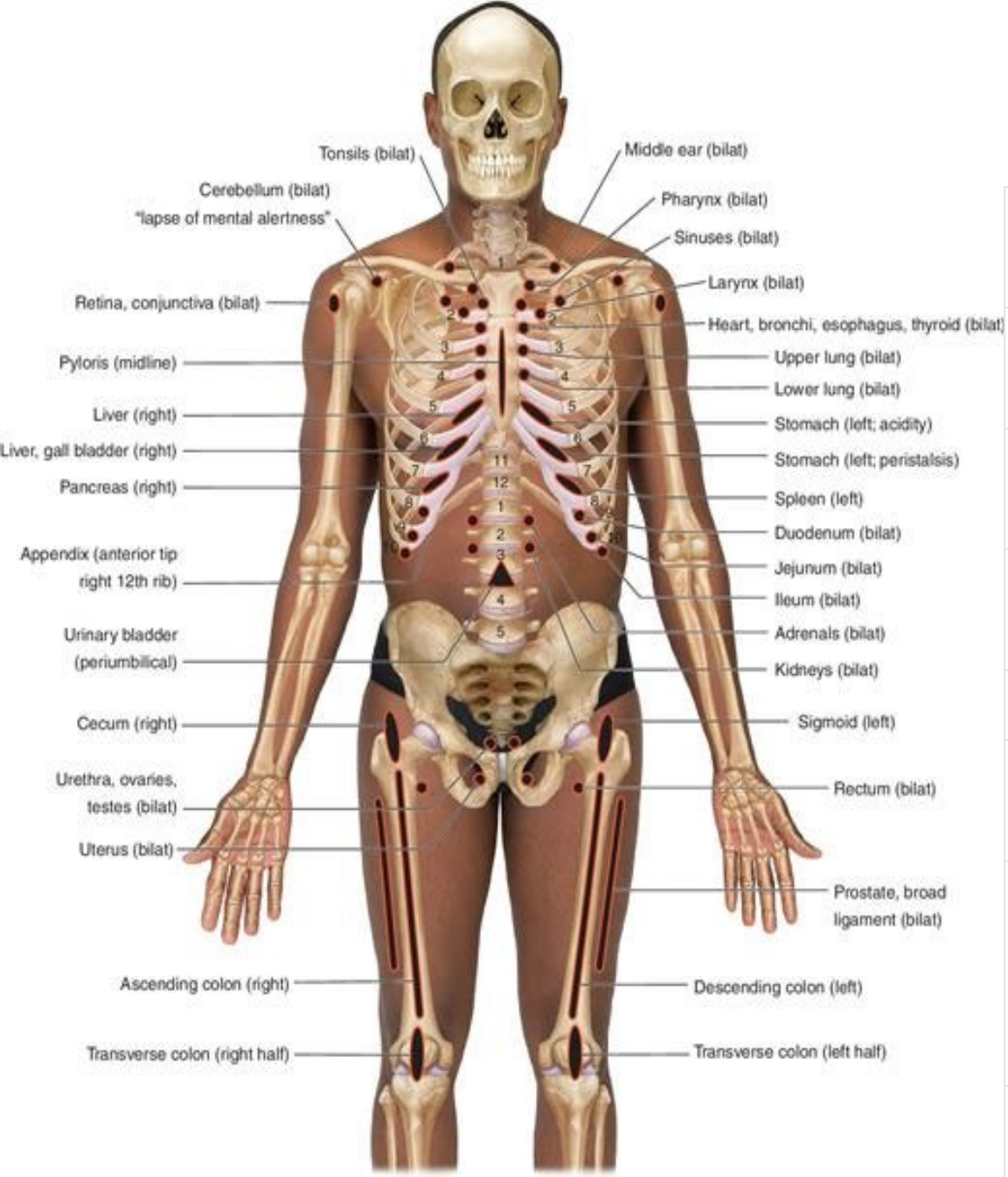
Chapman's Reflexes [6]



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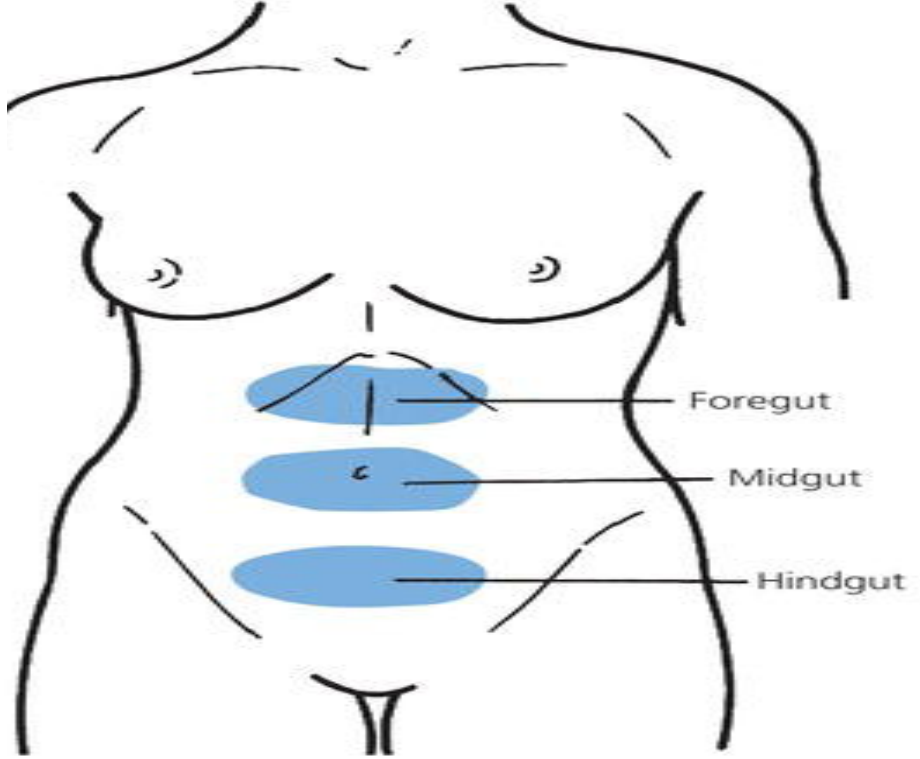
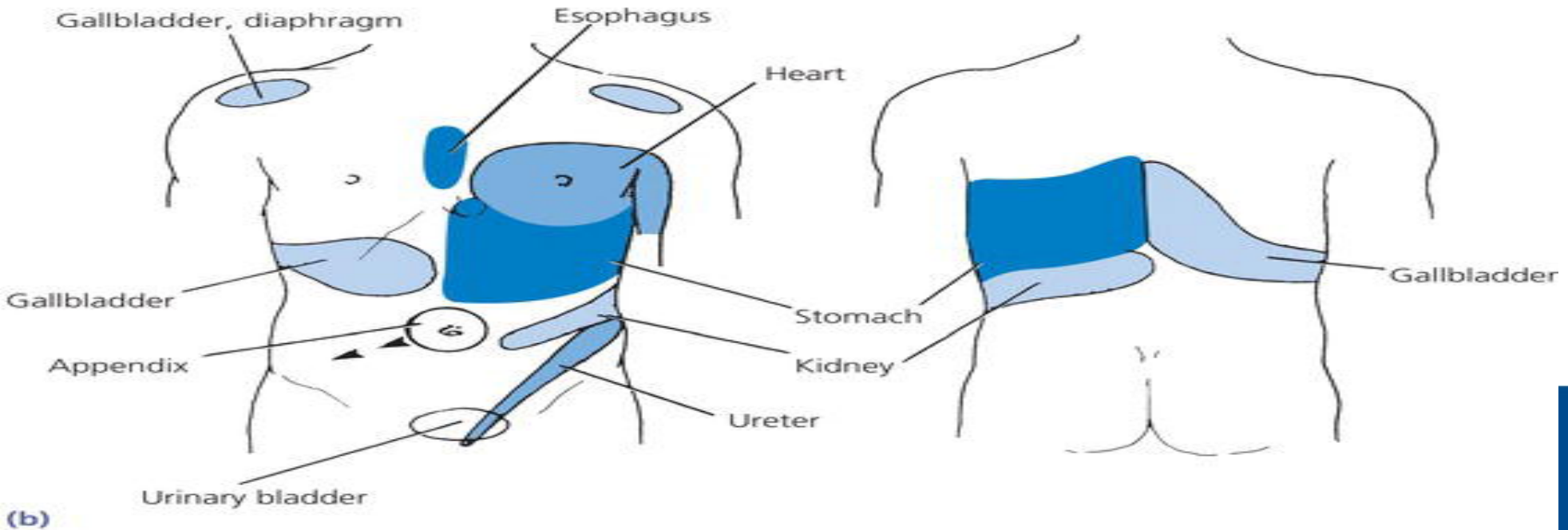
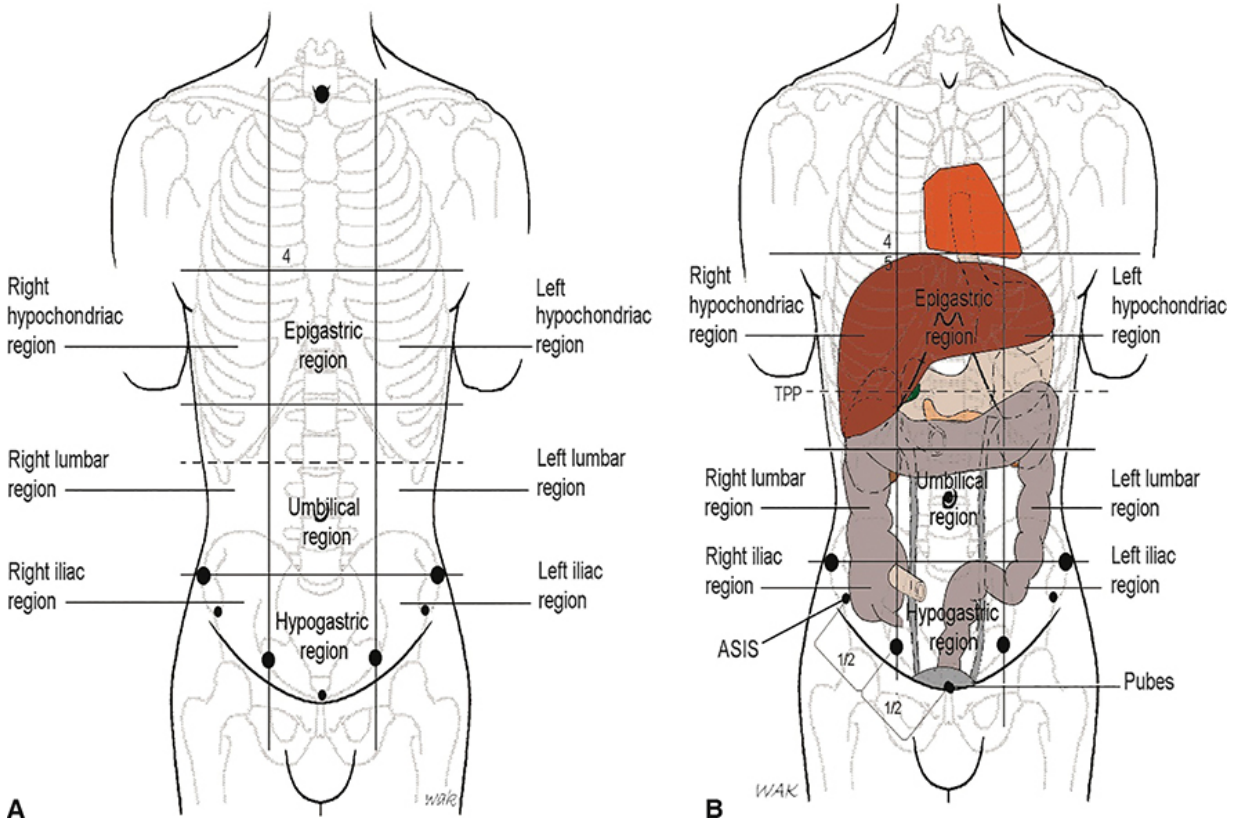
Stomach acidity (Left)—5th intercostal space, midclavicular line to the sternum.
Liver (Right)—5th and 6th intercostal spaces, from the midclavicular line to the sternum.
Gallbladder (Right)—6th intercostal space, midclavicular line to the sternum.
Pancreas (Right)—7th intercostal space, close to the approximation of the costal cartilages.
Appendix (Right)—tip of the 12th rib
Small intestine (Bilateral)—8th, 9th, and 10th intercostal spaces near the costal cartilage (e.g., enteritis).
Left colon—A band 1 to 2 inches wide on the anterolateral aspect of the left femur, from 1 inch above the patella to the greater trochanter (left distal femur = left half of transverse colon, left midfemur = descending colon, left proximal femur = sigmoid colon).
Right colon—same instructions as for left colon (right distal femur = right half of transverse colon; right midfemur = ascending colon; right proximal femur = cecum)

Referral Patterns of True Visceral Pain [7]





Principles of Diagnosis [3]



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- Knowledge of symptoms suggesting dysfunction in a specific organ
- Facilitated spinal segment
- Chapman reflex point
- Pain or abnormal tissue texture on palpation of an organ or structure

Safety Considerations [3]

Contraindications to visceral manipulation include:

- acute abdomen/peritonitis
- suspected visceral perforation
- abdominal aortic aneurysm
- active GI hemorrhage
- unstable fractures
- known abdominal malignancy with risk of tumor disruption
- recent abdominal surgery (typically avoid for 6–8 weeks post-op).

Safety of treatments:

- Visceral OMT has a favorable safety profile.
- An overview of systematic reviews found **no adverse events reported in most studies**.
- A modeling study found the majority of post-OMT adverse events were mild (98%), with a benchmark incidence of 1.0 AE per 100 post-OMT interval-days. [8-9]

Keep in Mind

- Visceral OMT is used as an **adjunct** to standard medical management, not a replacement.
- **Red flags** always warrant appropriate medical workup first.
  - Weight loss
  - GI bleeding
  - New masses
  - Fever
  - Peritoneal signs

Clinic-Friendly Visceral OMT Techniques

- Each technique below can be performed in **2–5 minutes**, making them feasible within a standard primary care visit.
- Visceral manipulation sessions as brief as 15 minutes have been used effectively in clinical trials. [10]
- All of the following treatments can be found in **Foundations of Osteopathic Medicine, 5th Ed.** [11], unless otherwise noted.

PARASPINAL INHIBITION

1. The patient is supine. The physician is seated at either side of the patient.
2. The physician places both hands side by side under the patient's thoracolumbar spine with the fingerpads on the opposite side of the spine contacting the lateral aspect of the erector spinae mass and the thenar and hypothenar eminences contacting the lateral aspect of the erector spinae issue on the side of the patient nearest the physician.
3. The physician then flexes the fingerpads toward the base of the palms, which effectively compresses or approximates the erector spinae masses and draws the thoracolumbar spine into extension.
4. The physician finds a point of tissue tension balance or equalization by adjusting the pressure between the two hands. This may be achieved by moving the forearms closer or farther from the patient's body, and by alternating the pressure between the two hands to match the tension in the paraspinal tissues.
5. Once this balance is achieved the physician maintains this tension on the erector spinae muscles until a sense of release or relaxation is sensed. This usually takes 60 to 90 seconds.
6. These above steps may be repeated until tissue tension at that region is greatly decreased or completely resolved upon reassessment

Collateral Ganglia Assessment

1. Patient supine. The physician stands at the patient's side, facing the patient's abdomen.
2. To ensure equal depth of penetration of the tissues when applying pressure to the ganglia, the physician standardizes the length of the fingers of the palpating hand by flexing the longer fingers.
3. The ganglia are located along the patient's midline as follows: the celiac ganglion is located inferior to the xiphoid process; the inferior mesenteric ganglion is located just superior to the umbilicus; the superior mesenteric ganglion is located between those two regions.
4. The physician assesses the tenderness and tension of the soft subcutaneous tissues over each ganglia (celiac, superior mesenteric, and inferior mesenteric) by sensing each region with the palpating hand and applying pressure with the other hand.
5. If a region or regions over a ganglion is diagnosed as tense or tender, the physician may then apply the collateral ganglia inhibition technique described next.

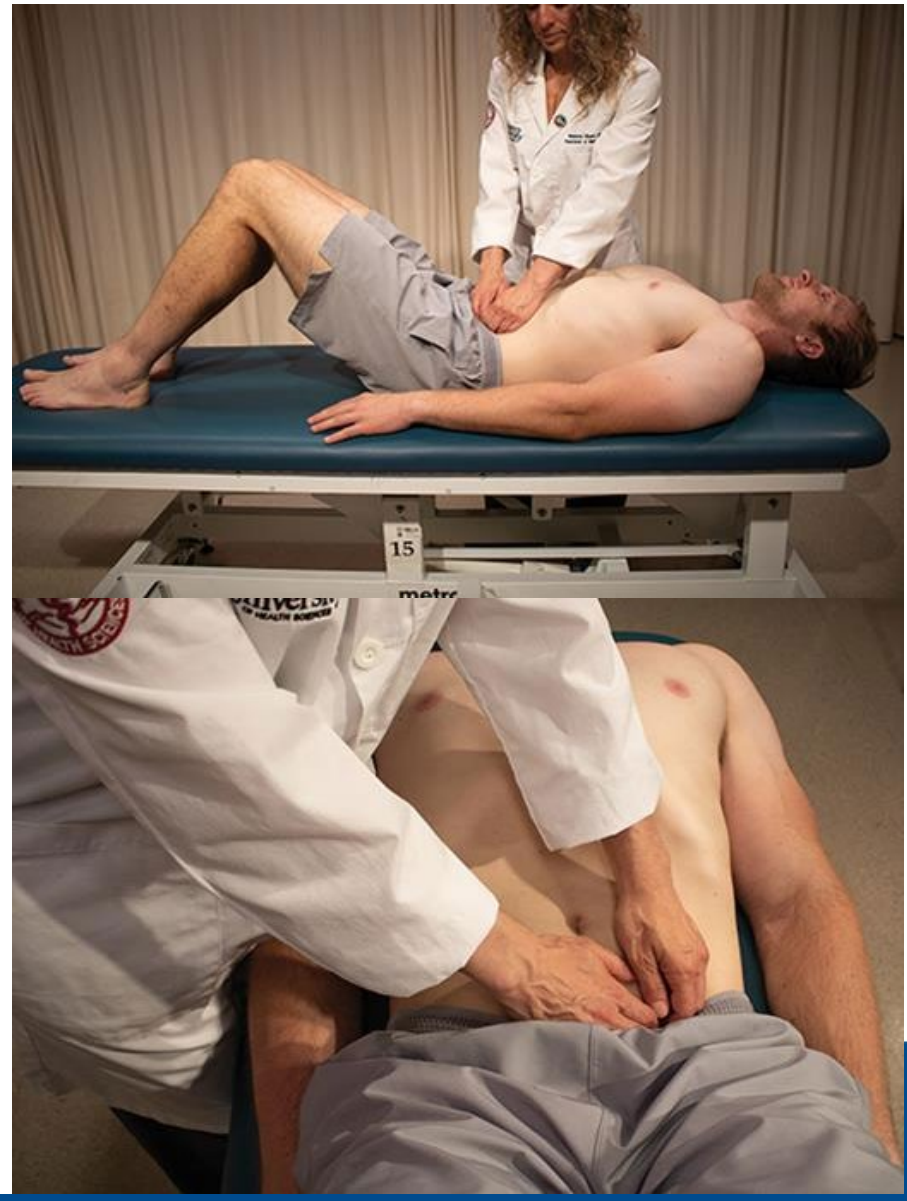
Collateral Ganglia Inhibition

1. Once an area of increased tension or tenderness is diagnosed as per above, the physician will use the same handhold as described above to contact the midline of the abdomen over the facilitated ganglion.
2. The physician applies posterior pressure to that area until resistance is palpated.
3. The physician instructs the patient to inhale partially (sometimes called “taking a half-breath in”) against the physician’s applied resistance and instructs the patient to hold that partial inhalation for as long as possible.
4. As the patient exhales, the physician gently increases their pressure as tolerated by the tissues as they relax, until the next barrier of restriction is met.
5. The physician repeats the above steps until significant decrease or no further tension or tenderness is identified.
6. The physician should reassess by palpating that same region with the initial diagnostic pressure. The patient should no longer report tenderness and the tissues should feel soft and compliant upon palpation.

CECUM AND SIGMOID RELEASES

1. The physician contacts the left or right lower quadrant of abdomen with the ulnar edges of their fingers.
2. The physician gently scoops the colon out of the pelvis in line with the attachments in the distal corners of the lower abdomen (sigmoid guided in a diagonal line toward the liver; cecum guided in a diagonal line toward the spleen).
3. The colon and its surrounding tissues are taken gently into this right angle toward their mesenteric attachments until resistance is sensed.
4. The colon may then recede back (recoil) to its corner. The physician follows this recoil and then repeats the above steps three to four times until that aspect of the colon is compliant to motion testing.
5. This technique may also be done as follows: once the physician draws the colon and its surrounding tissues to the point of resistance, the physician instructs the patient to inhale partially and hold their breath until forced to exhale.
6. As the patient exhales, the physician may engage a new restrictive barrier. This cycle of respiration and engaging the new restrictive barrier of the tissues is repeated (generally three to four times) until there is a sense of compliance and relaxation of the involved tissues and structures.
7. To retest, the physician will gently scoop the colon out of the pelvis toward the mesenteric attachments. With this maneuver, no further fascial restriction should be palpated.

An RCT of 102 obese adults with functional constipation (Rome IV criteria) showed visceral manipulation alongside standard care significantly improved stool consistency (Bristol Stool Scale), increased defecation frequency, reduced defecation pain, and decreased laxative use (all $p \leq 0.001$), with no adverse events. [12]



Mesenteric Root Release (for periumbilical pain, IBS, functional abdominal pain)

1. Patient supine with knees bent. Operator stands at the patient's side.
2. The root of the mesentery is roughly at a 45-degree angle, beginning 1 inch cephalad and 1 inch leftward from the umbilicus, ending near the right sacroiliac joint. It is roughly 6 inches long and serves as the attachment of about 30 feet of intestines.
3. The physician contacts the tissues over the root of the mesentery by allowing the ulnar aspects of the hands or the fingerpads to sink into the tissue through anterior parietal peritoneum, greater omentum, and loops of small intestine until the root of the mesentery is palpated as a cord-like structure.
4. The physician then draws the root of the mesentery toward the hepatic flexure until resistance is met.
5. The physician may then use the patient’s respiratory cooperation; the patient holds the breath in inhalation as long as possible until forced to exhale at which point the fascia will generally release allowing the physician to engage a new restrictive barrier. This is repeated five to six times until the root of the mesentery is compliant to motion testing.
6. Instead of employing respiratory cooperation, the physician may choose to hold the tissues to a point of tension until they recoil in which case the physician follows the recoil and repeats this procedure five to six times until the tissues are compliant and relaxed.

Hepatic Release [5]
(RUQ pain, dyspepsia, post-cholecystectomy complaints)

1. The patient lies supine, and the physician sits to the right and faces the patient.
2. The physician places the left hand under the rib cage at the level of the liver.
3. The physician places the right hand immediately inferior to the subcostal angle at the patient's right upper quadrant.
4. The physician gently compresses the patient with both hands (arrows, Fig. 15.40) and attempts to palpate the liver.
5. The physician next tests for any ease-bind tissue texture and motion asymmetries.
6. On noting any asymmetry, the physician maintains a constant pressure at either the ease (indirect) or the bind (direct), depending on the patient's tolerance and physician's preference.
7. The physician holds this until a release is palpated and continues until no further improvement is produced.
8. A release-enhancing mechanism, such as deep inhalation and exhalation, can be helpful.

A single session of visceral mobilization of the stomach and liver has been shown to reduce pain and improve upper trapezius EMG activity immediately and at 7 days. [13]

Gastroesophageal Junction Indirect Technique (for GERD)

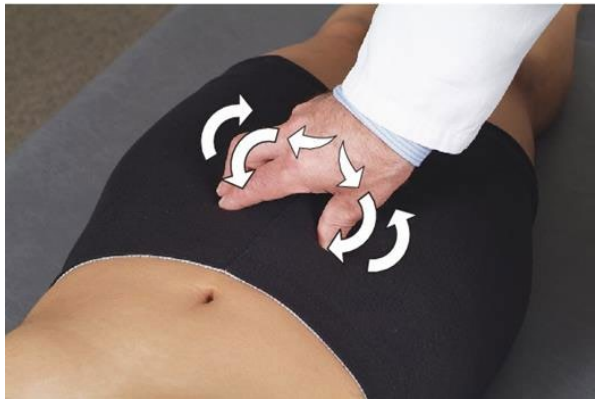
1. The patient is supine; the physician stands to the right of the patient and places their right hand over the stomach.
2. The thumb is pointed toward the pylorus and the middle finger pointed toward the left clavicle.
3. The physician performs a layer palpation through the abdominal wall to the stomach and assesses for the presence of a fascial pull (listening).
4. The physician takes the stomach in the direction of listening and exaggerates it, until a release is palpated.
5. This process is repeated as necessary, until the stomach can be motion tested to distend anterior and lateral to the left over 2 cm, without a hard end feel.

An RCT demonstrated that this technique produced a **significant improvement in GERD symptoms** (GerdQ score difference 1.49 points, p = 0.005) one week after a single treatment, along with improved cervical mobility and reduced C4 pressure pain thresholds. [14]

Presacral Fascia Release [15] (for pelvic pain, dysmenorrhea, bladder complaints)

1. The patient lies supine, and the physician stands at either side of the patient.
2. The physician, with the index and third fingers approximated and the thumb abducted, makes a C shape.
3. The physician places the fingers and thumb downward in the lower abdominal region just above the ramus of the pubic bone.
4. The physician determines whether an ease-bind asymmetry is present by applying and vectoring forces in multiple directions, including posterior, superior, inferior, clockwise, and counterclockwise.
5. The physician, on determining the dysfunctional asymmetry, applies forces in an indirect or direct manner, respectively, until meeting the ease or bind barriers.
6. This position is held until the physician palpates a release (20 to 30 seconds), and then the physician follows this movement (fascial creep) to the new barrier and continues until no further improvement is detected.

Visceral manipulation improved quality of life in women with endometriosis ($p = 0.0001$) and pelvic organ prolapse ($p = 0.0093$) after weekly sessions over 5 weeks. [16]



Evaluating Response and Follow-Up Strategy

Immediate reassessment after treatment:

- Re-palpate the treated region for changes in tissue texture, tenderness, and fascial mobility.
- Ask the patient about subjective changes in pain or comfort.
- Re-examine the corresponding spinal segments for changes in paraspinal hypertonicity.

Follow-up strategy:

- Clinical trials have used protocols ranging from **weekly sessions for 5–6 weeks** to more intensive schedules (20 sessions over 4 weeks). For primary care integration, a practical approach is 1–3 sessions spaced 1–2 weeks apart, then reassess. [10,12,16]
- Track outcomes using validated tools: numeric pain rating scale, Bristol Stool Scale for constipation, GerdQ for reflux. [12,17]
- If no improvement after 3–4 sessions, reconsider the diagnosis, address contributing psychosocial factors (central sensitization, anxiety, catastrophizing), and consider referral. [18]

Questions?

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