**Latissimus Dorsi** (in Latin – means “widest part of the back”)

**Origin:** Aponeurosis (lumbosacral fascia) from SPs of sacrum to T-6 & post ½ of iliac crest; also sometimes from lower 3-4 ribs and inferior of scapula (next to teres major)

**Insertion:** Floor of bicipital groove (narrowed to about 1 ½ inches wide—a ribbon-like tendon which spirals 180°)

**Function:** Extends, medial rotates, and adducts humerus

**Spinal Levels:** Innervation: C-6, 7, 8 (Thoracodorsal)  
**TS Line/Meric:** T-6  
**Acupuncture:** T-11/12

**Organ:** Pancreas – blood sugar handling; digestive enzyme deficiency

**Acupuncture:** Spleen-pancreas

**Nutrition:** Vitamin A; Vitamin F; Betaine; Zinc; Pancreatic digestive enzymes; Pancreas tissue; Glucose regulation related substances: Chromium; Vanadium

**Chapman’s Reflex:**  
Ant: Left 7th IC space, medial portion, 7th costal cartilage; Post: Left T-7/8

**Clinical Indications** associated with weakness:
- Upper trapezius tightness
- Difficulty Swimming or paddling a canoe
- Works with Pec Major in holding shoulder down during ordinary pushing, & on parallel bars, etc.
- Sacroiliac problems – especially during lifting
- Rarely: tight causing ipsilateral frozen shoulder due to weakness on opposite side from frozen shoulder

**Pectoralis Major, Clavicular Division (PMC)** (uppermost ¼ of pectoralis major)

**Origin:** Front of medial ½ of clavicle

**Insertion:** Lateral lip of bicipital groove (crosses over PMS–i.e., pec major insertion rotates 180°)

**Function:** Adduction; flexion (runs nearly 90 degrees to PMS)

**Spinal Levels:** Innervation: C-5, 6, 7 (Lateral Pectoral)  
**TS Line/Meric:** T-5  
**Acupuncture:** T-12/L-1

**Organ:** Stomach

**Acupuncture:** Stomach

**Nutrition:** Vitamin B complex; “B”; “G”; Bilateral: Hydrochloric acid; Stomach substance with B-12

**Chapman’s Reflex:**  
Ant: Left 5th / 6th IC space; Post: Left T-5/6

**Bennett’s Reflex:** Bilateral over the frontal eminences – directly above each eye, middle of forehead

**Clinical Indications** associated with weakness:
- Throwing problems
- Emotional Stress Overload (“Emotional Neurovascular” points)
- Symptoms associated with a need for B vitamins
- Stomach problems including hiatal hernia, helicobacter pylori infection (ulcers)
- Bilateral weakness associated with allergies, HCl need, temporal bulge cranial fault

**Pectoralis Major, Sternal Division (PMS)**

**Origin:** Sternum to rib 7; cartilages of ribs 1-6; Aponeurosis of external abdominal oblique

**Insertion:** Lateral lip of bicipital groove; (passes behind PMC as it rotates 180°)

**Function:** Flexes humerus; extends humerus when already flexed

**Spinal Levels:** Innervation: C-6,7,8,T-1 (Med & Lat Pectoral)  
**TS/Meric:** T-8  
**Acupuncture:** T-9/10

**Organ:** Liver

**Acupuncture:** Liver

**Nutrition:** Vitamin A; Bile salts; Betaine; Liver tissue

**Chapman’s Reflex:**  
Ant: Right 5th / 6th IC space – medial portion; Post: Right T-5/6

**Clinical Indications** associated with weakness:
- Tightness in rhomboid belly (also could result from inhibited serratus anterior)
- Throwing problems
- Vitamin A symptoms – night blindness and other visual problems
- Fat metabolism problems (increased cholesterol and/or triglycerides)
- Biliary problems and bile salts
- Systemic toxicity and detoxification problems
SESSION 2 MUSCLES & CLINICAL INDICATIONS OF WEAKNESS

**Psoas**
**Origin:** Bodies, discs, & TPs of T-12 through L-4 or L-5; interdigitates with diaphragm (R crus forms part of esophageal hiatus of diaphragm)
**Insertion:** Lesser trochanter
**Function:** Flexes hip, laterally rotates hip
**Spinal Levels:** Innervation: L-1,2,3,4 (Lumbar Plexus)  
**TS/Meric:** T-11/12  
**Acupuncture:** L-2/3
**Organ:** Kidney
**Acupuncture:** Kidney
**Nutrition:** Vitamin E; Vitamin A; Kidney tissue
**Chapman’s Reflex:** (Bilateral) Ant: 1 inch lateral to & 1 inch up from umbilicus; Post:T-11/12

**Clinical Indications** associated with weakness:
- Low back pain
- Lumbar scoliosis
- Bilateral weakness – flattened lumbar lordosis
- Supine – greater foot turn in on inhibited side
- Ipsilateral foot pronation
- Kidney problems including renal lithiasis

**Tensor Fascia Lata**
**Origin:** Anterior iliac crest
**Insertion:** Iliotibial band
**Function:** Abducts, flexes, and medial rotates hip; participates in knee extension and lateral stability to knee
**Spinal Levels:** Innervation: L-4,5 &S-1 (Superior Gluteal)  
**TS Line/Meric:** L-4  
**Acupuncture:** L-4/5
**Organ:** Large intestine
**Acupuncture:** Large intestine
**Nutrition:** Acidophilic substances; Vit. D; Bilateral weakness often associated with need for iron
**Chapman’s:** (Bilateral) Ant: Iliotibial band; Post: triangular area – L-2 to L-4 to crest of ilium

**Clinical Indications** associated with weakness:
- Lateral knee problems
- Decreased hip abduction / hip arthritis
- Sacroiliac subluxation recurrence
- Meralgia paresthetica
- All forms of colon problems and dysbiosis

**Piriformis**
**Origin:** Anterior lower 1/3rd of sacrum; sacrotuberous ligament
**Insertion:** Greater trochanter – superior border
**Function:** Lateral hip rotation
**Spinal Levels:** Innervation: L-5 S-1,2 (Sacral Plexus)  
**TS Line/Meric:** L-5  
**Acupuncture:** T-4/5
**Organ:** Reproductive organs (ovary, uterus, teste, prostate)
**Acupuncture:** Circulation-sex (Pericardium)
**Nutrition:** Vitamin E, Vitamin A; male and female reproduction system glandulars
**Chapman’s Reflex:** Ant: Upper pubic bone; Post: L-5 / PSIS

**Clinical Indications** associated with weakness:
- Greater trochanter pain
- Weak in side of sciatica – piriformis “drops down” on sciatic nerve and stretches it
- Supine – greater foot turn in on inhibited side (DD from psoas inhibition)
- Sacrum subluxations – often results in neck pain
**Rectus Femoris**

**Origin:** AIIS (anterior inferior iliac spine) just above acetabulum; upper margin of acetabulum

**Insertion:** Patella

**Function:** Flexes hip, extends knee

**Spinal Levels:** Innervation: L-2,3,4 (Femoral)  
**TS Line/Meric:** T-8/9/10/11  
**Acupuncture:** Sacrum (S-1) SI Joint

**Organ:** Small Intestine

**Acupuncture:** Small Intestine

**Nutrition:** Vitamin D; Vitamin B complex; Small intestine tissue;

**Chapman’s Reflex:** (Bilateral) Ant: Along lower border of rib cage; Post: T-8/9/10/11

**Clinical Indications** associated with weakness:

- Low back pain
- Hip pain
- Pain or weakness at origin (AIIS) on hip flexion
- Knee pain (along with other quadriceps)

**Abdominals - General**

**Function:** Flex trunk; rotate thorax; active on forced expiration

**Spinal Levels:** Innervation: T-5-12 (ventral rami, iliohypogastric, ilioinguinal)  
**TS Line/Meric:** T-6/7  
**Acupuncture:** Sacrum (S-1), SI Joint

**Organ:** Small Intestine

**Acupuncture:** Small Intestine

**Nutrition:** Vitamin E; Duodenal tissue

**Chapman’s Reflex:** (Bilateral) Ant: Medial thigh; Post: L-5/PSIS

**Clinical Indications** associated with weakness:

- Low back pain
- Difficulty flexing trunk: touching toes, sitting up
- Duodenum – “dumping syndrome,” narcolepsy, paroxysms of sneezing
- Rarely involved in frozen shoulder – weak contralateral to shoulder allowing abdominal tightness on frozen shoulder side holding rib cage down – look at rib angles

**Rectus Abdominis** (3 transverse inscriptions, sheathed by internal oblique)

**Origin:** Anterior portion of costal cartilages 5, 6, & 7; xiphoid process

**Insertion:** Pubic body

**Function:** Flexes trunk; active on forced expiration

**Spinal Levels:** Innervation: T-5-12 (ventral rami)  
**TS Line/Meric:** T-6/7  
**Acupuncture:** Sacrum (S-1), SI Joint

**Organ:** Small Intestine

**Acupuncture:** Small Intestine

**Nutrition:** Vitamin E; Duodenal tissue

**Chapman’s Reflex:** (Bilateral) Ant: Medial thigh (lower 1/3rd); Post: L-5/PSIS

**Clinical Indications** associated with weakness:

- Bilateral – hyperlordosis (along with bilateral gluteus maximus)
- Sway back posture-Active as a postural muscle in 20%-25% of people when sacrospinalis is not
- Difficulty lifting head off table
**Abdominal Internal Oblique** (middle layer of 3 abdominal muscles)

**Origin:** Lateral ½ of inguinal ligament; anterior 2/3rds of iliac crest

**Insertion:** Costal cartilages of last 4 ribs (7-10); midline from xiphoid to symphysis pubis; with TV abdominals – conjoint tendon (falx inguinalis) to front part of pectineal line; some fibers become cremasteric muscle which loops up and joins pubic tubercle

**Function:** Rotates trunk to same side; forced expiration

**Spinal Levels:** **Innervation:** T-7-12 (iliohypogastric & ilioinguinal, ventral rami)

**TS Line/Meric:** T-6/7 **Acupuncture:** Sacrum (S-1), SI Joint

**Organ:** Small Intestine

**Acupuncture:** Small Intestine

**Nutrition:** Vitamin E; Duodenal tissue

**Chapman’s Reflex:** (Bilateral) Ant: Medial thigh (upper 2/3rds); Post: L-5/PSIS

**Clinical Indications** associated with weakness:

- Difficulty turning body (rotating thorax) to one side as in skiing, hitting a tennis ball, looking over shoulder in car, etc.
- Internal – Pain in testicle (cremasteric muscle)
- Internal - Inguinal hernia

**Abdominal External Oblique** (outermost muscle of abdominal wall)

**Origin:** Outer surfaces of last 8 ribs – above costal margins

**Insertion:** Aponeurosis from xiphoid to symphysis pubis (linea alba); some posterior fibers insert directly into iliac crest

**Function:** Rotates trunk to opposite side; forced expiration

**Spinal Levels:** **Innervation:** T-5 to T-12 (iliohypogastric, ventral rami)

**TS Line/Meric:** T-6/7 **Acupuncture:** Sacrum (S-1), SI Joint

**Organ:** Small Intestine

**Acupuncture:** Small Intestine

**Nutrition:** Vitamin E; Duodenal tissue

**Chapman’s Reflex:** (Bilateral) Ant: Medial thigh (upper 2/3rds); Post: L-5/PSIS

**Clinical Indications** associated with weakness:

- Difficulty turning body (rotating thorax) to one side as in skiing, hitting a tennis ball, looking over shoulder in car, etc.

**Transverse Abdominis** (deepest and thinnest abdominal muscle)

**Origin:** Lateral 1/3rd of inguinal ligament; anterior-medial 2/3rds of iliac crest; lumbar TPs; entire lower margin of rib cage – interdigitates with diaphragm

**Insertion:** Into internal oblique

**Function:** Aid in pelvic flexion and lateral flexion; Support abdominal contents laterally during flexion

**Spinal Levels:** **Innervation:** T-7 to T-12 (iliohypogastric & ilioinguinal, ventral divisions)

**TS Line/Meric:** T-6/7 **Acupuncture:** Sacrum (S-1), SI Joint

**Chapman’s Reflex:** (Bilateral) Ant: Medial thigh (upper 2/3rds); Post: L-5/PSIS

**Clinical Indications** associated with weakness:

- Lateral abdominal wall bulge during sitting up
**Gluteus Maximus** (Most powerful muscle in the body)

**Origin:** Most posterior portion of ilium (crest); posterior sacroiliac ligaments; sacrotuberous ligament;

**Insertion:** ¼ along posterior shaft of femur below greater trochanter; ¾ into iliotibial band which attaches to lateral condyle of tibia

**Functions:** 1) Hip extension when power is needed (i.e. versus gravity or body weight) – e.g., rising from sitting or bending, climbing a hill or stairs, running (not walking); 2) works with TFL for lateral knee stability – makes lower limb a rigid column; 3) lateral thigh rotation (loses power for this movement when thigh is flexed)

**Spinal Levels:** **Innervation:** L-(4),5, S-1,2 (Inferior Gluteal) **TS Line/Meric:** L-3  
**Acupuncture:** T-4/5  
**Organ:** Reproductive (uterus, prostate, also ovaries, testes)  
**Acupuncture:** Circulation-sex (Pericardium)  
**Nutrition:** Vitamin E; Male or Female organ or glandular tissues  
**Chapman’s Reflex:** (Bilat.) Ant: Lateral thigh (posterior to & overlapping TFL reflex); Post: L-5/PSIS

**Clinical Indications** associated with weakness:
- “Grandpa McCoy” gait – backwards hitch
- Low back pain – often gets origin–insertion injury in low back trauma
- Difficulty or back pain going up stairs
- Bilateral – hyperlordosis (along with abdominals)
- Bilateral – AK upper cervical “fixation”
- Uterus – uterine lift challenge and technique
- Prostate – prostate lift challenge technique
- Lateral knee problems

**Gluteus Medius (and Minimus)**

**Origin (medius):** Iliac crest – from posterior gluteal line above to anterior gluteal line below

**Insertion (medius):** Lateral greater trochanter

**Origin (minimus):** Outer ilium between anterior and inferior gluteal lines; margin of sciatic notch

**Insertion (minimus):** Anterior greater trochanter

**Function:** Hip Abduction

**Spinal Levels:** **Innervation:** L-4,5, S-1 (Superior Gluteal) **TS Line/Meric:** L-5 **Acup:** T-4/5  
**Organ:** Reproductive (uterus, prostate, also ovaries, testes)  
**Acupuncture:** Circulation-sex (Pericardium)  
**Nutrition:** Vitamin E; Male or Female organ or glandular tissues  
**Chapman’s Reflex:** (Bilateral) Ant: Upper pubic bone; Post: L-5/PSIS

**Clinical Indications** associated with weakness:
- “Grandpa McCoy” gait – lateral hitch
- Elevated ipsilateral hip, shoulder, occiput
- Prostate – prostate lift challenge and technique
- Uterus – uterine lift challenge and technique
- Ovarian and testicular problems including hormonal imbalances

**Medial Hamstrings - Semitendinosus**

**Origin:** Ischial tuberosity (with the tendon of the biceps femoris long head)

**Insertion:** Pes anserinus (tendon lies lateral to semimembranosus tendon)

**Function:** Extends hip, flexes knee, medial rotates knee, works with biceps femoris short head when foot is OFF the ground – i.e., carries weight of leg

**Spinal Levels:** **Innervation:** L-(4),5, S-1,2 (Sciatic) **TS Line/Meric:** L-1 **Acupuncture:** L-4/5  
**Organ:** Rectum

**Acupuncture:** Large Intestine  
**Nutrition:** Vitamin E; (if cramping present on testing–consider calcium, hydrochloric acid)  
**Chapman’s Reflex:** (Bilateral) Ant: over lesser trochanter; Post: PSIS / L-5

**Clinical Indications** associated with weakness:
- Medial knee problems
- “Pulled Hamstring” – IRT to OI and belly
- Rectal problems including hemorrhoids
Medial Hamstrings - Semimembranosus
Origin: Ischial tuberosity – upper and lateral portion
Insertion: Posterior medial surface of tibial medial condyle
Function: Extends hip, flexes knee, medial rotates knee, works with biceps femoris long head when foot is ON the ground – i.e., extends hip and shifts weight of body forward
Spinal Levels: Innervation: L-(4),5, S-1,2 (Sciatic)  TS Line/Meric: L-1  Acup: L-4/5
Organ: Rectum
Acupuncture: Large Intestine
Nutrition: Vitamin E; (if cramping present on testing – consider calcium, hydrochloric acid)
Chapman’s Reflex: (Bilateral) Ant: over lesser trochanter; Post: PSIS / L-5
Clinical Indications associated with weakness:
- Medial knee problems
- “Pulled Hanstring” – IRT to OI and belly
- Rectum

Lateral Hamstrings – Biceps Femoris - Long Head
Origin: Ischial tuberosity; sacrotuberous ligament
Insertion: Lateral fibula; lateral tibial condyle; lateral deep fascia of leg
Function: Flexes knee, extends hip, works with semimembranosus when foot is ON the ground, i.e., extends hip and shifts weight of body forward
Spinal Levels: Innervation: L-(5), S-1,2,(3) (Sciatic)  TS Line/Meric: L-1  Acup: L-4/5
Organ: Rectum
Acupuncture: Large Intestine
Nutrition: Vitamin E; (if cramping present on testing–consider calcium &/or hydrochloric acid)
Chapman’s Reflex: (Bilateral) Ant: over lesser trochanter; Post: PSIS / L-5
Clinical Indications associated with weakness:
- Lateral knee problems
- “Pulled Hanstring” – IRT to OI and belly
- Rectum

Lateral Hamstrings – Biceps Femoris Short Head
Origin: Lateral linea aspera; lateral intermuscular septum; lateral supracondyle of femur
Insertion: Lateral fibula; lateral tibial condyle; lateral deep fascia of leg
Function: Flexes knee, extends hip, works with semitendinosus when foot is OFF the ground, i.e., carries weight of leg
Spinal Levels: Innervation: L-5, S-1,2 (Sciatic)  TS Line/Meric: L-1  Acupuncture: L-4/5
Organ: Rectum
Acupuncture: Large Intestine
Nutrition: Vitamin E; (if cramping present on testing–consider calcium &/or hydrochloric acid)
Chapman’s Reflex: (Bilateral) Ant: over lesser trochanter; Post: PSIS / L-5
Clinical Indications associated with weakness:
- Lateral knee problems
- Rectum
Neck Extensors
SPLENIUS CAPITUS
Origin: SPs C-7 to T-3; LOWER LIGAMENTUM NUCHAE
Insertion: MASTOID PROCESS AND LATERAL SUPERIOR NUCHAL LINE
SPLENIUS CERVICUS
Origin: SPs T-3 to T-6
Insertion: C-1 TO C-3 or C-4 – TPs POSTERIOR ASPECTS
SEMISPINALIS CAPITUS
Origin: TPs OF C-7 to T-6
Insertion: ARTICULAR PROCESSES OF C-4 to C-6
SEMISPINALIS CERVICIS
Origin: TPs T-1 to T-6
Insertion: SPs C-2 to C-5
Function: Extend and rotate neck and head
Spinal Levels: Innervation: Various TS Line/Meric: T-1 Acupuncture: T-12/L-1
Organ: Sinuses
Acupuncture: Stomach
Nutrition: Niacinamide, B-6, Iodine
Chapman’s Reflex: (Bilateral) Ant: Inferior to mid-clavicle; Post: C-1/C-2 lamina
Clinical Indications associated with weakness:
• Unilateral – AK iliac fixation
• Bilateral – AK sacral fixation – possibly anterior sacrum rotation
• Whiplash injuries may cause origin-insertion injury

Quadratus Lumborum
Origin: Posterior iliac crest; iliolumbar ligament
Insertion: Inferior border of 12th rib; TPs of L-1 to L-4
Function: Extends lumbar spine, lateral flexes lumbar spine
Spinal Levels: Innervation: (T-12), L-1,2,3 (lumbar plexus) TS/Meric: L-2 Acupuncture: L-4/5
Organ: Appendix
Acupuncture: Large Intestine
Nutrition: Vitamin E, Vitamin A, Vitamin C
Chapman’s Reflex: (Bilateral- 2 Post reflexes) Post 1: Tip of 12th rib; Post 2: T-11
Clinical Indications associated with weakness:
• Low back pain – often gets origin-insertion injury in low back trauma
• Elevated 12th rib seen on x-ray

Sacrospinalis
Origin: Multiple
Insertion: Multiple
Function: Extends spine, lateral flexes spine
Spinal Levels: Innervation: Various TS Line/Meric: None Acupuncture: Sacrum
Organ: Bladder
Acupuncture: Bladder
Nutrition: Vitamins A, C, & bioflavonoids (combinations or individually); Vitamin E; Calcium
Chapman’s Reflex: (Bilat–2 Anterior) Ant 1:Lateral to umbilicus; Ant 2:Symphysis pubis; Post:L-2
Clinical Indications associated with weakness:
• “C” curve scoliosis – convex on side of weakness / concave on opposite side of weakness
• Difficulty laterally bending or difference in right and left lateral bending
• Can see tight side “bunched up” in prone position
**Subscapularis**
*Origin:* Anterior scapula (subscapular fossa)
*Insertion:* Humerus – lesser tuberosity, shoulder joint capsule
*Function:* medial rotation

**Spinal Levels:**
*Innervation:* C-5/6 (upper & lower subscapular)  
*TS/Meric:* T-2  
*Acup:* T-5/6

**Organ:** Heart

**Acupuncture:** Heart

**Nutrition:** Heart tissue, B vitamins (including “B” & “G”), vitamin E

**Chapman’s Reflex:** (Bilateral) Ant: 2nd IC space; Post:T-2/3

**Clinical Indications** associated with weakness:
- Throwing
- Playing tennis (forehand), golf, etc.
- Difficulty (pain, limited ROM) reaching forward
- Difficulty (pain, limited ROM) reaching across body
- Can’t get arm up behind back
- Origin-insertion injury in “rotator cuff syndrome”
- Must consider entire origin in injury
- Heart problems (coronary, cardiac)

**Infraspinatus**
*Origin:* Medial 2/3rds of infraspinous fossa of scapula
*Insertion:* Greater tubercle of humerus (middle facet), shoulder joint capsule
*Function:* lateral rotation; with teres minor and teres major produces smooth shoulder abduction by stabilizing scapula

**Spinal Levels:**
*Innervation:* C-5,6 (suprascapular)  
*TS Line/Meric:* N/A

**Organ:** Thymus

**Acupuncture:** Triple Warmer (Triple Heater)

**Nutrition:** Thymus tissue; immune supportive substances

**Chapman’s Reflex:** (Ant. only) Right 5th IC space from mid axillary line to mid mamillary line

**Clinical Indications** associated with weakness:
- Difficulty (pain, limited ROM) with shoulder elevation
- Difficulty (pain, limited ROM) with reaching backwards
- Can’t raise arm overhead with palm up
- Playing tennis (backhand), golf, etc
- Origin-insertion injury in “rotator cuff syndrome”
- Origin-insertion injury anywhere in scapular origin
- Any immune system problem (infections, autoimmunity, cancer patients)

**Teres Minor**
*Origin:* Middle to lower 1/3 of axillary border of scapula
*Insertion:* Greater tubercle of humerus – lowest facet
*Function:* lateral rotation; with infraspinatus and teres major produces smooth shoulder abduction by stabilizing scapula

**Spinal Levels:**
*Innervation:* C-(4),5,(6) (axillary)  
*TS Line/Meric:* N/A

**Organ:** Thyroid

**Acupuncture:** Triple Warmer (Triple heater)

**Nutrition:** Thyroid tissue, Iodine, Parotid tissue,

**Chapman’s Reflex:** (Bilateral) Ant: 2nd IC space; Post:T-2/3

**Clinical Indications** associated with weakness:
- Can see palm of hand from behind
- Difficulty (pain, limited ROM) with shoulder elevation
- Difficulty (pain, limited ROM) with reaching backwards
- Can’t raise arm overhead with palm up
- Playing tennis (backhand), golf, etc.
- Origin-insertion injury in “rotator cuff syndrome”
- Thyroid problems
**Supraspinatus**

**Origin:** Medial 2/3rds of supraspinous fossa of scapula

**Insertion:** Greater tubercle of humerus, shoulder joint capsule

**Function:** begins abduction (1st 15° – 20°); holds humeral head in glenoid fossa

**Spinal Levels:** Innervation: C-5,(6) (suprascapular) TS Line/Meric: N/A Acup: T-6/7, T-7/8

**Organ:** Brain

**Acupuncture:** Governing Vessel or Conception Vessel

**Nutrition:** Brain tissue, RNA

**Chapman’s Reflex:** (Bilateral) Ant: Over coracoid process; Post: Base of skull to C-1 lamina

**Clinical Indications** associated with weakness:

- Difficulty with initiation of humeral abduction – even to point of pseudo frozen shoulder
- Any shoulder pain or movement problems
- Origin-insertion injury in “rotator cuff syndrome”
- Brain – weakness with cerebrovascular accident including transient ischemic attacks
Deltoid - Middle
**Origin:** Upper surface of acromion (embraces insertion of upper trapezius)
**Insertion:** Deltoid tubercle of humerus
**Function:** abduction; cannot initiate abduction; lifts arm only to 90° – further elevation from tilting glenoid fossa superiorly

**Spinal Levels:** Innervation: C-5/6 (axillary)  TS Line/Meric: T-3  Acupuncture:  T-3/4

**Organ:** Lung

**Acupuncture:** Lung
**Nutrition:** Vitamin C; Lung tissue, (RNA)

**Chapman’s Reflex:** (Bilateral) Ant: (2nd), 3rd, (4th) IC spaces; Post: T-(2)/3/4

**Clinical Indications** associated with weakness:
- Difficulty with shoulder abduction
- Absent lung sounds – pneumothorax
- Lung conditions (less likely in asthma)
- Route of elimination (nasal / sinus congestion)
- Bilateral - C-7 / T-1 / T-2 AK “fixation”

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Deltoid - Posterior
**Origin:** Posterior border of spine of scapula
**Insertion:** Deltoid tubercle of humerus
**Function:** abduction; shoulder extension

**Spinal Levels:** Innervation: C-5/6 (axillary)  TS Line/Meric: T-3  Acupuncture:  T-3/4

**Organ:** Lung

**Acupuncture:** Lung
**Nutrition:** Vitamin C; Lung tissue, (RNA)

**Chapman’s Reflex:** (Bilateral) Ant: (2nd), 3rd, (4th) IC spaces; Post: T-(2)/3/4

**Clinical Indications** associated with weakness:
- Works with supraspinatus – injured with supraspinatus
- Difficulty (pain, limited ROM) on abduction
- Difficulty (pain, limited ROM) in reaching backwards, e.g., reaching in back seat
- Adduction from abducted position

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Deltoid - Anterior
**Origin:** Superior surface of anterior distal 1/3rd of clavicle
**Insertion:** Deltoid tubercle of humerus
**Function:** abduction, shoulder flexion

**Spinal Levels:** Innervation: C-5/6 (axillary)  TS Line/Meric: T-3 (T-4)  Acup:  T-3/4 (T-11/12)

**Organ:** Lung (Gall Bladder)

**Acupuncture:** Lung (Gall Bladder)
**Nutrition:** Vitamin C; Lung tissue, (RNA)

**Chapman’s Reflex:** (Bilateral) Ant: (2nd), 3rd, (4th) IC spaces; Post: T-(2)/3/4

**Clinical Indications** associated with weakness:
- Works with and parallels PMC
- Difficulty (pain, limited ROM) on abduction and flexion
- Throwing
**Serratus Anterior**

**Origin:** By finger-like slips (serrated – saw-tooth) from the upper 8-9 ribs – outer surfaces and superior borders – runs as a broad sheet of muscle along chest wall

**Insertion:** Entire vertebral border of scapula - 5/8 of fibers insert on lower border; lower fibers insert in directly opposite direction from the rhomboids fibers;

**Function:** most powerful protractor of shoulder; rotates glenoid fossa upward (works with upper and lower trapezius); anchors scapula to chest wall so other shoulder muscles can pull from a fixed source

**Spinal Levels:** Innervation: C-5,6,7 (long thoracic)  
**TS Line/Meric:** T-3  
**Acupuncture:** T-3/4  
**Organ:** Lung  
**Acupuncture:** Lung  
**Nutrition:** Vitamin C; Lung tissue  
**Chapman's Reflex:** (Bilateral) Ant: 3rd, 4th, 5th IC spaces; Post: T-3/4/5  
**Clinical Indications** associated with weakness:
- 1st AK patient
- In paralysis – humerus abduction limited to 90°
- Observe for scapular movement during abduction
- Difficulty (pain, limited ROM) when reaching or pushing
- Tight rhomboid
- Injured when catching self when falling forward
- Breathing problems – diaphragm – affects rib positions
- Breathing problems - lung
- Pseudo breast soreness from injuries to origins
- Bilateral - C-7 / T-1 / T-2 AK “fixation”

**Coracobrachialis**

**Origin:** Tip of coracoid process – shares tendon with short head of biceps

**Insertion:** Medial side of humerus – just opposite deltoid insertion

**Function:** flexion; adduction

**Spinal Levels:** Innervation: C-5,6,7 (musculocutaneous)  
**TS Line/Meric:** T-4  
**Acup:** T-3/4  
**Organ:** Lung  
**Acupuncture:** Lung  
**Nutrition:** Vitamin C; Lung tissue  
**Chapman’s Reflex:** (Bilateral) Ant: 2nd, 3rd, 4th IC spaces; Post:T-3/4  
**Clinical Indications** associated with weakness:
- Difficulty combing hair
- Difficulty shaving
- Difficulty holding arm up overhead
- Lung

**Lower Trapezius**

**Origin:** SPs of T-5 to T-12  
**Insertion:** Medial 1/3rd of spine of scapula

**Functions:** pulls medial end of scapular spine inferiorly; tilts glenoid fossa upward (working with upper trapezius); together – retracts and lowers both shoulders

**Note:** Entire trapezius (upper, middle, lower) combined with latissimus dorsi attachments provide upper limb attachments the entire way from the back of the head to the sacrum

**Spinal Levels:** Innervation: C-2,3,4, CN XI (accessory)  
**TS Line/Meric:** T-7  
**Acup:** T-11/12  
**Organ:** Spleen  
**Acupuncture:** Spleen-pancreas  
**Nutrition:** Vitamin C; Spleen tissue, (Calcium)  
**Chapman’s Reflex:** Ant: Left 7th / 8th IC space; Post: Left T-7/8  
**Clinical Indications** associated with weakness:
- Difficulty raising arm overhead
- Unilateral – lower thoracic scoliosis
- Bilateral – increased thoracic kyphosis
- Bilateral – AK thoracolumbar “fixation”
Middle Trapezius
Origin: SPs of T-1 to T-5
Insertion: Superior border of scapula & medial aspect of acromion
Function: retracts scapula; steady scapula at very first stage of raising arm
Spinal Levels: Innervation: C-2,3,4, CN XI (accessory) TS Line/Meric: T-7 Acup: T-11/12
Organ: Spleen
Acupuncture: Spleen-pancreas
Nutrition: Vitamin C; Spleen tissue, (Calcium)
Chapman’s Reflex: Ant: Left 7th / 8th IC space; Post: Left T-7/8
Clinical Indications associated with weakness:
Difficulty standing at attention
Opposite shoulder problem (through tight contralateral middle trapezius)

Teres Major
Origin: Dorsal surface of inferior angle of scapula & inferior 1/3rd of lateral border of scapula; sometimes blends with latissimus dorsi
Insertion: Medial lip of bicipital groove
Function: Extension and medial rotation of humerus; does not move shoulder girdle, but does stabilize upper end of humerus during abduction
Spinal Levels: Innervation: C-5,6,(7) TS Line/Meric: N/A Acupuncture: T-6/7
Organ: Spine; acid-alkaline balance
Acupuncture: Governing Vessel
Nutrition: Acid ash minerals; alkaline ash minerals; zinc; kelp
Chapman’s Reflex: (Bilateral) Ant: 2nd IC space – 2-3’ lateral to sternum; Post: T-3
Clinical Indications associated with weakness:
Hand lateral rotation – can see palm from front
Can raise arm in lateral rotation but not in medial rotation
Swimming
Acid – alkaline mineral imbalances
   Plantar warts (usually require potassium)
   Excessive perspiration (kelp and/or alkaline ash minerals)
   Drooling (phosphorus / acid ash minerals)
Bilateral - Thoracic AK “fixation”
Note: Beware TLing to lumbars

Rhomboids
Major - Origin: SPs of T-2 to T-5
Minor - Origin: Ligamentum nuchae; SPs of C-7 & T-1
Major - Insertion: Medial border of scapula from spine to inferior angle
Minor - Insertion: Medial border of scapula at the root of the spine of the scapula
Function: Retracts scapula; turns glenoid fossa downward; holds scapula to chest wall; only primates have scapula which is longer than wider – only primates can raise arm overhead
Spinal Levels: Innervation: C-4,5 (dorsal scapular) TS Line/Meric: N/A Acupuncture: T-11/12 (T-8-9) (controversial)
Organ: Stomach, (Liver) (controversial)
Acupuncture: Stomach; (Liver) controversial
Nutrition: Vitamin A
Chapman’s Reflex: (Left only) Ant: 5th/6th IC space; Post: T-5/6/7
Clinical Indications associated with weakness:
Woodsman swinging an axe
Tight in PMS or Serratus Anterior weakness
**Pectoralis Minor**

**Origin:** Ribs 3, 4, & 5 near costal cartilages  
**Insertion:** Coracoid process  
**Function:** Pulls coracoid process anteriorly, medially, & inferiorly; stabilizes anterior shoulder  
**Spinal Levels:** Innervation: C-6,7,8, T-1 (medial pectoral nerve)  
**Organ:** Parotid gland, Immune (Chemical sensitivities)  
**Acupuncture:** N/A  
**Nutrition:** Molybdenum, Parotid tissue, Iron, EFA  
**Chapman’s Reflex:** Lower middle sternum  
**Clinical Indications** associated with weakness:  
Shoulder injury from punching motion  
Chemical hypersensitivities  
Heavy metal toxicity  
AK Retrograde problems

**Subclavius**

**Origin:** 1st rib at junction of costal cartilage  
**Insertion:** Groove in inferior surface of clavicle between costoclavicular & conoid ligaments  
**Function:** Draws clavicle anteriorly & inferiorly – “crank-like” action of clavicle during abduction; restrains active elevation and protraction of clavicle  
**Spinal Levels:** Innervation: C-5,6 (brachial plexus branch)  
**Organ:** N/A  
**Acupuncture:** Stomach(?)  
**Nutrition:** N/A  
**Chapman’s Reflex:** (Bilateral) Ant: Junction of clavicle, 1st rib, & sternum; Post: T-1  
**Clinical Indications** associated with weakness:  
Frozen shoulder
**Sternocleidomastoid**

**Origin:** Sternum: anterior manubrium; Clavicle: upper surface of medial half

**Insertion:** Lateral mastoid process; lateral ½ of superior nuchal line

**Function:** Bilateral function: flexes head, accessory respiratory muscle; Unilateral: rotates head to opposite side, pulls head towards ipsilateral shoulder

**Spinal Levels:**

**Innervation:** C-2,3, CN XI (accessory)  
**TS Line/Meric:** T-1/1st rib  
**Acup:** T-12/L-1

**Organ:** Sinuses

**Acupuncture:** Stomach

**Nutrition:** Niacinamide with B-6; Iodine

**Chapman’s Reflex:** (Bilateral) Ant: Inferior to mid-clavicle; Post: C-1/C-2 lamina

**Clinical Indications** associated with weakness:

Bilateral

- Whiplash injuries – origin and insertion injuries
- Frontal bone cranial faults
- Neck flexion and extension problems – limited ROM, pain

Unilateral

- Difficulty (pain, limited ROM) on lateral flexion like holding a phone in the ear
- Difficulty (pain, limited ROM) on neck rotation – including looking over shoulder while backing up in a car
- Sinuses

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**Medial Neck Flexors**

**SCALENEUS ANTERIOR**

**Origin:** ANT TPs C-2 to C-6  
**Insertion:** UPPER RIB 1

**SCALENEUS MEDIUS**

**Origin:** POST TPs C-2 TO C-7  
**Insertion:** UPPER RIB 1

**SCALENEUS POSTERIOR**

**Origin:** POST TPs C-4,5,6  
**Insertion:** OUTER RIB 2

**LONGUS CAPITUS**

**Origin:** ANT TPs C-3 to C-6  
**Insertion:** INF BASILAR PORTION OF OCCIPUT

**LONGUS COLLI**

**Origin:** BODIES T-1,2,3 C-5,6,7  
**Insertion:** BODIES C-2,3,4

**Function:** Bilateral function: flexes head and neck, accessory respiratory muscle

Unilateral: rotates head and neck to opposite side

**Spinal Levels:**

**Innervation:** Various (C-1 to 8)  
**TS Line/Meric:** T-1/1st rib  
**Acup:** T-12/L-1

**Organ:** Sinuses

**Acupuncture:** Stomach

**Nutrition:** B-6 with Niacinamide; Iodine

**Chapman’s Reflex:** (Bilateral) Ant: Inferior to mid-clavicle; Post: C-1/C-2 lamina

**Clinical Indications** associated with weakness:

Bilateral

- Whiplash injuries – origin and insertion injuries
- Neck flexion and extension problems – limited ROM, pain
- Cranial frontal bone faults

Unilateral

- Difficulty (pain, limited ROM) on neck rotation, lateral flexion
- Shoulder elevation problems – often contralateral to weakness
- Squamosal suture cranial faults (parietal descent fault)
- Sinuses
**Upper Trapezius**

**Origin:** External occipital protuberance and medial 1/3rd of superior nuchal line, ligamentum nuchae to the SP of C-7

**Insertion:** Lateral 1/3rd of superior clavicle and acromion process

**Function:** Elevates lateral scapula (tilts glenoid cavity superiorly), rotates head, laterally flexes head; Bilaterally: extends head, elevates and adducts shoulders

**Spinal Levels:** Innervation: CN XI (accessory), C-(2),3,4; **TS Line/Meric:** N/A **Acupuncture:** L-2/3

**Organ:** Eye, Ear

**Acupuncture:** Kidney

**Nutrition:** Calcium, EFA (vitamin F), B complex, “G”, Vitamin A

**Chapman’s Reflex:** (Bilateral) Ant: 1 inch band - 3 inches long over upper arm; Post: Nuchal line/C-1

**Clinical Indications** associated with weakness:
- Difficult head rotation to opposite side—as with looking over shoulder while backing up in a car
- Difficulty (pain, limited ROM) on lateral flexion as in holding a phone in the ear
- Pain in upper trapezius - contralateral to inhibited side
  - Most common: inhibition of ipsilateral latissimus dorsi
- Pain in ipsilateral or contralateral levator scapula
- Difficulty with shoulder (glenoid fossa) elevation

**Levator Scapula**

**Origin:** TPs of C-1 to C-4

**Insertion:** Superior medial border of the scapula

**Function:** Elevates medial side of scapula (tilts glenoid cavity inferiorly), rotates neck and head, laterally flexes neck

**Spinal Levels:** Innervation: C-3,4,5 (dorsal scapular) **TS Line/Meric:** N/A **Acupuncture:** T-3/4

**Organ:** Parathyroid

**Acupuncture:** Lung

**Nutrition:** Parathyroid substance, calcium, magnesium (especially when on left)

**Chapman’s Reflex:** (Bilateral) Ant: 1st IC space peristernal; Post: belly of teres minor muscle

**Clinical Indications** associated with weakness:
- Pain in origin and/or insertion
- Pain in contralateral levator scapula
- Pain in ipsilateral or contralateral upper trapezius
- Patient awakens with “crick” in the neck
- Difficulty (pain, limited ROM) with cervical rotation or lateral flexion
- Whiplash injuries – origin and insertion injuries
- Recurrent cervical subluxations
- Parathyroid relationship
  - General muscle tension and pain to palpation (Pseudofibromyalgia)
  - Smooth muscle “spasm”
    - Increased blood pressure
    - Gall bladder symptoms
    - Difficulty swallowing
**Hyoid Muscles**

**DIGASTRICUS - POSTERIOR BELLY**
*Origin:* Mastoid process  
*Insertion:* Intermediate tendon

**DIGASTRICUS - ANTERIOR BELLY**
*Origin:* Inner mandible near symphysis menti  
*Insertion:* Intermediate tendon

**STYOHYOID**
*Origin:* Styloid process  
*Insertion:* Body of hyoid at greater cornu

**MYLOHYOID**
*Origin:* Entire length of inner surface of lower mandible  
*Insertion:* Anterior body of hyoid

**GENIOHYOID**
*Origin:* Inferior mandible at symphysis menti  
*Insertion:* Anterior surface of body of hyoid

**STERNOHYOID**
*Origin:* Manubrium; clavicle; sternoclavicular ligament  
*Insertion:* Inferior body of hyoid

**THYROHYOID**
*Origin:* Thyroid cartilage  
*Insertion:* Lower greater cornu and adjacent hyoid body

**OMOHYOID**
*Origin:* Upper border of scapula  
*Insertion:* Inferior body of hyoid

- **Functions:** Move hyoid in various motions; jaw opening (anterior digastric)
- **Spinal Levels:** Innervation: Various  
  TS Line/Meric: N/A  
  Acupuncture: T-12 / L-1(?)
- **Organ:** (Thymus)?
- **Acupuncture:** (Stomach)?
- **Nutrition:** Folic acid; Thymus tissue
- **Chapman’s Reflex:** N/A

**Clinical Indications** associated with weakness:
- Difficulty swallowing
- Difficulty phonating
- Related to “switching” phenomena
  - folic acid
  - thymus gland
- TMJ involvement (hyoid bone is like a “little TMJ”)
- Recurrent upper cervical subluxations

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**External (Lateral) Pterygoid**

**Superior head - Origin:** Greater wing of sphenoid-infratemporal surface, infratemporal crest

**Inferior head - Origin:** Lateral pterygoid plate – lateral surface

- **Insertion:** Condyle of mandible-anterior part; articular capsule & disc of TMJ
- **Function:** Opens jaw; pulls articular disc anteriorly during opening; protrudes mandible; alternates with opposite external pterygoid to produce side-to-side movements for chewing and grinding

**Spinal Levels:** Innervation: V-3 (mandibular-lateral pterygoid)  
TS Line/Meric: N/A  
Acupuncture: T-12/L-1

- **Organ:** N/A

- **Acupuncture:** Stomach
- **Nutrition:** Raw veal bone
- **Chapman’s Reflex:** (Bilateral) Ant: IC spaces 2, 3, & 4 peristernal; Post: T-2,3,4

**Clinical Indications** associated with weakness:
- TMJ disorders
  - Opening problems
  - Disc problems including opening & closing “clicks”
- Most common muscle to show IRT
- Related to cranial faults
Internal (Medial) Pterygoid

**Origin:** Medial surface of lateral pterygoid plate; pyramidal process of palatine bone

**Insertion:** Ramus of mandible – medial surface; Angle of mandible – medial surface

**Functions:** Closes the jaw; protracts jaw; mastication - pulls mandible to opposite side for grinding movements

**Spinal Levels:** Innervation: V-3 (mandibular-medial pterygoid)  
**TS Line/Meric:** N/A  
**Acupuncture:** T-12/L-1

**Organ:** N/A

**Acupuncture:** Stomach

**Nutrition:** Raw veal bone

**Chapman’s Reflex:** (Bilateral) Ant: IC spaces 2, 3, & 4 peristernal; Post: T-2,3,4

**Clinical Indications** associated with weakness:
- TMJ disorders
- Chewing problems including jaw muscle fatigue
- IRT to origin common
- Related to cranial faults

Temporals

**Origin:** Entire temporal fossa; Deep temporal fascia

**Insertion:** Coronoid process-apex, medial surface, anterior border, posterior border; ramus of mandible-anterior border

**Function:** Closes the jaw; clenches the teeth; mastication; posterior fibers retract jaw

**Spinal Levels:** Innervation: V-3 (mandibular)  
**TS Line/Meric:** N/A  
**Acupuncture:** T-12/L-1

**Organ:** N/A

**Acupuncture:** Stomach

**Nutrition:** Raw veal bone

**Chapman’s Reflex:** (Bilateral) Ant: IC spaces 2, 3, & 4 peristernal; Post: T-2,3,4

**Clinical Indications** associated with weakness:
- TMJ disorders
- Chewing problems including jaw muscle fatigue
- Fascial shortening associated with temporoparietal jam cranial fault

Masseter

**Origin:** Zygomatic arch

**Insertion:** Angle & ramus of mandible – outer surface; coronoid process

**Function:** Closes the jaw; clenches the teeth; mastication

**Spinal Levels:** Innervation: V-3 (mandibular)  
**TS Line/Meric:** N/A  
**Acupuncture:** T-12/L-1

**Organ:** N/A

**Acupuncture:** Stomach

**Nutrition:** Raw veal bone

**Chapman’s Reflex:** (Bilateral) Ant: IC spaces 2, 3, & 4 peristernal; Post: T-2,3,4

**Clinical Indications** associated with weakness:
- TMJ disorders
- Chewing problems including jaw muscle fatigue
**SESSION 8 MUSCLES & CLINICAL INDICATIONS OF WEAKNESS**

**Quadriceps – Vastus Muscles**

**Lateralis - Origin:** Anteriorly and laterally on proximal femur; proximal linea aspera (lateral); fascial lata; intermuscular septum; wraps around

**Lateralis - Insertion:** Patella to tibial tubercle

**Intermedius - Origin:** Anterior and lateral femoral shaft- proximal 2/3rds (hidden by other 2 vasti and rectus femoris); distal linea aspera; lateral intermuscular septum

**Intermedius - Insertion:** Into the back of rectus femoris tendon into the patella to tibial tubercle

**Medialis - Origin:** Linea aspera (medial); distal intertrochanteric line; proximal medial supracondylar line; medial intermuscular septum; tendons of adductor longus & magnus

**Medialis - Insertion:** Patella to tibial tubercle

**Function:** knee extension; protect and insure integrity of knee joint

**Spinal Levels:** Innervation: L-2,3,4 (femoral) TS Line/Meric: T-10  Acupuncture: Sacrum

**Organ:** Small Intestine

**Acupuncture:** Small Intestine

**Nutrition:** Vitamin D; Vitamin B complex including B-12 & folic acid; Small intestine tissue

**Chapman’s Reflex:** (Bilat) Ant: along lower border of costal cartilages (ribs 8-11); Post: T-8-11

**Clinical Indications** associated with weakness:

- Difficulty going upstairs
- Lateral or medial patellar displacement on movement
- Any knee problem
- Stands with hyperextended knee or slightly flexed knee when weak
- Relaxed in knee extension - lateral tibial rotation (“locking home’) on final knee extension
- Articularis genu origin–insertion injury in unusual suprapatellar knee pain
- Small intestine

**Popliteus**

**Origin:** Lateral femoral condyle; superior tibial-fibular joint and head of fibula; oblique popliteal ligament (which runs against the lateral meniscus);

**Insertion:** Posterior tibia (above soleus origin)

**Function:** medially rotates knee; (note: when knee is flexed, hamstrings, not popliteus causes medial knee rotation; “unlocks” knee during first phase of extension

**Spinal Levels:** Innervation: L-4/5 S-1 (sciatic - tibial) TS Line/Meric: T-4  Acupuncture: T-10/11

**Organ:** Gall Bladder

**Acupuncture:** Gall Bladder

**Nutrition:** Bile salts; Vitamin A; EFA; Betaine

**Chapman’s Reflex:** (Right only) Ant: 4th/5th IC space - sternum to mid-mamillary line; Post: T-4/5/6

**Clinical Indications** associated with weakness:

- Any knee problem
- Difficulty going down stairs
- Gall Bladder (“female, fair fat, forty” with a knee problem)
**Diaphragm**

**Origin:** Sternum – posterior aspect of xiphoid; Ribs – inner surfaces of costal cartilages & ribs of lower 6 ribs; Lumbar – medial & lateral lumbocostal arches (medial & lateral arcuate ligaments); 2 crura from lumbar vertebrae

**Insertion:** Central tendon

**Function:** Inspiration

**Spinal Levels:** **Innervation:** C-3,4,5 (phrenic)  
**TS Line/Meric:** N/A  
**Acupuncture:** T-7/8

**Organ:** N/A

**Acupuncture:** Conception vessel

**Nutrition:** N/A

**Chapman’s Reflex:** Ant only: Entire length of sternum

**Clinical Indications** associated with weakness:
- Lower lateral rib movements decreased on inspiration
- Breathing difficulties
- Misdiagnosed asthma
- Hiatal hernia / reflux (GERD)
- Pericardial sac firmly attached to upper central tendon
**Sartorius** (longest muscle in the body; also has the longest muscle fibers; “tailor’s muscle”)

**Origin:** ASIS

**Insertion:** Upper medial tibia (PES anserinus - means “foot of the goose”)

**Function:** “to pull origin and insertion together;” flexes, abducts, and lateral rotates hip; flexes medial rotates knee; “tailor’s position”

**Spinal Levels:** Innervation: L-2,3,4 (femoral)  
TS Line/Meric: T-9  
**Acupuncture:** T-4/5

**Organ:** Adrenals

**Acupuncture:** Circulation-Sex (Pericardium)

**Nutrition:** Adrenal tissue; Vit. C; Pantothenic acid; Niacinamide; Wheat germ oil; DHEA; Adaptogens

**Chapman’s Reflex:** (Bilateral) Ant: 1 inch lateral and 2 inches superior to the umbilicus; Post: T-11/12

**Clinical Indications** associated with weakness:

- Longest muscle in the body with longest fibers
- Any knee problem
- Medial meniscus injury
- Difficulty (especially medial knee soreness) going downstairs
- Tightness in iliotibial band
- Origin injury in “hip pointer” injury
- Tripod muscle for knee and pelvic stabilization (with gracilis and semitendinosis)
- Category 2 – posterior Ilium (UoMS)
- Adrenal

**Gracilis (2 test versions)**

**Origin:** Lower ½ of symphysis pubis; ischiopubic line

**Insertion:** Upper medial tibia (PES anserinus - means “foot of the goose”)

**Function:** adducts thigh; medially rotates knee; protects knee medially

**Spinal Levels:** Innervation: L-2,3,4 (obturator)  
TS Line/Meric: T-9  
**Acupuncture:** T-4/5

**Organ:** Adrenals

**Acupuncture:** Circulation-Sex (Pericardium)

**Nutrition:** Adrenal tissue; Vit. C; Pantothenic acid; Niacinamide; Wheat germ oil; DHEA; Adaptogens

**Chapman’s Reflex:** (Bilateral) Ant: 1 inch lateral and 2 inches superior to the umbilicus; Post: T-11/12

**Clinical Indications** associated with weakness:

- Any knee problem
- Medial meniscus injury
- Tripod muscle for knee and pelvic stabilization (with sartorius and semitendinosis)
- Category 2 – posterior Ilium (UoMS)
- Adrenal

**Gastrocnemius** (also discussed in Session 5)

**Medial head - Origin:** Medial femoral condyle & adjacent femur; capsule of knee joint

**Medial head - Insertion:** Achilles tendon (calcaneus)

**Lateral head - Origin:** Lateral femoral condyle; posterior surface of knee joint

**Lateral head - Insertion:** Achilles tendon (calcaneus)

**Function:** knee flexion; ankle plantar flexion; fibers are too short for both to be performed simultaneously.

**Spinal Levels:** (L-4,5) S-1,2 (sciatic-tibial)  
**TS Line/Meric:** (T-9)  
**Acupuncture:** T-4/5

**Organ:** Adrenals

**Acupuncture:** Circulation-sex (Pericardium)

**Nutrition:** Adrenal tissue; Vit. C; Pantothenic acid; Niacinamide; Wheat germ oil; DHEA; Adaptogens

**Chapman’s Reflex:** (Bilateral) Ant: 1 inch lateral and 2 inches superior to the umbilicus; Post: T-11/12

**Clinical Indications** associated with weakness:

- Important in “take-off” phase of walking or running
- Difficulty standing on tip-toes (works with soleus)
- Any knee problem
- Recurrent calcaneus subluxations
- Cramps or “charley horses” at night – calcium metabolism
- Adrenal
Adductors (Adductor Longus, Adductor Brevis, Adductor Magnus, Pectineus)

Pectineus - Origin: Superior ramus of pubis to pectineal line
Pectineus - Insertion: Pectineal line – from upper linea aspera (below lesser trochanter)
Adductor Brevis - Origin: Front of inferior pubic ramus
Adductor Brevis - Insertion: Along a line from lesser trochanter to linea aspera
Adductor Longus - Origin: Front of pubic ramus between the crest and symphysis pubis
Adductor Longus - Insertion: middle 1/3rd of medial linea aspera
Adductor Magnus - Origin: Ischiopubic ramus back to ischial tuberosity
Adductor Magnus - Insertion: Linea aspera from lesser trochanter to adductor tubercle

Note on adductor insertions: The adductor group inserts along the medial linea aspera down to the medial supracondylar ridge & adductor tubercle, and are *layered like the pages of a book*

Function: thigh adduction, hip flexion; lateral thigh rotation; stability of femoral position; stability of pelvis

Spinal Levels: Innervation:
Pectineus: L-2,3,4 (femoral & obturator); Add Brev: L-2,3,4 (obturator); Add Long: L-2,3,4 (obturator); Add Magnus: L-2,3,4,5 S-1 (obturator & sciatic)

TS Line/Meric: L-5 Acupuncture: T-4/5

Organ: Reproductive - uterus, prostate (ovaries; testes)

Acupuncture: Circulation-sex (Pericardium)

Nutrition: Vitamin E; Uterus tissue; Prostate tissue; (Ovarian tissue; Orchic tissue)

Chapman’s Reflex: (Bilateral) Ant: On anterior chest wall behind areola *(not in the breast tissue)*; Post: Below inferior angle of scapula

Clinical Indications associated with weakness:

- Difficulty in crossing knees
- Medial knee pain (origin insertion injury of adductor magnus)
- Difficulty with hip flexion
- Lower groin pain
- Tight in positive Patrick’s sign (Fabere-Patrick sign) (weak on contralateral side)
- Category 2 – anterior ilium (LiLL)
- Elbow pain (shared Chapman’s reflex)
- Thumb pain (shared Chapman’s reflex)
SESSION 9 MUSCLES & CLINICAL INDICATIONS OF WEAKNESS

**Posterior Tibialis**
**Origin:** Tibia-lateral part of posterior surface; Fibula-medial 2/3rds; interosseus membrane; intermuscular septum; deep leg fascia
**Insertion:** Tendon courses behind medial malleolus through tarsal tunnel and fans out on bottom of foot to: navicular tuberosity, all cuneiforms, metatarsals 2,3,4, cuboid, sustenaculum tali
**Function:** plantar flexion; foot inversion; maintains “spring” in the medial longitudinal arch during locomotion
**Spinal Levels:** L-5 S-1(tibial)  **TS Line/Meric:** (T-9)  **Acupuncture:**  T-4/5
**Organ:** Adrenal
**Acupuncture:** Circulation-sex (Pericardium)
**Nutrition:** Adrenal tissue; Vit. C; Pantothenic acid; Niacinamide; Wheat germ oil; DHEA; Adaptogens

**Chapman’s Reflex:** (Bilateral) Ant: 1 inch lateral & 2 inches superior to umbilicus; Post: T -11/12

**Clinical Indications** associated with weakness:
- Most common weakness in foot and ankle problems
- Usually needs origin–insertion treatment
- Foot pronation / flat feet
- Foot and ankle instability – recurrent foot subluxations
- Tired feet
- No “spring in the step”
- Plantar fasciitis
- Posterior shin splints
- Wobbly ankle
- Hammer toes
- Tarsal tunnel syndrome
- Adrenal

**Anterior Tibialis**
**Origin:** Tibia: lateral condyle, proximal 2/3rds of lateral surface; interosseus membrane; deep fascia; intermuscular septum
**Insertion:** 1st cuneiform; base of 1st metatarsal
**Function:** ankle dorsiflexion; medial foot dorsiflexion; foot inversion; dorsiflexes foot during gait; maintains medial longitudinal arch during gait
**Spinal Levels:**  **Innervation:** L-4,5 (S-1) (peroneal)  **TS Line/Meric:** N/A  **Acupuncture:**  S-2
**Organ:** Bladder
**Acupuncture:** Bladder
**Nutrition:** Vitamin A; Vitamin B complex
**Chapman’s Reflex:** (Bilateral) Ant: Superior area of pubic bone; Post: L-2

**Clinical Indications** associated with weakness:
- Foot drop
- Catching toes in carpet
- Stubbing toes
- High stepping gait
- Anterior shin splints
- Bladder
**Peroneus Longus**

**Origin:** Upper 2/3rds lateral fibula; Lateral condyle of tibia; Intermuscular septa & fascia

**Insertion:** Groove under cuboid to lateral portions of: proximal 1st metatarsal, 1st cuneiform

**Spinal Levels:** Innervation: L-4,5 (S-1) (peroneal)  
**TS Line/Meric:** N/A  
**Acupuncture:** S-2

**Organ:** Bladder

**Acupuncture:** Bladder

**Nutrition:** Vitamin A; Vitamin B complex; Calcium (avoid oxalic acid foods)

**Chapman’s Reflex:** (Bilateral) Ant: Inferior pubic bone; Post: L-5/PSIS

**Function:** foot eversion; foot plantar flexion; supports longitudinal arch;

**Clinical Indications** associated with weakness:

- Origin-insertion injury in inversion ankle sprain – allows recurrent injuries
- Navicular, 1st cuneiform, and 1st metatarsal subluxations
- Fibular pain, sometimes described as lateral knee pain
- Bladder

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**Peroneus Brevis**

**Origin:** Lower 2/3rds lateral tibia

**Insertion:** Laterally on base of metatarsal 5

**Function:** foot eversion, especially with plantar flexion

**Spinal Levels:** Innervation: L-4,5 (S-1) (peroneal)  
**TS Line/Meric:** N/A  
**Acupuncture:** S-2

**Organ:** Bladder

**Acupuncture:** Bladder

**Nutrition:** Vitamin A; Vitamin B complex; Calcium (avoid oxalic acid foods)

**Chapman’s Reflex:** (Bilateral) Ant: Inferior pubic bone; Post: L-5/PSIS

**Clinical Indications** associated with weakness:

- Origin-insertion injury in inversion ankle sprain – allows recurrent injuries
- 5th metatarsal and lateral foot symptoms
- Bladder

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**Peroneus Tertius**

**Origin:** Lower 1/3rd of anterior surface of fibula

**Insertion:** Dorsum of metatarsal 5

**Function:** ankle dorsiflexion; lateral foot dorsiflexion; counteracts anterior tibialis so foot can be placed “foursquare” on the ground (no other primate can do this)

**Spinal Levels:** Innervation: L-4,5 S-1 (peroneal)  
**TS Line/Meric:** N/A  
**Acupuncture:** S-2

**Organ:** Bladder

**Acupuncture:** Bladder

**Nutrition:** Vitamin A; Vitamin B complex; Calcium (avoid oxalic acid foods)

**Chapman’s Reflex:** (Bilateral) Ant: Inferior pubic bone; Post: L-5/PSIS

**Clinical Indications** associated with weakness:

- Origin-insertion injury in inversion ankle sprain – allows recurrent injuries
- 5th metatarsal and lateral foot symptoms
- Cuboid and 3rd cuneiform subluxations
- Bladder
**Soleus**

**Origin:** Fibula-posterior head & posterior 1/3rd of shaft; Tibia-middle 1/3rd of medial border; tendinous arch between tibia and fibula

**Insertion:** Achilles tendon (calcaneus)

**Function:** plantar flexion of the ankle

**Spinal Levels:** (L-4,5) S-1,2 (tibial)  **TS Line/Meric:** (T-9)  **Acupuncture:** T-4/5

**Organ:** Adrenal

**Acupuncture:** Circulation-sex (Pericardium)

**Nutrition:** Adrenal tissue; Vit. C; Pantothenic acid; Niacinamide; Wheat germ oil; DHEA; Adaptogens

**Chapman’s Reflex:** (Bilateral) Ant: 1 inch lateral and 2 inches superior to the umbilicus; Post: T-11/12

**Clinical Indications** associated with weakness:

- Powerful plantar flexion (gastrocnemius far less powerful)
- Important in “take-off” phase of walking or running
- Difficulty standing on tip-toes (gets help from gastrocnemius)
- Recurrent calcaneus subluxations
- Adrenal

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**Intrinsic Muscles of the Foot**

**Origins:** Various

**Insertions:** Various

**Functions:** Many individual functions

**Spinal Levels:**  **Innervation:** Various  **TS Line/Meric:** N/A  **Acupuncture:** N/A

**Organ:** N/A

**Acupuncture:** N/A

**Nutrition:** Raw veal bone if injured

**Chapman’s Reflex:** None

**Clinical Indications** associated with weakness:

- 4 layers of foot muscles
- Difficult to isolate and test
- OI based on location of symptoms
- OI based on palpation

Often requires OI-IRT correction
Triceps – Medial and Lateral Heads

Medial head - Origin: Lower posterior surface of humerus
Lateral head - Origin: Posterolateral surface of humerus
Insertion: Upper posterior surface of olecranon; deep fascia of forearm
Function: elbow extension; medial head comparable with brachialis

Spinal Levels: Innervation: C-(6),7,6 (T-1)  
TS Line/Meric: T-6  
Acupuncture: T-11/12  
Organ: Pancreas – blood sugar handling; digestive enzyme deficiency  
Acupuncture: Spleen-pancreas  
Nutrition: Vitamin A; Vitamin F; Betaine; Zinc; Pancreas tissue; Glucose regulation related substances: Chromium; Vanadium; Pancreatic digestive enzymes  
Chapman’s Reflex: Ant: Left 7th IC space, medial portion, 7th costal cartilage; Post: Left T-7/8

Clinical Indications associated with weakness:
- Elbow problems including “tennis elbow” and “golf elbow”
- Pancreas – triceps are overactive in hyperinsulinism

Triceps – Long Head

Origin: Infraglenoid tubercle of scapula
Insertion: Upper posterior surface of olecranon; deep fascia of forearm
Function: elbow extension; shoulder extension; long head and lateral head are comparable with the biceps brachii

Spinal Levels: Innervation: C-(6),7,6 (T-1)  
TS Line/Meric: T-6  
Acupuncture: T-11/12  
Organ: Pancreas – blood sugar handling; digestive enzyme deficiency  
Acupuncture: Spleen-pancreas  
Nutrition: Vitamin A; Vitamin F; Betaine; Zinc; Pancreas tissue; Glucose regulation related substances: Chromium; Vanadium; Pancreatic digestive enzymes  
Chapman’s Reflex: Ant: Left 7th IC space, medial portion, 7th costal cartilage; Post: Left T-7/8

Clinical Indications associated with weakness:
- Elbow problems
- Difficulty (pain, limited ROM) of shoulder
- Difficulty “elbowing” someone behind you
- Pancreas – triceps are overactive in hyperinsulinism

Brachialis

Origin: Lower anterior humerus (extensive)
Insertion: tuberosity of ulna
Function: flexes elbow (biceps brachii often gets credit for work done by brachialis)

Spinal Levels: Innervation: C-5,6 (musculocutaneous)  
TS Line/Meric: N/A  
Acupuncture: T-12/L-1  
Organ: Stomach  
Acupuncture: Stomach  
Nutrition: Hydrochloric acid; (duodenal concentrate; chlorophyll)  
Chapman’s Reflex: (Bilateral) Ant: 4th/5th IC spaces; Post: C-2 (T-4/5)

Clinical Indications associated with weakness:
- Tested with biceps brachii
- Difficulty (pain, limited ROM) on elbow flexion
- May be bilaterally weak in hyperinsulinism
- Ulna subluxations
- Stomach
**Biceps brachii**

**Long head - Origin:** Supraglenoid tubercle of scapula  
**Short head - Origin:** Coracoid process  
**Insertion:** Tuberosity of radius; Lacertus fibrosis (=deep Aponeurosis continuous with deep fascia of forearm)  
**Function:** flexes elbow (especially against resistance – assists brachialis); supinates forearm (especially against resistance - assists supinator); flexes shoulder; helps retain humeral head in glenoid fossa (long head only)  
**Spinal Levels:** Innervation: C-5,6 (musculocutaneous)  
**TS Line/Meric:** N/A  
**Acupuncture:** T-12/L-1  
**Organ:** Stomach  
**Acupuncture:** Stomach  
**Nutrition:** Hydrochloric acid; (duodenal concentrate; chlorophyll)  
**Chapman’s Reflex:** (Bilateral) Ant: 4th/5th IC spaces; Post: C-2 (T-4/5)  
**Clinical Indications** associated with weakness:  
- Slipped bicipital tendon – painful catch in shoulder during elevation and return  
- Bilateral weakness induced by hyperinsulinism  
- Radius subluxations  
- Difficulty (pain, limited ROM) on elbow flexion  
- Difficulty (pain, limited ROM) on forearm supination, especially against resistance  
- Using a screw driver  
- Long head can rupture at origin  
- Stomach

**Brachioradialis**

**Origin:** Proximal 2/3rd of supracondylar ridge (from lateral epicondyle to halfway up humeral shaft)  
**Insertion:** By a long, ribbon-like tendon to the lateral base of styloid process of the radius  
**Function:** flexes elbow, especially with forearm semi-pronated (especially with heavy loads or rapid movements) as in carrying a coat, or carrying a baby; hitch-hiking motion or thumbs-up motion  
**Spinal Levels:** Innervation: C-5,6 (radial)  
**TS Line/Meric:** N/A  
**Acupuncture:** T-12/L-1  
**Organ:** Stomach  
**Acupuncture:** Stomach  
**Nutrition:** N/A  
**Chapman’s Reflex:** (Bilateral) Ant: Entire pectoralis major muscle; Post: Over supraspinatus origin  
**Clinical Indications** associated with weakness:  
- Elbow pain (usually at origin)  
- Pain or fatigue when holding weight with arm in semi-pronated position  
- Inhibited in cases of “nerves” and “general nervous tension” (Chapman’s NL reflex)
**Pronator Teres**

*Origin:* Humerus-medial epicondyle; ulna-medial side of coronoid process  
*Insertion:* Radius – middle of the lateral shaft where bowing reaches its maximum  
*Function:* elbow flexion; forearm pronation, especially when power is needed  
*Spinal Levels:* Innervation: C-6,7 (median)  
*Acupuncture:* T-12/L-1  
*Organ:* Stomach  
*Acupuncture:* Stomach  
*Nutrition:* N/A  
*Chapman’s Reflex:* (Bilateral) Ant: On anterior chest wall behind areola (*not* in the breast tissue); Post: Below inferior angle of scapula  

**Clinical Indications** associated with weakness:  
- Elbow flexion / extension differentiates pronator teres & pronator quadratus tests  
- Difficulty using a screw driver to unscrew  
- Elbow pain – medial epicondylitis  
- Radius subluxations  
- Wrist pain, especially on pronation  
- Wrist subluxations  
- Stomach, Large intestine(?)

**Pronator Quadratus**

*Origin:* Front of ulnar shaft just above wrist joint (distal 1/4 of ulna)  
*Insertion:* Front of radius shaft just below wrist joint; distal ¼ of radius – most anterior and medial areas  
*Function:* pronates forearm; stabilizes radius and ulna at wrist  
*Spinal Levels:* Innervation: C-7,8 T-1 (median)  
*Acupuncture:* T-12/L-1  
*Organ:* Stomach  
*Acupuncture:* Stomach  
*Nutrition:* N/A  
*Chapman’s Reflex:* (Bilateral) Ant: On anterior chest wall behind areola (*not* in the breast tissue); Post: Below inferior angle of scapula  

**Clinical Indications** associated with weakness:  
- Elbow flexion / extension differentiates pronator teres and pronator quadratus tests  
- Difficulty using a screw driver to unscrew  
- Can’t stand weight on hands such as doing push-ups, leaning on hands  
- Carpal tunnel syndrome  
- Wrist subluxations  
- Any wrist pain  
- Large intestine (Stomach?)

**Supinator**

*Origin:* Lateral condyle of humerus; radial collateral ligament; annular ligament; supinator crest of ulna  
*Insertion:* Lateral surface of radius – upper 1/3rd  
*Function:* supinates forearm, especially when power not needed  
*Spinal Levels:* Innervation: C-(5),6 (radial)  
*Acupuncture:* T-12/L-1  
*Organ:* Stomach  
*Acupuncture:* Stomach  
*Nutrition:* Vitamin B complex; “B”, “G”; Hydrochloric acid  
*Chapman’s Reflex:* (Left only) Ant: 5th / 6th IC space; Post: T-5/6; NOTE: Sometimes associated with Adductors Chapman’s reflex  

**Clinical Indications** associated with weakness:  
- Difficulty (pain, limited ROM) with forearm supination; e.g., using a screw driver  
- Any elbow problems
Opponens Pollicus
Origin: Flexor retinaculum; tubercle of trapezium bone
Insertion: Entire 1st metacarpal – radial side
Function: flexes & abducts (away from palm) the 1st metacarpal; slightly internally rotates thumb; causes opposition of the thumb toward the other fingers.
Spinal Levels: Innervation: C-6,7 (median)  TS Line/Meric: N/A  Acupuncture: T-12/L-1
Organ: Stomach
Acupuncture: Stomach
Nutrition: Raw veal bone
Chapman’s Reflex: (Bilateral) Ant: On anterior chest wall behind areola (not in the breast tissue); Post: Below inferior angle of scapula
[Also reported as: (Bilateral) Ant: inferior to pubic bone; Post: L-5/PSIS]
Clinical Indications associated with weakness:
• Carpal tunnel syndrome
• Difficulty holding objects
• Difficulty opening a jar

Opponens Digiti Minimi
Origin: Hamulus (hook) of hamate bone; flexor retinaculum
Insertion: Entire 5th metacarpal shart – ulnar side
Function: flexes & slightly rotates the 5th metacarpal; helps to lift ulnar portion of hand so metacarpophalangeal flexors can bring little finger toward thumb (opposition); helps to cup hand
Spinal Levels: Innervation: C-(7),8 T-1 (ulnar)  TS Line/Meric: N/A  Acupuncture: T-12/L-1
Organ: Stomach
Acupuncture: Stomach
Nutrition: Raw veal bone
Chapman’s Reflex: (Bilateral) Ant: On anterior chest wall behind areola (not in the breast tissue); Post: Below inferior angle of scapula (Also reported as: (Bilateral) Ant: inferior to pubic bone; Post: L-5/PSIS)
Clinical Indications associated with weakness:
• Pisiform-hamate syndrome
• Difficulties with little finger

Extensor Carpi Radialis Longus & Brevis
Longus - Origin: Humerus-lateral supracondylar ridge - distal 1/3rd
Longus - Insertion: Dorsal surface of base of 2nd metacarpal - radial side
Brevis - Origin: Humerus-lateral epicondyle (common extensor tendon); radial collateral ligament; deep antebrachial fascia
Brevis - Insertion: Dorsal surface of 3rd metacarpal
Function: Extends wrist; abducts wrist; stabilizes wrist for finger movements
Spinal Levels: Innervation: C-(5), 6,7,8 (radial)  TS Line/Meric: N/A  Acupuncture: L-4/5
Organ: Right – Ileocecal valve; Left – Houston valve (rectosigmoid folds)
Acupuncture: Kidney
Nutrition: N/A
Chapman’s Reflex: (Bilateral - Same as ICV / Houston valve) Ant #1: From the ASIS downward about three inches; Ant #2 area: From the point of the right shoulder downward about 2 or 3 inches; Post: C-3
Clinical Indications associated with weakness:
• Elbow problems – lateral epicondylitis (“tennis elbow”)
• Difficulty (pain, limited ROM) on wrist extension and/or abduction
• Open ileocecal valve syndrome
**Extensor Carpi Ulnaris**  
**Origin:** Humerus-lateral epicondyle (common extensor tendon); aponeurosis from posterior border of ulna; deep antebrachial fascia  
**Insertion:** Base of 5th metacarpal – ulnar side  
**Function:** Extends wrist; adducts wrist; stabilizes wrist for finger movements  
**Spinal Levels:** Innervation: C-(6),7,8 (radial)  
**TS Line/Meric:** N/A  
**Acupuncture:** L-2/3  
**Organ:** Right – Ileocecal valve; Left – Houston valve (rectosigmoid folds)  
**Acupuncture:** Kidney  
**Nutrition:** N/A  
**Chapman’s Reflex:** (Bilateral - Same as ICV / Houston valve) Ant #1: From the ASIS downward about three inches; Ant #2 area: From the point of the right shoulder downward about 2 or 3 inches; Post: C-3  
**Clinical Indications** associated with weakness:  
- Elbow problems – lateral epicondylitis (“tennis elbow”)  
- Difficulty (pain, limited ROM) on wrist extension and/or adduction  
- Open ileocecal valve syndrome

**Finger Extensors** (Extensor digitorum; Extensor Indicis; Extensor Digiti Minimi)  
**Extensor digitorum** – **Origin:** Humerus-lateral epicondyle (common extensor tendon); deep antebrachial fascia  
**Extensor digitorum** – **Insertion:** Middle & disatl phalanges 2-5  
**Extensor Indicis** – **Origin:** Ulna-posterior surface (distal to origin of extensor pollicis longus); interosseus membrane  
**Extensor Indicis** – **Insertion:** index finger with extensor digitorum longus tendon  
**Extensor Digitii Minimi** – **Origin:** Humerus-lateral epicondyle (common extensor tendon); deep antebrachial fascia  
**Extensor Digitii Minimi** – **Insertion:** Little finger with extensor digitorum longus tendon  
**Function:** extend fingers  
**Spinal Levels:** Innervation: C-6,7,8 (radial)  
**TS Line/Meric:** N/A  
**Acupuncture:** N/A  
**Organ:** Right – Ileocecal valve; Left – Houston valve (rectosigmoid folds)  
**Acupuncture:** Kidney  
**Nutrition:** N/A  
**Chapman’s Reflex:** (Bilateral - Same as ICV / Houston valve) Ant #1: From the ASIS downward about three inches; Ant #2 area: From the point of the right shoulder downward about 2 or 3 inches; Post: C-3  
**Clinical Indications** associated with weakness:  
- Difficulty (pain, limited ROM) on finger and wrist extension  
- Difficulty (pain, limited ROM) on finger or wrist flexion

**Flexor Carpi Radialis**  
**Origin:** Medial epicondyle of humerus (common flexor tendon); deep antebrachia fascia  
**Insertion:** Base of 2nd metacarpal; a slip to base of 3rd metacarpal  
**Function:** wrist flexion; wrist abduction (slight); stabilizes wrist for finger movements  
**Spinal Levels:** Innervation: C-6,7,(8) (median)  
**TS Line/Meric:** N/A  
**Acupuncture:** (T-12/L-1)  
**Organ:** N/A  
**Acupuncture:** (Stomach)  
**Nutrition:** N/A  
**Chapman’s Reflex:** (Bilateral) Ant: On anterior chest wall behind areola (not in the breast tissue); Post: Below inferior angle of scapula  
**Clinical Indications** associated with weakness:  
- Elbow pain – medial epicondylitis  
- Wrist pain, weakness on flexion
**Flexor Carpi Ulnaris**

**Origin:** Humerus-medial epicondyle (common flexor tendon); Ulna-medial margin of olecranon, proximal 2/3rds of posterior border; deep antebrachial fascia

**Insertion:** Pisiform; hamate; 5th metacarpal

**Function:** wrist flexion; wrist adduction (works with extensor carpi ulnaris); stabilizes wrist for finger movements

**Spinal Levels:** Innervation: C-(7),8 (T-1) (ulnar)  
**TS Line/Meric:** N/A  
**Acup:** (T-12/L-1)

**Organ:** N/A

**Acupuncture:** (Stomach)

**Nutrition:** N/A

**Chapman’s Reflex:** (Bilateral) Ant: On anterior chest wall behind areola (not in the breast tissue); Post: Below inferior angle of scapula

**Clinical Indications** associated with weakness:
- Elbow pain – medial epicondylitis (“golf elbow”)
- Wrist pain, weakness on flexion

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**The Seven Interossei – 4 Dorsal Interosei (DAB) & 3 Palmar Interosei (PAD)**

**Dorsal - Origins:** Metacarpal bone shafts – dorsal surfaces

**Dorsal - Insertions:** Bases of proximal phalanges – dorsal surfaces

**Palmar - Origins:** Metacarpal bone shafts – palmar surfaces

**Palmar - Insertions:** Bases of proximal phalanges – palmar surfaces

**Function:** abduction (four dorsal interossei-DAB) and adduction (three palmar interossei-PAD) of fingers; work with lumbricales to flex metacarpophalangeal joints and extend interphalangeal joints – to put hand in the writing position or “billiard cue” position or holding a violin bow

**Spinal Levels:** Innervation: C-8, T-1 (ulnar)  
**TS Line/Meric:** N/A  
**Acupuncture:** (T-12/L-1)

**Organ:** N/A

**Acupuncture:** (Stomach)

**Nutrition:** N/A

**Chapman’s Reflex:** N/A

**Clinical Indications** associated with weakness:
- Difficulty (pain, limited ROM) on finger movements
- Difficulty holding or controlling a writing implement
- Abduction weakness in neurological “pyramidal distribution” of weakness

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**The Four Lumbricales**

**1st & 2nd Origin:** Radial surface of flexor profundus tendons to index & middle fingers

**3rd Origin:** Adjacent sides of flexor profundus tendons of middle & ring fingers

**4th Origin:** Adjacent sides of flexor profundus tendon of ring & little fingers

**Insertions:** Radial border of respective digits

**Function:** flex metacarpophalangeal joints and extend interphalangeal joints – to put hand in the writing position or “billiard cue” position or holding a violin bow

**Spinal Levels:** Innervation: 1st & 2nd: (C-(6,7),8, T-1 (medial); 3rd & 4th: C-(7), 8, T-1 (ulnar)  
**TS Line/Meric:** N/A  
**Acupuncture:** (T-12/L-1)

**Organ:** N/A

**Acupuncture:** (Stomach)

**Nutrition:** N/A

**Chapman’s Reflex:** N/A

**Clinical Indications** associated with weakness:
- Difficulty (pain, limited ROM) on finger movements
- Difficulty holding or controlling a writing implement
**Quintessential Applications**

**Quintessential Applications – Study Group Guidelines**

**Session 1: Hands-on Pain Relief**

**Gait Analysis**
1. Perform Standing PMC and Latissimus dorsi Tests
2. Perform Standing PMC and Latissimus dorsi Tests again during right gait and left gait.

**Muscle Spindle Cell Manipulation & Golgi Tendon Organ Manipulation**
Using a PMC or a Latissimus dorsi, observe patterns of facilitation and inhibition
- Inhibit normal muscles by MSC
- Facilitate inhibited muscles by MSC
- Inhibit normal muscles by GTO
- Facilitate inhibited muscles by GTO

**Postural Analysis**
Start with Postural Analysis with a partner. Observe each other’s postural deviations in the standing position.
- Levels of hips (iliac crests), shoulders, and occiput (mastoid processes)
- Rotations of hips, shoulders, head, hands, feet

**Practice Muscle Testing**
1. For each muscle, work with a partner and attempt to produce the Postural Analysis pattern for each muscle.
2. Perform the muscle test exactly as shown in class and as shown in textbooks.
3. To learn how an inhibited muscle feels, if normal response is found – perform MSC and/or GTO techniques to inhibit the muscle and then immediately retest.
4. Test each muscle covered in Session 1
   a. Latissimus dorsi
   b. Pectoralis major, clavicular
   c. Pectoralis major, sternal
5. If a muscle is inhibited “in the clear” – TL to spinal areas
   a. associated with the innervation of that muscle
   b. associated with the acupuncture associated area of the spine for that muscle
   c. Use vertebral challenge technique to determine listing of subluxation
6. TL to Chapman’s Reflexes for each muscle.
   a. If muscle is inhibited, look for a change from inhibited to facilitated.
      i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   b. If muscle is facilitated, observe for a change from inhibited (51%er.)
**Injury Recall Technique**

1. Do this first whenever you find an inhibited muscle: Perform MSC to facilitate (Autogenic Facilitation.) If this does not result in a facilitated response, there is an injury somewhere. Rub the skin over areas of suspected past injuries. Rubbing active injuries will cause the inhibited muscle to test strong temporarily.

2. TL injuries of the head and neck with the neck in extension. If a strong muscle weakens, perform IRT for the head and neck.
   a. Measure an appropriate range of motion before and after correction (neck, hip abduction, etc.)

3. TL injuries on the rest of the body while gently jamming (i.e., challenging) the ipsilateral mortis joint in a cephalward direction. If a strong muscle weakens, perform IRT by a micromanipulation (REMEMBER – IT IS A MICROMANIPULATION) on the ipsilateral talus in the direction of distraction.
   a. Measure an appropriate range of motion before and after correction.

**Stop Your Pain Now! Techniques**

1. NSB (IPR):
   a. If acute pain, aggravate pain by pressure or range of motion and test for indicator muscle inhibition.
   b. If a strong muscle weakens – TL ipsilateral acupuncture head points one-by-one until you find one which negated the inhibition.
   c. Tap this point while intermittently aggravating the pain as above. Tap until pain reduction is maximized.

2. Set Point (Touch and Tap) Technique:
   a. Have the patient TL an area of pain, either past or present.
   b. While testing a strong muscle, tap each acupuncture head point one-by-one until the indicator muscle shows inhibition.
   c. Maintain the TL and tap the acupuncture head point 100 times.
   d. Recheck a. and b.
   e. Check a range of motion before and after correction.

3. Location Quality Memory Technique:
   a. Test a strong muscle while the patient thinks about an area of past injury:
      i. Location on the body
      ii. Quality or nature of what the pain feels like when active
      iii. Memory of what the pain felt like at its worst
      iv. Memory of incident which caused original onset of the pain
   b. For each of the above LQM factors which induce inhibition in the strong indicator muscle, find an acupuncture head point which negates the inhibition.
   c. Tap the appropriate acupuncture head point 100 times coincident with the patient thinking about each of the positive LQM factors.
   d. Check to see if the patient can reproduce the pain before and after correction.
Practice Muscle Testing

1. For each muscle, work with a partner and attempt to produce the Postural Analysis pattern for each muscle.
2. Perform the muscle test exactly as shown in class and as shown in the textbooks.
3. To learn how an inhibited muscle feels, if normal response is found – perform MSC technique to inhibit (pressure in the belly toward the middle of the muscle) and/or GTO technique (pressure on the ends of the muscle away from the middle of the muscle) to inhibit the muscle and then immediately retest.
4. Test each muscle covered in Session 2
   a. Psoas
   b. Tensor Fascia Lata
   c. Rectus femoris
   d. Abdominals - general
   e. Rectus Abdominis
   f. Oblique Abdominals
   g. Gluteus medius (& minimus)
   h. Piriformis (prone)
   i. Gluteus maximus
   j. Hamstrings – general
   k. Medial hamstrings (semimembranosus & semitendinosus)
   l. Lateral Hamstrings (biceps femoris)
   m. Neck extensors
   n. Quadratus lumborum
   o. Sacrospinalis
5. If a muscle is inhibited “in the clear” – check for Autogenic Facilitation (i.e., MSC to facilitate.)
   a. If AF does not strengthen, then rub over areas of injury / trauma
   b. If rubbing one or more areas of previous injury strengthens, perform IRT over these areas.
6. Local Nutrition:
   a. If a “vitamin E” muscle is inhibited “in the clear” – test with oral vitamin E
      i. Various doses
      ii. Various sources
   b. If a gluteus medius or gluteus maximus is weak “in the clear” and the patient has any reproductive system symptoms or history - test orally with the appropriate glandular or organ substances.
7. If a muscle is inhibited “in the clear” – TL to spinal areas
   a. Associated with the innervation of that muscle
   b. Associated with the TS Line / Meric level listed for that muscle (i.e., its organ relationship)
   c. Associated with the acupuncture associated area of the spine for that muscle
   d. Use vertebral challenge technique to determine listing of subluxation
8. TL to Chapman’s Reflexes for each muscle.
   a. If muscle is inhibited, look for a change from inhibited to facilitated.
      i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   b. If muscle is facilitated, observe for a change from inhibited (51%er.)
      i. If this occurs – rub Chapman’s Reflex to correct this cause of inhibition.
Vertebral Challenge
1. Identify a strong piriformis muscle. TL the spine area by area. If positive, TL segment-by-segment to identify level of subluxation.
2. Use vertebral challenge technique to identify direction of subluxation.
   a. Adjust in direction which produces inhibition of indicator muscle.
3. For lumbar subluxations, put one ear down and then the other ear down to determine which side posture position is most appropriate.
   a. Adjust with body in side posture position that maintains the challenge weakness.
4. Rechallenge after adjustment to determine success of correction.

Check the Iliolumbar Ligament
1. TL the IL ligament and challenge the talus in a cephalward direction to look for IRT
2. If positive – perform origin-insertion IRT to the iliolumbar ligament.

Category 2
1. TL for Category 2
   a. TL in supine position
   b. TL with 1 hand on a sacroiliac joint
2. Check for LiLL and UoMS signs
3. Challenge (push and release)
   a. PSIS P to A
   b. Ischium P to A (ASIS A to P)
4. Adjust in direction of positive challenge
   a. Supine with DeJarnette blocks (orthopedic wedges)
   b. Side posture
5. Rechallenge as in 2. above to ascertain correction

Category 1
1. TL for Category 1
   a. TL in prone position
   b. TL with 2 hands – one on each sacroiliac joint
   c. TL with 2 hands to one sacroiliac to determine side of primary involvement
2. Challenge (push and release)
   a. P to A on Right PSIS and Left Ischial tuberosity
   b. P to A on Left PSIS and Right Sacroiliac
3. Adjust using DeJarnette blocks – place according to challenge in 2. above
   a. Adjust repeatedly to aid block correction – Adjust on contralateral side from primary involvement
   b. Never adjust into a block
   c. Monitor 1st rib head pain decrease on side of primary involvement – continue adjusting until 1st rib head pain diminished
4. Rechallenge as in 2. above and recheck TL as in 1. above to ascertain correction

Category 3
1. Challenge for Category 3:
   a. Simultaneously challenge ilium from A to P and L-5 SP toward ilium side.
   b. Challenge on both sides
2. Challenge for IRT to sacrospinous and sacrotuberous ligaments
3. Correct IRT to sacrospinous and sacrotuberous ligaments
4. Recheck Category 3 challenge to see if it is now normal
**Iliac Fixations**

1. Test the neck extensors bilaterally
2. If one neck extensor is weak – it is likely due to an iliac fixation:
   a. TL ipsilateral sacroiliac – positive TL if fixation present
   b. Dynamic challenge (push and release) the PSIS from medial to lateral and from lateral to medial
   c. Static challenge (hold in one direction) the PSIS from medial to lateral and from lateral to medial
   d. Correct in direction determined by b. and c. above – prone or side posture
3. Rechallenge as above to ascertain correction
4. Recheck the neck extensor

**Sacral Fixations**

1. Test the neck extensors bilaterally
2. If both neck extensors are weak – it is likely due to a sacral fixation:
   a. TL to the sacrum – positive in sacral fixation
   b. Use Static Challenge over sacrum
   c. Anterior sacral fixation – Holding sacral base anteriorly causes inhibition
   d. Posterior sacral fixation – Holding sacral SP lateral pressure causes inhibition:
      i. Spinous process pressure left to right = left posterior fixation
      ii. Spinous process pressure right to left = right posterior fixation
   e. Adjust anterior fixation in side posture
   f. Adjust posterior fixation prone or in side posture
3. Rechallenge as above to ascertain correction
4. Recheck the neck extensors
**Practice Muscle Testing**

1. For each muscle, work with a partner and attempt to produce the Postural Analysis pattern for each muscle. Feel the muscle actions in your own body as you attempt to duplicate the various muscle imbalance postures.
2. Perform the muscle test exactly as shown in class and as shown in the textbooks.
3. To learn how an inhibited muscle feels, if a normal response is found – perform MSC technique to inhibit (pressure in the belly toward the middle of the muscle) and/or GTO technique (pressure on the ends of the muscle away from the middle of the muscle) to inhibit the muscle and then immediately retest.
4. Test each muscle covered in Session 4 [associated nutrients in brackets]:
   a. Subscapularis [Heart tissue, B vitamins – G]
   b. Teres minor [Thyroid tissue, Iodine, Parotid tissue]
   c. Infraspinatus [Thymus tissue; immune supportive substances]
   d. Supraspinatus [Brain tissue, RNA]
5. If a muscle is inhibited “in the clear” – check for Autogenic Facilitation (i.e., MSC to facilitate.)
   a. If AF does not strengthen, then rub over areas of injury / trauma
   b. If rubbing one or more areas of previous injury strengthens, perform IRT over these areas.
6. If a muscle is inhibited “in the clear” – TL to spinal areas:
   a. Associated with the innervation of that muscle
   b. Associated with the TS Line / Meric level listed for that muscle (i.e., its organ relationship)
   c. Associated with the acupuncture associated area of the spine for that muscle
   d. Use vertebral challenge technique to determine listing of subluxation
   e. Use coupled adjusting procedures. (See below.)
7. TL to Chapman’s Reflexes for each muscle.
   a. If muscle is inhibited, look for a change from inhibited to facilitated.
      i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   b. If muscle is facilitated, observe for a change to inhibited (51%er.)
      i. If this occurs – rub Chapman’s Reflex to correct this cause of inhibition.

**Visceral Challenge Technique – Part 1**

1. Find an inhibited muscle.
2. Pinch the VRP area for each organ to see if it strengthens the weak muscle.
3. If pinching a VRP strengthens, perform IRT to the associated Chapman’s reflex.
4. Rub the VRP for each organ to see if it strengthens the weak muscle.
5. If rubbing the VRP strengthens, rub the associated Chapman’s reflex.
6. Recheck 1 & 2 above to ascertain correction.

**Essential Fatty Acids**

1. Test oral aspirin, acetaminophen, ibuprofen mix with any weak muscle
   a. If Aspirin, etc. mixture facilitates the weak muscle, wipe off the tongue and then test for EFA by placing EFA in the mouth and retesting the inhibited muscle.
      i. Test with oral Black Currant Seed Oil, Flaxseed Oil, Fish Oils (EPA-DHA), and Sesame Seed Oil.
      ii. Also test with EFA Cofactors: B-6, Magnesium, Zinc, Niacin
**Visceral Challenge Technique – Part 2 (Challenge with Offender – Bad Fats)**

1. Find a weak muscle that strengthens with oral aspirin, acetaminophen, ibuprofen mix strengthens a weak muscle.
2. Using the weak muscle, pinch the VRP area for each organ to see if one or more strengthens the weak muscle.
3. If pinching a VRP strengthens, test a strong indicator muscle while TLing to the associated Chapman’s reflex and orally challenge with:
   - a. Lard
   - b. Shortening (trans fats)
4. When a bad fat causes positive TL to the Chapman’s reflex, perform IRT to the Chapman’s reflex with the offender in the mouth.
5. Recheck 1 & 2 above to ascertain correction.

**Iron, B-12, & Folic acid**

1. If a muscle is inhibited “in the clear” – test with iron, folic acid, vitamin B-12
   - a. Test various sources including “activated” forms of folic and B-12

**Fascial Release Technique (Fascial Flush and/or Spray & Stretch)**

1. Stretch a strong muscle and then retest it.
2. If it becomes inhibited, redo the test with Vitamin B-12 in the mouth.
3. Perform fascial release technique (fascial flushing) by repeatedly “stripping the muscle” from its origin to its insertion (or vice versa – direction of pressure towards the heart.)
4. Perform “Spray & Stretch” technique along the course of the muscle, increasing the range of motion each time you spray.
5. Re-stretch the muscle and retest to ascertain correction.
6. Consider performing a CBC with differential. Possibly supplement with Vitamin B-12
Practice Muscle Testing
1. For each muscle, work with a partner and attempt to produce the Postural Analysis pattern for each muscle. Feel the muscle actions in your own body as you attempt to duplicate the various muscle imbalance postures.
2. Perform the muscle test exactly as shown in class and as shown in the textbooks.
3. To learn how an inhibited muscle feels, if a normal response is found – perform MSC technique to inhibit (pressure in the belly toward the middle of the muscle) and/or GTO technique (pressure on the ends of the muscle away from the middle of the muscle) to inhibit the muscle and then immediately retest.
4. Test each muscle covered in Session 4 [associated nutrients in brackets]:
   a. Deltoid – Middle [Vitamin C; Lung tissue, (RNA)]
   b. Deltoid – Anterior [Vitamin C; Lung tissue, (RNA)]
   c. Deltoid – Posterior [Vitamin C; Lung tissue, (RNA)]
   d. Serratus anterior [Vitamin C; Lung tissue]
   e. Coracobrachialis [Vitamin C; Lung tissue]
   f. Pectoralis minor
   g. Lower trapezius [Vitamin C; Spleen tissue]
   h. Middle trapezius [Vitamin C; Spleen tissue]
   i. Teres major [Acid ash minerals; alkaline ash minerals; zinc; kelp]
   j. Rhomboids [Vitamin A]
   k. Subclavius [N/A]
5. If a muscle is inhibited “in the clear” – check for Autogenic Facilitation (i.e., MSC to facilitate.)
   a. If AF does not strengthen, then rub over areas of injury / trauma
   b. If rubbing one or more areas of previous injury strengthens, perform IRT over these areas.
6. “Local” Nutrition: Test individual nutrients associated with each muscle found weak.
   a. If a “vitamin C muscle is inhibited “in the clear” – test with oral vitamin C
      i. Various doses
      ii. Various sources
7. If a muscle is inhibited “in the clear” – TL to spinal areas:
   a. Associated with the innervation of that muscle
   b. Associated with the TS Line / Meric level listed for that muscle (i.e., its organ relationship)
   c. Associated with the acupuncture associated area of the spine for that muscle
   d. Use vertebral challenge technique to determine listing of subluxation
   e. Use coupled adjusting procedures. (See below.)
8. TL to Chapman’s Reflexes for each muscle.
   a. If muscle is inhibited, look for a change from inhibited to facilitated.
      i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   b. If muscle is facilitated, observe for a change to inhibited (51%er.)
      i. If this occurs – rub Chapman’s Reflex to correct this cause of inhibition.

Citric Acid Cycle:
1. If any muscle is inhibited “in the clear” – test with rebreathing in a paper bag.
   a. If strengthens – test Citric Acid Cycle nutrients
   b. If none of these strengthen, test for vitamin B-6 (including active form P-5-P)
Practice the **Kocher Maneuver for Anterior Shoulder Dislocation**
1. Slightly adduct shoulder and traction inferiorly
2. Maintain traction and externally rotate humerus
3. Maintain external rotation and bring elbow forward across the chest as far as possible. Then begin to internally rotate the humerus from this position.
4. Continue to internally rotate the humerus until the hand is over the opposite shoulder.
5. It may be necessary to immobilize the shoulder in this position.

Practice the **Slipped Bicipital Tendon Technique**
1. Challenge the bicipital tendon from lateral to medial (and from medial to lateral) and test an indicator muscle (simple challenge – no rebound)
2. Grab the patient’s elbow with one hand and contact medial to the bicipital tendon with tip of the thumb of the other hand.
3. While maintaining medial to lateral pressure with the thumb on the bicipital tendon, move the humerus as follows:
   a. Into extension
   b. Then abduct and medially rotate
   c. Then bring humerus back anteriorly and back into adduction to the starting position
Temporosphenoidal Line
1. Palpate the TS Line and note especially the areas for T-11/12 (Psoas), T-8 (PMS), L-5 (Piriformis, Gluteus Medius, Adductors), T-5 (PMC), and T-6 (Latissimus Dorsi)
2. Test the associated muscles when you palpate a TS Line point. Check for 51%ers if not weak “in the clear.”
3. When you find a weak muscle, work backwards and go to the TS Line to see if you can find its related point active there.

Allergy / Hypersensitivity Screening & Treatment (using Visceral Challenge Technique)
1. Find an inhibited muscle which is not related to an injury (i.e., AF strengthens)
2. Test the muscle with oral antihistamine mixture and look for strengthening.
3. If antihistamine mix strengthens, clean it out of the mouth and pinch the VRP area for each GI organ to see which one(s) strengthens the weak muscle.
4. Place various suspicious foods in the patient’s mouth and:
   a. Test a strong indicator muscle to see if the oral challenge induces general weakness. If general weakness is created. TL to the Chapman’s reflex(es) for the organ(s) whose VRPs strengthened in 3.
   b. If general weakness does not occur, test a strong indicator muscle while TLing to the Chapman’s reflex(es) for the organ(s) whose VRPs strengthened in 3.
5. With the offender held in the mouth, perform IRT to the positive Chapman’s reflex(es) found in 4.a. or 4.b.
6. Recheck 1 & 2 above to ascertain correction.

Vertebral Challenge
Flexor Reflex Afferent Subluxation Technique
Lumbar Coupled Adjusting
1. Identify a strong piriformis, hamstring muscle, or latissimus dorsi. Pinch the spine area by area. If positive, pinch segment-by-segment to identify level of subluxation.
2. Use vertebral challenge technique to identify direction of subluxation.
   a. Adjust in direction which produces inhibition of indicator muscle.
3. For lumbar subluxations, put one ear down and then the other ear down to determine which side posture position is most appropriate.
   a. Adjust with body in side posture position that maintains the challenge weakness.
4. For lumbar subluxations, place the spine in the position of coupled which should aid in correction of the subluxation.
   a. If the challenge weakness is maintained in the coupled mechanics position, adjust accordingly.
   b. If the challenge weakness is negated in the coupled mechanics position, do not adjust.
5. Rechallenge after adjustment to determine success of correction.
6. Re-pinch the segment to determine success of correction.
Vertebral Challenge

Flexor Reflex Afferent Subluxation Technique

Cervical Coupled Adjusting

5. Identify a strong extensor muscle. Pinch the spine area by area. If positive, pinch segment-by-segment to identify level of subluxation.

6. Use vertebral challenge technique to identify direction of subluxation.
   a. Adjust in direction which produces inhibition of indicator muscle.

7. For any subluxations, place the spine in the position of coupled mechanics which should aid in correction of the subluxation.
   a. If the challenge weakness is maintained in the coupled mechanics position, adjust accordingly.
   b. If the challenge weakness is negated in the coupled mechanics position, do not adjust. Look for:
      i. Pre-test imaging / cranial faults (cervical subluxations)
      ii. Injury along sclerotome
      iii. Injury along dermatome
      iv. Visceral problem

8. Rechallenge after adjustment to determine success of correction.

9. Re-pinch the segment and test an extensor muscle to determine success of correction.
**Practice Muscle Testing**

1. For each muscle, work with a partner and attempt to produce the Postural Analysis pattern for each muscle.
2. Perform the muscle test exactly as shown in class and as shown in the textbooks.
3. To learn how an inhibited muscle feels, if normal response is found – perform MSC technique to inhibit (pressure in the belly toward the middle of the muscle) and/or GTO technique (pressure on the ends of the muscle away from the middle of the muscle) to inhibit the muscle and then immediately retest.
4. Test each muscle covered in Session 3:
   - a. Sternocleidomastoid
   - b. Medial neck flexors
5. If a muscle is inhibited “in the clear” – check for Autogenic Facilitation (i.e., MSC to facilitate.)
   - a. If AF does not strengthen, then rub over areas of injury / trauma
   - b. If rubbing one or more areas of previous injury strengthens, perform IRT over these areas.
6. **Local Nutrition:** Test individual nutrients associated with each muscle found weak.
   - a. If a sternocleidomastoid is weak “in the clear” – test orally for niacinamide; also iodine
   - b. If the medial neck flexors are weak “in the clear”- test orally for B-6 (+/or P-5-P)
7. If a muscle is inhibited “in the clear” – TL to spinal areas
   - a. Associated with the innervation of that muscle
   - b. Associated with the Meric / TS Line level listed for that muscle (i.e., its organ relationship)
   - c. Associated with the acupuncture associated area of the spine for that muscle
   - d. Use vertebral challenge technique to determine listing of subluxation
   - e. Use coupled adjusting procedures (see below.)
8. TL to Chapman’s Reflexes for each muscle.
   - a. If muscle is inhibited, look for a change from inhibited to facilitated.
     - i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   - b. If muscle is facilitated, observe for a change to inhibited (51%er.)
     - i. If this occurs – rub Chapman’s Reflex to correct this cause of inhibition.
Temporosphenoidal Line
1. Palpate the TS Line and note especially the points for neck flexors (1st rib & T-1 areas.)
2. Test the associated muscles when you palpate a TS Line point. Check for 51%ers if not weak “in the clear.”
3. When you find a weak muscle, work backwards and go to the TS Line to see if you can find its related point active there.

Pre-Test Imaging & Cranial Faults
1. If a muscle is weak “in the clear” – have the patient imagine performing the test.
2. Immediately retest the muscle - if it is now strong:
3. TL to the cranial bones and cranial sutures until you find one area that neutralizes the original muscle weakness. Start with the frontals, then the greater wings of the sphenoid, then the mastoid processes. If one of these does not TL, then TL other cranial bones & sutures. (Do not use pre-test imaging at this time.)
   a) A time saver: Rubbing the skin over the cranial fault will also strengthen.
   b) Pinching the skin over the cranial fault will weaken a strong extensor muscle (unless the cranial fault requires mechanical correction.)
4. Identify cranial fault by standard AK indicators (e.g., neck flexors weakness, challenge, pain patterns, etc.)
5. Correction by neck flexion IRT while patient TLs cranial bone or suture.
6. Note if the standard cranial indicators are now gone.
7. If standard cranial indicators for internal or external frontal faults are still present, correct using mechanical correction taught in class and in AK textbooks.

Shortcut TMJ Correction using IRT
1. Does TL to a TMJ strengthen a weak muscle?
2. If so, perform IRT for the head & neck (atlanto-occipital flexion) while the patient TLs to the involved TMJ.

When TMJ Problems are Secondary to Immune System Involvement
1. Does TL to the TMJ Strengthen a weak muscle?
2. Does hypothalamus tissue strengthen the same weak muscle?
3. If 1. is yes – TL to each TMJ
   a. If TMJ TL is positive – check for IRT to the each TMJ
4. If right TMJ TL is positive – rub thymus RP area. If positive:
   a. Test right infraspinatus
   b. Test thymus tissue
   c. Treat (rub) the thymus Chapman’s reflex (right 5th IC space – laterally)_
5. If left TMJ is positive – rub spleen RP area. If positive:
   a. Test left lower trapezius
   b. Test spleen tissue
   c. Treat (rub) the spleen Chapman’s reflex (left 7th IC space – laterally)
6. If thymus or spleen are not present – test both pectoralis minor muscles
7. If pectoralis minors are weak – test for parotid tissue
8. Recheck IRT to TMJ to ascertain correction
When Cranial Problems are Secondary to Immune System Involvement

1. Is pre-test imaging positive for strengthening a weak muscle?
2. Does hypothalamus tissue strengthen the same weak muscle?
3. If 1. is yes – TL to each cranial bone until one negates the muscle weakness
   a. Check for IRT TL to the that cranial bone
   b. If negative – there is a mechanical cranial fault
   c. If IRT TL to the cranial bone is positive, proceed
4. If right cranial fault is present – rub thymus RP area. If positive:
   a. Test right infraspinatus
   b. Test thymus tissue
   c. Treat (rub) the thymus Chapman’s reflex (right 5th IC space – laterally)
5. If left cranial fault is present – rub spleen RP area. If positive:
   a. Test left lower trapezius
   b. Test spleen tissue
   c. Treat (rub) the spleen Chapman’s reflex (left 7th IC space – laterally)
6. If thymus or spleen are not present – test both pectoralis minor muscles
7. If pectoralis minors are weak – test for parotid tissue
8. Recheck IRT to the cranial area to ascertain correction

Treat a patient following the full protocol to this point in the course.

NOTE: On all procedures, always test something besides muscle testing to ascertain if anything is changing from your corrections. This could be a range of motion such as hip abduction, foot turn in, low back flexion, etc. Or it could be a decrease in pain, or a change in an autonomic finding such as blood pressure or pupillary reflex, or a neurological test such as a tendon reflex or Weber’s sign, etc.
Practice Muscle Testing
1. For each muscle, work with a partner and attempt to produce the Postural Analysis pattern for each muscle.
2. Perform the muscle test exactly as shown in class and as shown in the textbooks.
3. To learn how an inhibited muscle feels, if normal response is found – perform MSC technique to inhibit (pressure in the belly toward the middle of the muscle) and/or GTO technique (pressure on the ends of the muscle away from the middle of the muscle) to inhibit the muscle and then immediately retest.
4. Test each muscle covered in Session 7:
   a. Upper trapezius
   b. Levator scapula
   c. Neck extensors
5. If a muscle is inhibited “in the clear” – check for Autogenic Facilitation (i.e., MSC to facilitate.)
   a. If AF does not strengthen, then rub over areas of injury / trauma
   b. If rubbing one or more areas of previous injury strengthens, perform IRT over these areas.
6. Local Nutrition: Test individual nutrients associated with each muscle found weak.
   a. If levator scapula is weak “in the clear” – test for parathyroid/calcium preparations
      i. Palpate for multiple areas which are tender. See if chewing the parathyroid/calcium preparation diminishes the tenderness of these areas.
7. If a muscle is inhibited “in the clear” – TL to spinal areas
   a. Associated with the innervation of that muscle
   b. Associated with the Meric / TS Line level listed for that muscle (i.e., its organ relationship)
   c. Associated with the acupuncture associated area of the spine for that muscle
   d. Use vertebral challenge technique to determine listing of subluxation
   e. Use coupled adjusting procedures (see below.)
8. TL to Chapman’s Reflexes for each muscle.
   a. If muscle is inhibited, look for a change from inhibited to facilitated.
      i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   b. If muscle is facilitated, observe for a change to inhibited (51%er.)
      i. If this occurs – rub Chapman’s Reflex to correct this cause of inhibition.

Shortcut TMJ Correction using IRT
3. Does TL to a TMJ strengthen a weak muscle?
4. If so, perform IRT for the head & neck (atlanto-occipital flexion) while the patient TLs to the involved TMJ.
Cranial Fault Review

1. In any cranial fault, pre-test imaging will be positive: If a muscle is weak “in the clear” – have the patient imagine performing the test.
2. Immediately retest the muscle - if it is now strong:
3. TL to the cranial bones and cranial sutures until you find one area that neutralizes the original muscle weakness. Start with the frontals, then the greater wings of the sphenoid, then the mastoid processes. If one of these does not TL, then TL other cranial bones & sutures. (Do not use pre-test imaging at this time.)
   a. A time saver: Rubbing the skin over the cranial fault will also strengthen.
   b. Pinching the skin over the cranial fault will weaken a strong extensor muscle (unless the cranial fault requires mechanical correction.)
4. Correction by neck flexion IRT while patient TLs cranial bone or suture, or by mechanical cranial correction.

3 TMJ – Related Cranial faults

1) Temporoparietal Jamming Cranial Fault (TPJ)
   1. Rubbing over (or TL to) squamosal suture strengthens a weak muscle
   2. Contact below the angle of the mandible and apply direct pressure upward through the ramus of the mandible. This will cause inhibition of a strong muscle.
   3. Correct by making contact on the parietal bone directly above the squamosal suture and apply pressure medially. Hold this contact for a minimum of 15-20 seconds.
   4. During this procedure, place thumb over sagittal suture to avoid jamming this suture.
   5. Rechallenge as in 2. above to ascertain correction.

2) The Nasosphenoid Cranial Fault (Sphenoid tilt)
   1. Rubbing over (or TL to) one greater wing of the sphenoid (GW sphenoid) strengthens a weak muscle.
   2. Challenge for sphenoid tilt on each side:
      a. Contact on right lateral nasal bone and challenge by pressing laterally from right to left. Support this challenge by pressing cephalward on the left GW sphenoid and caudalward on the right GW sphenoid.
      b. Contact on left lateral nasal bone and challenge by pressing laterally from left to right. Support this challenge by pressing cephalward on the right GW sphenoid and caudalward on the left GW sphenoid.
   3. Find a phase of respiration which negates the challenge weakness
   4. Correct in the direction of challenge weakness during the phase of respiration which negates the weakness – on 6 to 8 respirations.
   5. Rechallenge as in 2. above to ascertain correction.

3) Sphenoid Compression Fault (Pineal Problem)
   1. Find any strong endocrine related muscle.
   2. Darken the room and re-test the muscle. If it weakens, check again with oral pineal tissue
   3. If darkness weakens the strong muscle, challenge for sphenoid compression fault.
      a. Press on the ramus of the mandible bilaterally from lateral to medial
      b. OR Press on the GW sphenoid bilaterally from lateral to medial
   4. If this challenge weakens a strong muscle, see if it is negated by oral pineal tissue.
   5. Correct by spreading the ramus of the mandible (intraorally) by pressing bilaterally from medial to lateral with firm force for about five seconds.
   6. Rechallenge as in 3. above to ascertain correction.
   7. Retest the strong endocrine muscle with the room darkened.
TMJ Muscle Problems

1. Find an inhibited muscle. TL to each TMJ. If one is positive:
2. TL to TMJ with the atlanto-occipital area in extension IRT. If positive:
3. TL origins and insertions of TMJ Muscles with neck in extension.
   a. External (Lateral) Pterygoid
   b. Internal (Medial) Pterygoid
4. Correct with origin-insertion IRT

Treat a patient following the full protocol to this point in the course.

NOTE: On all procedures, always test something besides muscle testing to ascertain if anything is changing from your corrections. This could be a range of motion such as hip abduction, foot turn in, low back flexion, etc. Or it could be a decrease in pain, or a change in an autonomic finding such as blood pressure or pupillary reflex, or a neurological test such as a tendon reflex or Weber’s sign, etc.
Practice Muscle Testing

1. Test each muscle covered in Session 8 [associated nutrients in italics in brackets]:
   a. Quadriceps [Vit D; Vit B complex including B-12 & folic acid; Small intestine tissue]
      i. General Quadriceps test
      ii. Rectus Femoris
      iii. Vastus Medialis
      iv. Vastus Lateralis
   b. Popliteus [Bile salts; Vitamin A; EFA; Betaine]

Visceral Referred Pain (VRP) Areas

Procedure 1 – Mark the skin area for a VRP:
1. Find a weak digestive related muscle
2. Rub the VRP area for each GI organ to see if it strengthens the weak muscle
3. Pinch the VRP area for each GI organ to see if it strengthens the weak muscle
4. If rubbing or pinching strengthens, continue to rub or pinch very specifically and mark the skin at the limits of that organ’s VRP for that patient.

Procedure 2 – Rubbing a VRP strengthens – Rub Chapman’s reflex:
1. Find a weak digestive related muscle
2. Rub the VRP area for each GI organ to see if it strengthens the weak muscle
3. If rubbing the VRP strengthens, TL to the Chapman’s reflex for that organ/muscle
4. Rub Chapman’s reflex
5. Recheck 1, 2, and 3 above to ascertain correction

Procedure 3 – Pinching a VRP strengthens – Set Point to Chapman’s reflex:
1. Find a weak digestive related muscle
2. Pinch the VRP area for each GI organ to see if it strengthens the weak muscle
3. If pinching the VRP strengthens, have the patient 2-hand TL to the Chapman’s reflex for that organ/muscle and the ipsilateral associated acupuncture head point (AHP)
4. Treat the Set Point for that organ - tap the AHP 100 times while the patient TLs the Chapman’s reflex area.
5. Recheck 1, 2, and 3 above to ascertain correction

Procedure 4 – Pinching a VRP strengthens – IRT to Chapman’s reflex:
1. Find a weak digestive related muscle
2. Pinch the VRP area for each GI organ to see if it strengthens the weak muscle
3. If pinching the VRP strengthens, perform IRT to the Chapman’s reflex
4. Recheck 1 & 2 above to ascertain correction
Ileocecal Valve Syndromes & Enteric Nervous System Concepts:

Open ICV – Traditional Approach
1. Challenge for open ICV by pushing down and toward right hip causes weakness.
2. If positive, rub Chapman’s reflexes for open ICV
3. Check for fat soluble chlorophyll complex
4. Check for L-1 subluxation

Open ICV – Systemic GI Tract Approach
1. Challenge for open ICV by pushing down and toward right hip causes weakness.
2. If positive, rub and pinch digestive organ VRP areas to find which one(s) negates the challenge
3. Treat this organ by rubbing Chapman’s reflex (rubbing VRP strengthens) or with IRT to Chapman’s reflex (pinching VRP strengthens)

Open ICV – Enteric Nervous System Approach
1. Challenge for open ICV by pushing down and toward right hip causes weakness.
2. Check for fat soluble chlorophyll complex
3. Check for L-1 subluxation

Closed ICV – Traditional Approach
1. Challenge for closed ICV by pushing up and toward the left shoulder causes weakness.
2. If positive, check for and rub Chapman’s reflexes for the small intestine (quadriceps)
3. Check for ionizable calcium (e.g., lactate, citrate, gluconate)
4. Check for L-3 anterior subluxation

Closed ICV – Systemic GI Tract Approach
1. Challenge for closed ICV by pushing up and toward the left shoulder causes weakness.
2. If positive, rub and pinch digestive VRP areas to find which one(s) negates the challenge
3. Treat this organ by rubbing Chapman’s reflex (rubbing VRP strengthens) or with IRT to Chapman’s reflex (pinching VRP strengthens)

Closed ICV – Enteric Nervous System Approach
1. Challenge for closed ICV by pushing up and toward the left shoulder causes weakness.
2. If negative, place a source of a good fat or oil in the mouth
3. If closed ICV now present, TL to Chapman’s reflexes for the pancreas, liver and gall bladder
4. With the fat or oil in the mouth, rub the active Chapman’s reflexes

Hiatal hernia / Gastroesophageal reflux (GERD)
1. Perform the “hiatal hernia” challenge upward into the left diaphragm
2. If positive, mechanically “pull the hernia down” and follow with bilateral IRT correction (both talus bones)
3. Rub the Chapman’s reflex for the diaphragm (entire sternum)
4. Test both lower trapezius muscles – if bilaterally weak → dorsolumbar fixation
5. Challenge for T-12 / L-1 / L-2 fixation
   a. P to A on one vertebra on the left and the adjacent vertebra on the right
   b. P to A on the same vertebra on the right and the adjacent vertebra on the left
6. Adjust in direction of challenge with contacts on both vertebrae
7. Retest the lower trapezius muscles
8. Re-perform the “hiatal hernia” challenge

Treat a patient following the full protocol to this point in the course.
Quintessential Applications – Study Group Guidelines

Session 9: Lower Limb / Low Endocrine Function

Practice Muscle Testing

1. For each muscle, work with a partner and attempt to produce the Postural Analysis pattern for each muscle. Feel the muscle as it contracts in your own body, and then feel the muscle actions as you attempt to duplicate the various weak muscle postures.

2. Perform the muscle test exactly as shown in class and as shown in the textbooks.

3. To learn how an inhibited muscle should feel, if a normal response is found – perform MSC technique to inhibit (pressure in the belly toward the middle of the muscle) and/or GTO technique (pressure on the ends of the muscle away from the middle of the muscle) to inhibit the muscle and then immediately retest.

4. Test each muscle covered in Session 9 [associated nutrients in italics in brackets]:
   a. Sartorius [Adrenal tissue; Vitamin C; Pantothenic acid; Niacinamide; Wheat germ oil; DHEA; Adaptogens]
   b. Gracilis (2 test versions) [Same as Sartorius]
      i. Traditional version (prone)
      ii. Beardall version (supine)
   c. Adductors group (longus, brevis, magnus, pectineus) [Vitamin E; Uterus tissue; Prostate tissue; (Ovarian tissue; Orchic tissue)]
   d. Hamstrings [Vitamin E; (if cramping - calcium, hydrochloric acid)]
      a. Medial hamstrings
      b. Lateral Hamstrings
   e. Gastrocnemius – Medial & Lateral (2 test versions) [Same as Sartorius]
      i. Flexed 60°
      ii. Hyperflexed

5. If a muscle is inhibited “in the clear” – check for Autogenic Facilitation (i.e., MSC to facilitate.)
   a. If AF does not strengthen, then rub over areas of injury / trauma
   b. If rubbing one or more areas of previous injury strengthens, perform IRT over these areas.

6. “Local” Nutrition: Test individual nutrients above [in brackets and in italics]. associated with each muscle found weak
   a. In the case of adrenal tissue, test various types of glandular preparations.

7. If a muscle is inhibited “in the clear” – TL to spinal areas:
   a. Associated with the innervation of that muscle
   b. Associated with the TS Line / Meric level listed for that muscle (i.e., its organ relationship)
   c. Associated with the acupuncture associated area of the spine for that muscle
   d. Use vertebral challenge technique to determine listing of subluxation
   e. Use coupled adjusting procedures.

8. TL to Chapman’s Reflexes for each muscle.
   a. If muscle is inhibited, look for a change from inhibited to facilitated.
      i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   b. If muscle is facilitated, observe for a change to inhibited (51%er.)
      i. If this occurs – rub Chapman’s Reflex to correct this cause of inhibition.
**Endocrine Problems**

1) **TLR Patterns & Low Endocrine Function**

1. Find a weak muscle and check TLR rules.
   a. Extensors should test strong in the supine or upright positions.
   b. Flexors should be strong in the prone position.
   c. A weak flexor should test strong with the opposite ear pointed toward the floor.
   d. A weak extensor should test strong with the same ear pointed toward the floor.

2. If any of the TLR rules are not met, TL to each of the endocrine Chapman’s reflexes (adrenal, reproductive, thyroid.) One area will strengthen the weak muscle.

3. Test the same inhibited muscle for strengthening to tasting endocrine related nutrients.

4. Rub the Chapman’s reflexes that were positive in step 2 above.

5. Re-evaluate the weak muscle for TLR patterns. The TLR should now be functioning normally.

**Practice Muscle Testing**

1. For each muscle, work with a partner and attempt to produce the Postural Analysis pattern for each muscle. Feel the muscle as it contracts in your own body, and then feel the muscle actions as you attempt to duplicate the various weak muscle postures.

2. Perform the muscle test exactly as shown in class and as shown in the textbooks.

3. To learn how an inhibited muscle should feel, if a normal response is found – perform MSC technique to inhibit (pressure in the belly toward the middle of the muscle) and/or GTO technique (pressure on the ends of the muscle away from the middle of the muscle) to inhibit the muscle and then immediately retest.

4. Test each muscle covered in Session 9 [associated nutrients in italics in brackets]:
   a. Posterior tibialis [Adrenal tissue; Vit. C; Pantothenic acid; Niacinamide; Wheat germ oil; DHEA; Adaptogens]
   b. Anterior tibialis [Vitamin A; Vitamin B complex]
   c. Peroneus longus [Vitamin A; Vitamin B complex; Calcium]
   d. Peroneus brevis [Vitamin A; Vitamin B complex; Calcium]
   e. Peroneus tertius [Vitamin A; Vitamin B complex; Calcium]
   f. Soleus [Adrenal tissue; Vit. C; Pantothenic acid; Niacinamide; Wheat germ oil; DHEA; Adaptogens]

5. If a muscle is inhibited “in the clear” – check for Autogenic Facilitation
   a. If AF does not strengthen, then rub over areas of injury / trauma
   b. If rubbing one or more areas of previous injury strengthens, perform IRT over these areas.

6. “Local” Nutrition: Orally challenge with the individual nutrients listed [in brackets and in italics] associated with each muscle found weak

7. If a muscle is inhibited “in the clear” – TL to spinal areas:
   a. Associated with the innervation of that muscle
   b. Associated with the TS Line / Meric level listed for that muscle (i.e., its organ relationship)
   c. Associated with the acupuncture associated area of the spine for that muscle
   d. Use vertebral challenge technique to determine listing of subluxation
   e. Use coupled adjusting procedures.

8. TL to Chapman’s Reflexes for each muscle.
   a. If muscle is inhibited, look for a change from inhibited to facilitated.
      i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   b. If muscle is facilitated, observe for a change to inhibited (51%er.)
      i. If this occurs – rub Chapman’s Reflex to correct this cause of inhibition.
**Helbing’s sign (for foot pronation)**
Have the patient take off the shoes and socks and observe the posture for medial bowing of the Achilles tendon

**Shock Absorber Technique**
1. Find a strong psoas and sharply strike the plantar surface of the foot several times with your closed fist. Immediately retest the psoas.
2. If the psoas weakens after the plantar shock, challenge and adjust the foot / ankle.
3. Recreate the plantar surface shock and ascertain that the psoas does not now weaken.

**Figure of 8 taping**
Practice the figure of 8 taping procedure associated with foot pronation.

**Tarsal Tunnel taping**
Practice the taping procedure for support of the tarsal tunnel syndrome.

**Treat a patient following the full protocol to this point in the course.**

NOTE: On all procedures, always test something besides muscle testing to ascertain if anything is changing from your corrections. This could be a range of motion such as hip abduction, foot turn in, low back flexion, etc. Or it could be a decrease in pain, or a change in an autonomic finding such as blood pressure or pupillary reflex, or a neurological test such as a tendon reflex or Weber’s sign, etc.
Evaluate for the 4 AK presentations of **Adrenal Stress Disorder / Syndrome**:

1. **Hypoadrenia #1 (Weak adrenal related muscle)**
   1. Inhibited adrenal related muscle with positive TL to Chapman’s adrenal reflexes (NLs).
   2. Test adrenal related nutrients orally for strengthening of this adrenal related muscle.
   3. Rub adrenal Chapman’s reflexes.
   4. Retest previously inhibited adrenal related muscle.

2. **Hypoadrenia #2 (Dysfunctioning TLR)**
   1. Test any inhibited muscle and observe for Tonic Labyrinthine Reflex activity.
      a. e.g., weak right PMC – should strengthen with left ear down.
      b. e.g., weak left TFL – should strengthen with right ear down.
   2. If there is a failure of normal TLR pattern to create strength, the weakness will be negated by positive TL to Chapman’s adrenal reflexes (or other endocrine reflex.)
   3. Test the same inhibited muscle for strengthening to tasting adrenal related nutrients.
   4. Rub adrenal Chapman’s reflexes.
   5. Recheck previously weak muscle and TLR pattern.

3. **Hyperadrenia**
   1. Find any inhibited muscle and TL the pituitary NL (at the glabella.)
   2. If it strengthens the weak muscle, find a strong indicator muscle.
   3. Retest the strong indicator muscle while TLing the pituitary NL and:
      a. Stimulating adrenal Chapman’s reflexes. (If it weakens, go to 4.) **OR**
      b. With body in “backwards C” curve - head & feet to right. (If it weakens, go to 4.)
   4. TL adrenal Chapman’s reflexes and test orally with stress offenders & look for inhibition.
      a. Common offenders: caffeine, norepinphrine (or jaw retruded), histamine, sugar, insulin (or pinch pancreas VRP below left costal margin)
   5. Treat by IRT to both adrenal Chapman’s reflexes with positive stress offender.
   6. Now, TL to Pituitary NL while rubbing adrenal Chapman’s reflexes or with “backwards C” curve should be negative.

4. **Ligament Stress Adrenal Stretch Syndrome**
   1. Stretch any joint and test any strong muscle. If weakness is created – positive LSASS.
   2. Inhibition after stretching is negated by TL to adrenal Chapman’s reflexes.
   3. Rub Chapman’s reflexes.
   4. Re-stretch any joint and test a strong indicator muscle to insure correction.

**Emotional Recall Quick Fix**

1. TL Emotional NVs (frontal eminences) and test any strong muscle.
2. If weakness: Test a strong muscle (PMC is the best indicator) and ask the patient to think about a mentally stressful problem or event.
3. **TREATMENT OPTION 1:**
   a. If weakness - Continue weakening thought and tap acupuncture head points until you find a pair that negates the weakness. (Most common points are both St-1)
   b. Tap positive AHP 100 TIMES which patient continues weakening thought.
4. **TREATMENT OPTION 2:**
   a. After identifying which AHPs negate the weakness, continue the weakening thought and TL the Chapman’s reflexes related to the positive AHPs.
   b. IRT to this Chapman’s reflex while patient continues weakening thought.
5. Recheck mentally stressful thought to insure it no longer weakens.
Heart-Focused Technique

1. Have the patient simultaneously TL the Heart meridian alarm point (at the tip of the xiphoid process) and mentally focus on the location of the heart itself.
   a. If a strong muscle weakens, this is an indication for the need for Heart-Focused Technique
   b. If no weakness is induced, proceed with the following procedure anyway. Heart-Focused Technique often creates positive changes even when this indication is absent.

2. Ask the patient to think about a mentally stressful problem or event until you find one which creates general inhibition.

3. Test a bilateral range of motion such as hip abduction.

4. Test a weak muscle while patient thinks about different types of appreciation until one causes strengthening.

5. Have patient send this empowering appreciation to the heart.
   a. Recheck the range of motion while patient continues holding the appreciation in the heart.

6. Ask the patient to fill heart with the empowering appreciation until it overflows and flows out to the rest of the body, including especially any problem areas. Continue this image until the entire body is full of the appreciation emanating from the heart.

7. After procedure, recheck the following for correction:
   a. Previously weak muscles
   b. Mentally stressful thought which created weakness
   c. Previous ranges of motion

Treat a patient following the full protocol.

NOTE: On all procedures, always test something besides muscle testing to ascertain if anything is changing from your corrections. This could be a range of motion such as hip abduction, foot turn in, low back flexion, etc. Or it could be a decrease in pain, or a change in an autonomic finding such as blood pressure or pupillary reflex, or a neurological test such as a tendon reflex or Weber’s sign, etc.
QUINTESSENTIAL APPLICATIONS – STUDY GROUP GUIDELINES
Session 11: Liver Detoxification – Part 1

Chemical Sensitivity Screening & Treatment
1. Test a strong indicator muscle.
2. Have the patient sniff an aldehyde (e.g., perfume, etc.) and retest the muscle.
3. If the aldehyde sniff weakens, perform the olfactory challenge again with each of the following nutrients in the mouth and see if any negate the weakening effect:
   a. Molybdenum
   b. Selenium
   c. Niacinamide
   d. Riboflavin
   e. Iron
4. Perform the aldehyde olfactory challenge again while TLing to various Chapman’s reflexes (e.g., liver, lungs, sinuses, small intestine, etc.) to find which ones negate the olfactory challenge.
5. Treat each of the positive reflexes in 4. with IRT following the aldehyde sniff.
6. Recheck 1 & 2 above to ascertain correction.

Liver Detoxification Technique
1. Find a weak muscle which is not related to an injury (i.e., AF strengthens.)
2. Pinch (and rub) the liver VRP (below the right ribs.)
3. If the liver VRP challenge is positive, retest the weak muscle while the patient tastes the following liver detoxification test substances:
   a. Niacinamide
      i. If niacinamide strengthens the weak muscle, TL to the liver Chapman’s reflex (right 5th & 6th IC space) and orally challenge with a source of caffeine.
      ii. If caffeine causes positive TL to liver Chapman’s reflex, perform IRT to the liver Chapman’s reflex with oral caffeine
   b. Cysteine
      i. If cysteine strengthens the weak muscle, TL to the liver Chapman’s reflex (right 5th & 6th IC space) while rubbing adrenal Chapman’s reflexes (to stimulate cortisol production) and test a strong indicator muscle.
      ii. If adrenal (cortisol) stimulation causes positive TL to liver Chapman’s reflex, perform IRT to the liver Chapman’s reflex immediately following stimulating the adrenal Chapman’s reflexes.
   c. Glucuronic acid
      i. If glucuronic acid strengthens the weak muscle, test for magnesium.
      ii. If glucuronic acid strengthens the weak muscle, TL to the liver Chapman’s reflex (right 5th & 6th IC space) while rubbing adrenal Chapman’s reflexes (to stimulate cortisol production) and test a strong indicator muscle.
      iii. If adrenal (cortisol) stimulation causes positive TL to liver Chapman’s reflex, perform IRT to the liver Chapman’s reflex immediately following stimulating the adrenal Chapman’s reflexes.
   d. Glycine
      i. If GLY strengthens the weak muscle, test for glycine synthesis factors
         1. Folic acid
         2. B-6 (and/or pyridoxial-5-phosphate)
         3. Manganese
         4. B-2 (riboflavin)
e. Acetic Acid (Sniff test)
   i. If acetic acid strengthens, also test for pantothenic acid (necessary for acetyl coenzyme A)
   ii. If acetic acid sniff strengthens, test for: nutrients that create acetic acid from acetaldehyde
       1. Molybdenum
       2. Iron
       3. Niacinamide
       4. Riboflavin

f. Methionine
   i. If MET strengthens, test MET cofactors (Note: these are also related to homocysteine)
       1. Magnesium
       2. Folic Acid
       3. B-12
       4. Methyl donor (betaine, choline)

g. Glutathione
   i. Test for amino acids that form glutathione
       1. Cysteine
       2. Glycine
       3. Glutamic acid
   ii. Test for nutrients necessary for glutathione synthesis
       1. Parathyroid tissue
       2. Magnesium
       3. Potassium

Treat a patient following the full protocol to this point in the course.

NOTE: On all procedures, always test something besides muscle testing to ascertain if anything is changing from your corrections. This could be a range of motion such as hip abduction, foot turn in, low back flexion, etc. Or it could be a decrease in pain, or a change in an autonomic finding such as blood pressure or pupillary reflex, or a neurological test such as a tendon reflex or Weber’s sign, etc.
Practice Muscle Testing – Elbow and Forearm

1. Contract each muscle and feel how it responds in your own body. Imagine what changes in motion would be present if the muscle were inhibited.

2. Perform the muscle test exactly as shown in class and as shown in the textbooks.

3. To learn how an inhibited muscle should feel, if a normal response is found – perform MSC technique to inhibit (pressure in the belly toward the middle of the muscle) and/or GTO technique (pressure on the ends of the muscle away from the middle of the muscle) to inhibit the muscle and then immediately retest.

4. Test each muscle covered in Session 7 [associated nutrients in italics in brackets]:
   a. Triceps [Vitamin A; Vitamin F; Betaine; Zinc; Pancreas tissue; Glucose regulation related substances: Chromium; Vanadium; Pancreatic digestive enzymes]
      i. General test
      ii. Long head
   b. Biceps brachii (and brachialis) [Hydrochloric acid; (duodenal concentrate; chlorophyll)]
      i. Elbow flexed
      ii. Long head (elbow extended)
   c. Brachioradialis [N/A]
   d. Pronator teres (and pronator quadratus) [N/A]
      i. Elbow extended
      ii. Elbow flexed
   e. Supinator [Vitamin B complex; “B”, “G”; Hydrochloric acid]
      i. Elbow extended
      ii. Elbow flexed

5. If a muscle is inhibited “in the clear” – check for Autogenic Facilitation (i.e., MSC to facilitate.)
   a. If AF does not strengthen, then rub over areas of injury / trauma
   b. If rubbing one or more areas of previous injury strengthens, perform IRT over these areas.

6. “Local” Nutrition: Test individual nutrients above [in brackets and in italics] associated with each muscle found weak (when applicable.)

7. If a muscle is inhibited “in the clear” – TL to spinal areas:
   a. Associated with the innervation of that muscle
   b. Associated with the TS Line / Meric level listed for that muscle (i.e., its organ relationship)
   c. Associated with the acupuncture associated area of the spine for that muscle
   d. Use vertebral challenge technique to determine listing of subluxation
   e. Use coupled adjusting procedures.

8. TL to Chapman’s Reflexes for each muscle.
   a. If muscle is inhibited, look for a change from inhibited to facilitated.
      i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   b. If muscle is facilitated, observe for a change to inhibited (51%er.)
      i. If this occurs – rub Chapman’s Reflex to correct this cause of inhibition.
The Cholesterol Test
1. Both PMS strong in the clear. Find another muscle which is weak.
2. Rubbing the liver VRP will strengthen the weak muscle unrelated to the liver.
3. Test both PMS with cholesterol (butter, cheese, bacon, lard, or cholesterol itself) in the mouth. In susceptible patients, this will cause weakness of both PMS.
4. Test cholesterol lowering nutrient(s) against the weak-in-the-clear muscle.
5. Treat by rubbing the liver Chapman’s reflex while the patient holds the cholesterol substance in the mouth.
6. Rechallenge both PMS with cholesterol in the mouth.

Visceral Challenge Technique for Poor Quality Fats
Perform the following procedures using two types of bad fats:
   First: A source of partially hydrogenated (trans) fat
   Second: Lard

   1. Find an inhibited muscle which is not related to an injury (i.e., AF strengthens)
   2. Test the muscle with oral aspirin / NSAID mixture and look for strengthening
   3. If aspirin / NSAID mix strengthens, clean it out of the mouth and pinch the VRP area for each GI organ to see which one(s) strengthens the weak muscle.
   4. Place a source of bad fat in the mouth and:
      a. Test a strong indicator muscle to see if the oral challenge induces general weakness. If general weakness is created, TL to the Chapman’s reflex(es) for the organ(s) whose VRPs strengthened in 3.
      b. If general weakness does not occur, test a strong indicator muscle while TLing to the Chapman’s reflex(es) for the organ(s) whose VRPs strengthened in 3.
   5. With the offender held in the mouth, perform IRT to the positive Chapman’s reflex(es) found in 4.a. or 4.b.
   6. Recheck 1 & 2 above to ascertain correction.

Practice Muscle Testing – Wrist, Hand, and Fingers
1. Contract each muscle and feel how it responds in your own body. Imagine what changes in motion would be present if the muscle were inhibited.
2. Perform the muscle test exactly as shown in class and as shown in the textbooks.
3. Test each muscle covered in Session 8 [associated nutrients in italics in brackets]:
   a. Opponens pollicis [Raw veal bone]
   b. Opponens digiti minimi [Raw veal bone]
   c. Wrist extensors [N/A]
   d. Finger extensors [N/A]
   e. Flexor carpi radialis [N/A]
   f. Flexor carpi ulnaris [N/A]
   g. Interossei [N/A]
   h. Lumbricales [N/A]
4. If a muscle is inhibited “in the clear” – check for Autogenic Facilitation (i.e., MSC to facilitate.)
   a. If AF does not strengthen, then rub over areas of injury / trauma
   b. If rubbing one or more areas of previous injury strengthens, perform IRT over these areas.

(Continued on next page)
5. **“Local” Nutrition:** Test individual nutrients above [*in brackets and in italics*]. associated with each muscle found weak (when applicable.)

6. If a muscle is inhibited “in the clear” – TL to spinal areas:
   a. Associated with the innervation of that muscle
   b. Associated with the TS Line / Meric level listed for that muscle (i.e., its organ relationship)
   c. Associated with the acupuncture associated area of the spine for that muscle
   d. Use vertebral challenge technique to determine listing of subluxation
   e. Use coupled adjusting procedures.

7. TL to Chapman’s Reflexes for each muscle (when applicable.)
   a. If muscle is inhibited, look for a change from inhibited to facilitated.
      i. If this occurs – rub Chapman’s Reflex to correct the inhibition.
   b. If muscle is facilitated, observe for a change to inhibited (51%er.)
      i. If this occurs – rub Chapman’s Reflex to correct this cause of inhibition.

**Treat a patient following the full protocol.**

NOTE: On all procedures, always test something besides muscle testing to ascertain if anything is changing from your corrections. This could be a range of motion such as hip abduction, foot turn in, low back flexion, etc. Or it could be a decrease in pain, or a change in an autonomic finding such as blood pressure or pupillary reflex, or a neurological test such as a tendon reflex or Weber’s sign, etc.
**Gait Pattern Assessment**

1. Check for normal gait inhibitory patterns. Use backward step first to establish gait pattern. Test the latissimus dorsi on the side of the backward foot and the PMC on the side of the forward foot. The gait pattern should induce inhibition in these muscles.
2. If normal gait pattern is not present, check for and correct:
   a. Spinal and/or pelvic mechanical faults
   b. Foot and ankle mechanical faults
   c. Iliolumbar ligament problem (usually IRT)
3. Normal gait inhibitory patterns should now be present.
4. While maintaining gait, tilt the head into lateral flexion as far as possible toward the side of backward gait / latissimus weakness. This should negate this extensor weakness and contralateral PMC weaknesses.
5. If the weaknesses persist in spite of the head tilt, TL to each endocrine NL (usually adrenal NLs) to identify which one allows the expected TLR override of gait inhibition.
6. Treat appropriate NLs.
7. Recheck 4) and 5) above to insure correction of gait with TLR pattern.

**Glucose / Insulin Metabolism - Part 1 (Systemic Nutrition)**

ASSESSMENT

1. Pinch pancreas VRP and test biceps brachii (or other flexors)
9. If weakness is induced, orally test with the following substances to identify which ones negate the biceps weakness induced by pinching the VRP area:
   a. Chromium, Vanadium, Zinc (check various sources of each)
   b. Sesame seed oil
   c. Pancreas tissue

TREATMENT PROCEDURE

1. Use Visceral Challenge Technique: Patient Tls Chapman’s reflex for pancreas at the anterior medial 6th / 7th intercostals space and orally challenge with:
   a. Milk
   b. Retruded jaw (norepinephrine)
   c. Cortisol (or stimulate the adrenal Chapman’s reflexes)
   d. Allergen
   e. Bad fats (partially hydrogenated fat, lard,)
2. Treat by IRT (both talus bones) to the pancreas Chapman’s reflex with the offender.

**Glucose / Insulin Metabolism - Part 2 - Disrupting Gait (Systemic Nutrition)**

1. Gait inhibitory patterns must be normal
2. Pinch pancreas VRP area (below the left rib cage) during normal gait pattern. If this disrupts normal gait inhibitory patterns, identify what restores this normal gait after pinching the pancreas VRP area:
   a. TL to the pancreas NL
   b. Nutrients (Chromium, Vanadium, Zinc (check various sources of each), Sesame seed oil, Pancreas tissue
3. Treat (rub) pancreas NL
4. Place sugar in mouth and recheck gait after pinching the pancreas VRP.
5. If sugar and pancreas VRP area pinch again disrupt gait, rub pancreas NL with sugar in the mouth until above pattern neutralized
Assessing the Chemistry of Joint Problems (Systemic Nutrition)

1. Find an inhibited muscle. Test Chondroitin Sulfate orally. If it strengthens an inhibited muscle, continue:

2. Test for sulfate need with oral cysteine
   a. If CYS strengthens – test associated nutrients (Methionine, Mg, B-12, Folic, Methyl donor (e.g., betaine, choline), Mo)

3. Test orally for precursors to chondroitin and hylauronic acid
   b. Test glucosamine (not sulfate)
   c. Test glucuronic acid

4. If glucosamine or glucuronic acid strengthen:
   d. Test magnesium
   e. Test for glucose / insulin problem (See above procedure.)

Treat a patient following the full protocol.

NOTE: On all procedures, always test something besides muscle testing to ascertain if anything is changing from your corrections. This could be a range of motion such as hip abduction, foot turn in, low back flexion, etc. Or it could be a decrease in pain, or a change in an autonomic finding such as blood pressure or pupillary reflex, or a neurological test such as a tendon reflex or Weber’s sign, etc.
1) Spinal Lateral Flexion Patterns and Increased Endocrine Function
   1. Find any inhibited muscle and TL the pituitary NL (at the glabella.)
   2. If it strengthens the weak muscle, find a strong indicator muscle.
   3. Retest the strong indicator muscle while TLing the pituitary NL with:
      c. Patient’s body in “backwards C” curve - head & feet to right. If positive, this suggests increased adrenal or reproductive function.
      d. Patient’s body in “C” curve - head & feet to left. If positive, this suggests increased thyroid function.
   4. TL Chapman’s reflexes for the increased organ(s) and challenge orally with stress offenders. Look for inhibition of a strong indicator muscle.
      a. Common adrenal offenders: caffeine, norepinephrine (or jaw retruded), histamine, sugar, insulin (or pinch pancreas VRP below left costal margin)
      b. Common reproductive offenders: Cortisol, caffeine, sugar, thyroid
         i. Check parotids for IRT.
   5. Treat by IRT to both positive Chapman’s reflexes with positive stress offender.
   6. TL to Pituitary NL with the patient’s body in whichever lateral flexion pattern was positive above. It should be negative.

2) Pituitary Drive Technique (for low pituitary function)
   1. Testing a strong indicator muscle, have the patient TL the pituitary Chapman’s reflex at the glabella AND Chapman’s reflexes for: a) Thyroid, b) Adrenal, c) Reproductive
   2. If one of these patterns weakens the strong muscle, check to see if inspiration or expiration negates the weakness.
   3. If inspiration strengthens: pump both mastoid processes anterior with inspiration 12 times
   4. If expiration strengthens: pump both mastoid processes posterior with expiration 12 times
   5. Retest the positive pattern in 1. above to ascertain correction.

3) Simple Endocrine Balancing
   1. Test muscles from each endocrine gland (adrenals, reproductive, thyroid) both in the clear and for 51%ers by TLing to the Chapman’s reflexes for each
   2. Cross check TL to each positive endocrine Chapman’s reflex while testing each of the endocrine muscles. One reflex will strengthen (or weaken, if 51%er) each of the endocrine related muscles.
   3. Test the glandular for this organ against each of the endocrine muscles (and, if they are 51%ers, against their Chapman’s reflexes)
   4. Rub the Chapman’s reflex for the primary gland.
   5. Retest all endocrine muscles and Chapman’s reflexes.

4) Liver and Bowel Balancing
   1. Test both PMS in the clear and as 51%ers by TLing the liver Chapman’s reflex.
   2. Test both TFL in the clear and as 51%ers by TLing the colon Chapman’s reflex.
   3. Cross check TL to the TFL Chapman’s reflex and test the PMS.
   4. Cross check TL to the liver Chapman’s reflex and test the TFL.
   5. Treat whichever Chapman’s reflex affects both muscles (organs) above.
Uterine and Prostate Challenge

1. Test any reproductive related muscle (gluteus medius, gluteus maximus, piriformis, adductors.) Correct any weaknesses.
2. Have the patient bear down increasing intra-abdominal and intra-pelvic pressure.
3. If the strong muscle weakens during bearing down, this is the indication for uterine lift technique or prostate lift technique.

Practice the Uterine Lift Technique

1. Contact over the suprapubic area with the flat edge of the lateral hand.
2. Ask the patient to lift the arms overhead and breathe in while you:
   a. Flex the pelvis by lifting the bended knees headward
   b. AND allow the knife edge of the hand to slide into the pelvis above the pubic bone (sliding it under the pelvic contents as they fall backwards)
3. Ask the patient to bring the arms slowly back to the sides and breathe out while you:
   a. Lower the legs to extend the pelvis
   b. AND HOLD your hand contact where it is (do not add any additional upward pressure) to lift the pelvic contents as the pelvis returns to the original position.
4. This should cause NO discomfort. Do not perform this technique during or immediately prior to menstruation. If done at this time - it may cause a worsening of dysmenorrhea.

Prostate Lift Technique

1. During intra-rectal prostate examination, make a digital contact in the sulcus inferior to each lobe of the prostate gland and lift each lobe of the prostate in a cephalward direction - first on one side, then the other side.
2. If prostate massage ("prostate stripping" or "prostate milking") technique is performed, massage in a cephalward direction over each lobe of the prostate.

Treat a patient following the full protocol on page 1 of the Notes.

NOTE: On all procedures, always test something besides muscle testing to ascertain if anything is changing from your corrections. This could be a range of motion such as hip abduction, foot turn in, low back flexion, etc. Or it could be a decrease in pain, or a change in an autonomic finding such as blood pressure or pupillary reflex, or a neurological test such as a tendon reflex or Weber’s sign, etc.
When the Immune System is Secondary
1. Cranial IRT or TMJ IRT present – negated by rubbing immune VRP
2. Infraspinatus or lower / middle trapezius or both pectoralis minors weak. HPT tissue strengthens.
3. Check for SYM or PS by testing weak immune muscle with eyes focused on an object in the distance such as the ceiling (SYM) and eyes focused on the tip of the nose (PS.)
   a. If SYM – pinch all VRPs until one strengthens the weak immune muscle
   b. If PS – Rub all VRPs until one strengthens the weak immune muscle
4. Treat the VRP related organ accordingly:
   a. Treat to increase SYM by IRT to the Chapman’s reflex with an oral offender
   b. Treat to increase PS by rubbing Chapman’s reflex in the traditional way.
5. The immune system muscle will now be strong, as will the original weak muscle, and anything else that was related (such as a cranial fault, TMJ, or whatever.)

The Bleach Sniff Test
1. Find a weak muscle and a strong muscle.
2. Bleach sniff weakens a strong muscle.
3. Using the weak muscle, test each of the following nutrients orally until one strengthens:
   a. Taurine
      i. If TAU strengthens – test CYS
      ii. If CYS strengthens – test homocysteine metabolizing nutrients:
         1. Folic acid
         2. B-12
         3. Methyl donor (choline, betaine)
         4. B-6 / P-5-P
   b. Niacinamide
   c. Selenium
   d. Vitamin E
   e. Essential Fatty Acids (BCSO, FSO, EPA-DHA)
   f. Vitamin C
4. Test the strengthening nutrient(s) in 3. above by placing them individually on the tongue and having the patient sniff bleach

The Ammonia Sniff Test
1. Find a weak muscle and a strong muscle.
2. Ammonia sniff weakens a strong muscle.
3. Using the weak muscle, test each of the following nutrients orally until one strengthens:
   a. B-6 (P-5-P)
   b. Molybdenum
   c. Iron
   d. Citric Acid Cycle Factors (B vitamins and Manganese)
   e. Arginase enzyme
4. Test the strengthening nutrients in 3. above by placing them on the tongue and having the patient sniff ammonia.
Treat a patient following the full protocol.

NOTE: On all procedures, always test something besides muscle testing to ascertain if anything is changing from your corrections. This could be a range of motion such as hip abduction, foot turn in, low back flexion, etc. Or it could be a decrease in pain, or a change in an autonomic finding such as blood pressure or pupillary reflex, or a neurological test such as a tendon reflex or Weber’s sign, etc.
This reading and reference list will help you prepare for and review each of the 15 sessions. Each major topic is listed. Some citations are listed in more than one place.

* = These topics will be only briefly covered in class. It is strongly recommended that you thoroughly read the reading list citations for more in depth coverage of the topic, especially if you think you may someday plan on taking the AK diplomate exam.

**ABBREVIATIONS**

**Session-by-session Reference Resources:**

*QA* = *Quintessential Applications: A(K) Clinical Protocol*

**AUDIO** = Audio recording of Dr. Schmitt’s paper: “The Neurological Rationale for a Comprehensive Clinical Protocol Using Applied Kinesiology Techniques”

**DVDs** = *DVDs of “Critical Concepts for Effective Care” Seminar.* Three patients were treated through the entire protocol in this seminar video. Watching the treatment of these patients will help you understand the application and synthesis of all of the parts of the protocol. Certain topics were highlighted and these are listed by session where applicable.

**Topic-by-topic Reference Resources:**

• **S2** = Walther, David, *Applied Kinesiology Synopsis – 2nd Edition*.
• **CSM** = Maffetone, Philip, *Complementary Sports Medicine*.
• **CNOCP** = Schmitt, Walter, *Compiled Notes on Clinical Nutritional Products*.
• **CGD** = Schmitt, Walter, *Common Glandular Dysfunctions in the General Practice*.
• **Stop** = Schmitt, Walter, *Stop Your Pain Now!*

Dr. Walther’s *Applied Kinesiology Synopsis* and Patient Education pamphlets are available from:

Systems D.C.
275 West Abriendo
Pueblo, CO 81004-1870
(800) 221-6262   Fax (719) 543-2357
www.systemsdc.com

Dr. Maffetone’s *Complementary Sports Medicine* is available from:

Human Kinetics
(800) 747-4457
www.humankinetics.com

All of Dr. Schmitt’s reference materials are available from:

Applied Kinesiology Study Program, LLC
1926 Overland Drive
Chapel Hill, NC 27514
(919) 419-9099   Fax (919) 419-9049

For additional references and resources – See “QA RECOMMENDED REFERENCE TEXTS & RESOURCES” at “Quintessential Applications – Philadelphia, PA” at www.theuplink.com
SESSION 1 – READING & REFERENCE LIST

QA = Sections 1-4, 32, Appendix page 30
AUDIO = Disc #1 - Track 1, 7-11; Disc #2 - Track 1
DVDs = Disc #1 - Tracks 1, Disc #5 - Track 5

*Overview of concepts of functional illness • CSM – pp. 1-8 • S2 – pp. 2-14

*Five factors of the intervertebral foramen • S2 – 13
• Schmitt, Walter H., CD Audio-Visual PowerPoint presentation on the “History and Development of AK and 5 factors of the IVF” (Distributed to those attending Session 1)

Overview of applied kinesiology (AK) concepts • S2 – 2-14 • CSM – 191-205
• Schmitt, Walter H. “The Neurological Basis for Chiropractic” 50 minute lecture at SCUHS, May, 2004 on www.theuplink.com - Free Audio download
• ICAK blue-colored “What is AK” Pamphlet

Neurophysiological Basis of AK • S2 – 4-10 • ICAK-USA, “Quotable Research”

Therapy Localization • S2 – 37-39 • CSM – 196-197

Chapman’s Neurolymphatic Reflexes • S2 – 46-47 • CSM – 106-107

*Bennett’s Neurovascular Reflexes • S2 – 48-51

*Acupuncture Meridian Points – Introduction • S2 – 235-238 • CSM – 105-106

Muscle - organ (viscerosomatic and somatovisceral) patterns • S2 – 14 • CSM – 192-194

International College of Applied Kinesiology – Value of membership • S2 – 4-10

Normal muscle facilitation and inhibition during gait • CSM – 36-38, 102-104 • S2 – 170-171

Postural analysis • S2 – 30-37 • CSM – 36-38, 85-95

The science and art of muscle testing • S2 – 304-308 • CSM – 96-101

Effect of tonic labyrinthine reflexes (TLR) on muscle testing positions • S2 – 307 • CSM – 235

Latissimus dorsi • S2 – 344 • CSM – 184-185

Pectoralis major, clavicular • S2 – 346 • CSM – 112-113
Pectoralis major, sternal • S2 – 347 • CSM - 114-115

Neuromuscular receptors: Golgi tendon organ technique • S2 – 64 • CSM – 225-227

Neuromuscular receptors: Muscle spindle cell technique • S2 – 62-63 • CSM – 227-228

Origin-Insertion Technique and GTO to facilitate and inhibit muscles • S2 – 2, 45-46, 64 • CSM 227-228

*Strain – Counterstrain technique • S2 - 201-207

*Reactive muscles • S2 – 65-66


Pain relief techniques using acupuncture head points • Schmitt, Walter H., Stop Your Pain Now! book and audio tape • S2 – 277-278, 593 • CSM - 262-266, 269-270

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
  Applied Kinesiology in the Chiropractic Exam
  Total Person Concept of Health
  Structural Balance – The Foundation of Health
SESSION 2 – READING & REFERENCE LIST

QA = Sections 8a, 27, 28
AUDIO = Disc #4 – Tracks 8-9
DVDs = Disc #5 - Track 5

Psoas • S2 – 325 • CSM – 134-135

Tensor Fascia Lata • S2 – 319 • CSM – 138-139

Piriformis (prone) for vertebral challenge • S2 – 309 • CSM – 186-187

Abdominals • S2 – 316-318 • CSM – 130-133

Gluteus maximus • S2 – 321 • CSM – 174-175

Gluteus medius and minimus • S2 – 320 • CSM – 156-159

Hamstrings • S2 – 310-311 • CSM – 176-177

Rectus femoris • S2 – 312-313 • CSM – 142-143

Quadratus lumborum • S2 - 372

Sacrospinalis • S2 – 370-371

Neck extensors • S2 – 368-369 • CSM – 188-189

Vitamin E • CNOCNP – 32-33, 34, 64-67, 166-167, 188

Vertebral Challenge Technique • S2 – 71 • CSM – 198

Respiratory adjustments • S2 – 80 • CSM – 250-251

Spinal fixations • S2 – 86-93

Occipital fixation – bilateral psoas • S2 – 74, 90-91

Hip and low Back problems

IVD Challenge • S2 – 96-107

Iliolumbar ligament • S2 – 130-132

*Imbrication and deimbrication technique • S2 – 81-83

*Meridian associated points along the spine • S2 - 240
Pelvic categories and fixations • S2 – 109

Category 1 • S2 – 110-112 • CSM – 243-246

Category 2 • S2 - 112-115 • CSM – 246-248

Category 3 • S2 - 115-116

Iliac fixation • S2 – 93

Sacral fixation • S2 – 91-92

Sagittal Suture separation for abdominal muscle weakness • S2 – 100, 318 • CSM – 242-243

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
   The Spine – An Integrated Structure
   Your Back – How to Care for It
   Intervertebral Disc
   Correct Lifting
SESSION 3 – READING & REFERENCE LIST

QA = Sections 5, 8b, 26, Appendix page 5
AUDIO = Disc #4 – Track 7; Disc #2 – Track 2
DVDs = Disc #5 - Track 5

Subscapularis • S2 – 353 • CSM – 168-169

Infraspinatus • S2 – 355 • CSM – 172-173

Teres minor • S2 – 354 • CSM – 170-171

Supraspinatus • S2 – 348 • CSM – 166-167

Essential fatty acids, Aspirin, NSAIDs, etc. • S2 – 554-557 • CSM – 45-48, 282-286, 301-303
• Schmitt, Walter H. Get These Out Of Your Family’s Kitchen pamphlet • CNOCNP – 138-181

Relieving Fatigue (Part 1) – CBC with differential nutritional values • CNOCNP - 86-90

Fascial Flush / Spray and Stretch Techniques • S2 – 192-198 • CSM – 231-232

Nutritional relationship to vitamin B-12 • S2 – 193

*Triggerpoints – challenge and respiratory correction • S2 – 193-198 • CSM – 231-232

*Aerobic and anaerobic testing – relationship to iron and essential fatty acids • S2 – 188-189

*Retrograde lymphatic – relationship to iron, pectoralis minor • 539-541

Schmitt Pamphlet
Get These Out Of Your Family’s Kitchen
SESSION 4 – READING & REFERENCE LIST

**QA** = Sections 8a, 12, Appendix pages 7-8, 20
**AUDIO** = Disc #2 - Track 5; Disc #3 – Track 7

Deltoid  • S2 – 349-351  • CSM – 164-165
    Anterior  • S2 - 350
    Middle  • S2 - 349
    Posterior  • S2 - 351

Coracobrachialis  • S2 – 357

Serratus anterior  • S2 – 356  • CSM – 116-117

Teres major  • S2 – 352

Lower trapezius  • S2 – 339  • CSM – 182-183

Middle trapezius  • S2 – 338  • CSM – 180-181

Subclavius (and frozen shoulder)  • S2 - 341

Rhomboids  • S2 - 342

Diaphragm  • S2 – 575-582  • CSM – 190

*Lingual Ascorbic Acid Test  • CNOCNP – 31-32  • CGD – 4-7, 43, 55

Shoulder  • S2 – 469-474

*The 5 joints of the shoulder  • S2 – 470-474

Slipped Bicipital Tendon  • S2 - 475

Bursitis  • CNOCNP – 93, 93, 150

Frozen Shoulder  • S2 – 341, 473

Citric acid cycle and electron transport chain  • CSM – 26-28  • CNOCNP – 120-135

*Anaerobic and anaerobic testing (pantothenic acid and CAC)  • S2 – 187-191  • CSM – 26-28

Lingual Ascorbic Acid Test – Available through: Applied Kinesiology Study Program, LLC,
1926 Overland Drive, Chapel Hill, NC 27517, (919) 419-9099, Fax (919) 419-9049

PATIENT EDUCATION MATERIALS

Systems DC Pamphlets
    Shoulder
    Bursitis / Tendonitis
SESSION 5 – READING & REFERENCE LIST

**QA** = Sections 6, 29, Appendix pages 9-11
**AUDIO** = Disc #2 - Track 3; Disc #4 - Track 9
**DVDs** = Disc #5 - Track 5

Coupled spinal mechanics & Coupled spinal adjusting, Uncoupled spinal mechanics patterns
- Schmitt, Audio-Video-Notes package “Spinal Adjusting”

*Lovett brother relationships  • S2 – 70-71

*Vertebral challenge for cervical disc and hidden cervical disc  • S2 – 105-107

Temporosphenoidal line analysis (T.S. Line) – 5 locations only  • S2 – 15-16

Allergies and hypersensitivities  • S2– 531-538, 433  • CSM– 200 (198-200)  • Stop– 13, 44-47

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
Fatigue

LABORATORY ASSESSMENTS
- Great Smokies Diagnostic Laboratory: for food allergies
  (800) 522-4762

- Diagnos-Techs: for food allergies
  (800) 878-3787

- ELISA – ACT Biotechnologies – for food allergies
  (800) 553-5472

- Great Plains Laboratory: for food allergies
  (888) 347-2781

- Many others for food allergies
SESSION 6 – READING & REFERENCE LIST

QA = Sections 10, 11, Appendix page 12
AUDIO = Disc #3 - Tracks 1-5
DVDs = Disc #1 – Track 5; Disc #2 – Tracks 3, 4 / Disc #3 – Track 1

Sternocleidomastoid • S2 – 365 • CSM – 108-109

Medial neck flexors • S2 – 366-367 • CSM – 110-111

*Cranial - sacral respiratory movement • S2 – 376-385 • CSM –238-242, 246

*Inspiration assist faults and Expiration assist faults • S2 – 385-386 • CSM – 239-240

*Sphenobasilar inspiration assist faults and Sphenobasilar expiration assist faults
• S2 – 387-388 • CSM – 240-242

*Sacral respiratory inspiration and expiration faults • S2 – 403-404 • CSM – 246

*Other cranial faults • S2 – 397-402

*Sutural faults • S2 – 397-400

*Universal cranial fault • S2 – 396

*Glabellar fault • S2 – 389

Internal frontal cranial fault • S2 – 392-393

External frontal cranial fault • S2 – 394

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
Cranial Respiratory Function
SESSION 7 – READING & REFERENCE LIST

QA = Sections 9, 10, 11, Appendix pages 13-14
AUDIO = Disc #3 - Tracks 1-5

Upper trapezius • S2 – 340 • CSM – 160-161

Levator scapula • S2 – 343 • CSM – 162-163

Parathyroid • S2 – 148

Hyoid challenge (relationship to neurological disorganization) • S2 – 418-422

The temporomandibular joint • S2 – 407-416 • CSM – 228-231, 190

*The stomatognathic system • S2 – 407-408

*TMJ Examination and treatment • S2 – 413-416

Internal and external pterygoid relationships • S2 – 410-411, 413-416 • CSM – 228-231, 190

Masseter, buccinator, temporalis relationships • S2–408-411, 413-416 • CSM–190, 228-231

Relationship to tooth problems • S2 – 417

*Relationship to temporal bulge and parietal descent • S2 – 390-391

Nasosphenoid cranial fault • S2 –395

Neurological disorganization and K-27 Switching • S2 – 170-175 • CSM – 232-233

Neurological tooth challenge • S2 – 417-418

Nociceptor Stimulation Blocking Technique (Immediate Pain Relief Technique) • Stop – 28-31

Set Point Technique (Touch and Tap Technique) • Stop – 32-33, 35

Hyoid • S2 – 418-422

*Cross crawl and homolateral crawl • S2 – 176-181

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
   Temporomandibular Joint
   Whiplash
   Early Nerve Organization – A Lifetime of Health for Your Child
SESSION 8 – READING & REFERENCE LIST

**QA** = Sections 21, 22, 23, Appendix page 2
**AUDIO** = Disc #4 – Tracks 2-4
**DVDs** = Disc #1 – Track 8; Disc #5, Tracks 1-4.

Quadriceps • S2 – 312-313 • CSM – 142-145

Popliteus • S2 - 327

Ileocecal Valve syndromes (Open and Closed) • S2 – 494-500

Colon • S2 – 500-503

*Small intestine and psychological reversal • S2 – 427-428

Hiatal Hernia / reflux (GERD) • S2 – 582-584

**PATIENT EDUCATION MATERIALS**

**Systems DC Pamphlets**
- Open Ileocecal Valve
- Closed Ileocecal Valve
- Digestive Disturbance
- The Colon’s Effect on Your Health
- Diaphragm

Laboratory assessments for gut toxicity, fungal problems, and other dysbioses

• Great Smokies Diagnostic Laboratory (800) 522-4762
  63 Zillicoa St.
  Asheville, NC 28801

• Diagnos-Techs (800) 878-3787
  6620 S. 192nd Place, Bldg. J
  Kent, WA 98032

• Great Plains Laboratory (888) 347-2781
  11813 West 77th St
  Lenexa, KS 66214

• MetaMetrix Clinical Laboratory (770) 446-5483
  4855 Peachtree Industrial Blvd.
  Norcross, GA 30092
SESSION 9 – READING & REFERENCE LIST

QA = Sections 14, 30, Appendix page 19
AUDIO = Disc #3 - Track 10
DVDs = Disc #5 - Track 5

Sartorius • S2 – 322, 324 • CSM – 140-141

Gracilis (2 test versions) • S2 – 323-324 • CSM – 178-179

Adductors (Adductor longus, brevis, magnus and pectineus) • S2 – 314-315 • CSM – 154-155

Hamstrings • S2 – 310-311 • CSM – 176-177

Gastrocnemius • S2 – 329

*Common knee syndromes • S2 – 464-469

*Patellofemoral syndrome • S2 – 465-467

*Iliotibial band friction syndrome and *Popliteus Tendonitis • S2 – 467-468

Fibular subluxations • S2 – 468-469 • CSM – 257-258

Posterior tibialis • S2 – 331 • CSM – 146-147

Anterior tibialis • S2 – 330 • CSM – 148-149

Peroneus longus • S2 – 333 • CSM – 150-151

Peroneus brevis • S2 – 333 • CSM – 150-151

Peroneus tertius • S2 – 332 • CSM – 152-153

Soleus • S2 – 328

Extremity challenge technique • S2 – 61 • CSM – 249-257

Foot and ankle problems • S2 – 447-463 • CSM – 345-350

Common foot and ankle subluxations / shock absorber • S2 - 61

Foot pronation and support • S2 – 447-458 • CSM – 347

*Tarsal tunnel syndrome • S2 – 454-458

*Foot rehabilitation • S2 – 452-454 • CSM – 347

*Triceps surae stretch • S2 – 453
PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
Knees
Adrenal Stress Syndrome / Disorder • S2 – 503-515 • CSM – 41-44 • CGD – 16-50

*Relationship with hypoglycemia • S2 – 515-526, 429-431 • CSM – 44-45, 313-315

Ligament Stretch Adrenal Stress Syndrome / Disorder • S2 – 200-201, 512

HeartMath • Freeze-Framer™ – Heart Rhythm Coherence Trainer - www.hearthmath.org


Emotional Neurovascular reflexes • S2 – 432-433

Emotional Nutritional and Homeopathic Support • CNOCNP – 110-112 • S2 – 434-435

Emotions and acupuncture meridian head points • Stop – 10, 37-40

*Meridian therapy • S2 – 235-302 • CSM – 105-106

*Law of 5 Elements – emotions, etc. • S2 – 293-298

Laboratory assessments for salivary hormone profiles
• Great Smokies Diagnostic Laboratory
  63 Zillicoa St.
  Asheville, NC 28801
  (800) 522-4762

• Diagnos-Techs
  6620 S. 192nd Place, Bldg. J
  Kent, WA 98032
  (800) 878-3787

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
Adrenal Stress Disorder
Stress
Diet for Hypoglycemia and Sugar Handling Stress
Chemical sensitivities & aldehydes • S2 – 200

Molybdenum • CNOCNP – 89, 90

Selenium • CNOCNP – 64, 89, 130, 172

• Schmitt, Audio-Video-Notes package “Liver Detoxification”

• Great Smokies Diagnostic Laboratory: for food allergies; liver detoxification profiles
  (800) 522-4762

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
Cholesterol
Triglycerides
Liver
SESSION 12 – READING & REFERENCE LIST

Q4 = Sections 8c, 19, 30 Appendix pages 15-16
AUDIO = Disc #2 - Track 5; Disc #4 – Track 12
DVDs = Disc #5 - Track 5

Triceps  • S2 – 360  • CSM – 120-121

Biceps brachii (and brachialis)  • S2 – 358  • CSM – 118-119

Brachioradialis  • S2 – 359

Pronator teres (and pronator quadratus)  • S2 – 362

Supinator  • S2 – 361

Elbow problems  • S2 – 477-480

Lateral epicondylitis  • S2 – 478

Common subluxations and adjustments  • S2 – 479-480

*Gait Reflexes  • S2 – 207-208  • CSM – 233-235

Cholesterol and Hyperlipoproteinemia  • CNOCNP – 36-44  • S2 – 552-567

Opponens pollicus  • S2 – 363  • CSM – 122-123

Opponens digiti minimi  • S2 – 364  • CSM – 124=125

Wrist extensors  • CSM – 126-127

Wrist flexors (Flexor carpi radialis, Flexor carpi ulnaris)  • CSM – 128-129

Pronator Quadratus  • S2 - 362

Wrist and hand problems  • S2 – 480-486  • CSM – 258-259

Carpal tunnel syndrome  • S2 - 480-485  • CSM – 258

Pisiform tunnel syndrome (pisiform – hamate syndrome)  • S2 – 485-486

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
   Nerves
      Carpal Tunnel Syndrome – Wrist / Hand Problems
Insulin insensitivity and CHO intolerance • S2 – 526-528 • CSM – 44-45, 351-362

Degeneration Intervention and Sulfation • S2 – 528-531

Cartilage formation • S2 – 529

Breaking viscous cycles of degenerative disease • S2 – 530

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
Action! Gait Mechanism
Diet for Hypoglycemia and Sugar Handling Stress
Arthritis
SESShON 14 – READING & REFERENCE LIST

QA = Sections 14, 18, 18, 20, Appendix page 21-22, 24
AUDIO = Disc #3 - Track 11-12
DVDs = Disc #1 - Track 7

Common Glandular Dysfunctions in the General Practice • CGD – Chapters 2, 3, 5, 6

*Parathyroid • S2 – 148

Adrenal stress syndrome / disorder – Review • S2 – 503-515 • CSM – 41-44 • CGD – 16-50

Thyroid • S2 – 542-550 • CGD – 85-109

Female hormones • S2 – 569-575 • CGD – 110-155

Male Hormones • S2 – 571, 573

Pineal and melatonin • S2 – 568-569 • CSM – 43-44

Pituitary Drive Technique • CGD – 128-131

Endocrine interaction • CGD – 110-155

Liver and GI tract effects • CGD – 146-154

Uterine lift • S2 – 575 • CGD – 124

Prostate lift • S2 – 573

PATIENT EDUCATION MATERIALS
Systems DC Pamphlets
Thyroid
Uniquely Feminine

Laboratory assessments for salivary hormone profiles:
• Diagnos-Techs, 6620 S. 192nd Place, Bldg. J, Kent, WA 98032, (800) 878-3787

• Great Smokies Diagnostic Laboratory, 63 Zillicoa St., Asheville, NC 28801, (800) 522-4762

• Sabre Sciences, Inc., 2233 Faraday Avenue, Suite K, Carlsbad, CA 92008, (888) 490-7300

• ZRT Laboratory, 1815 NW 169th Pl. Suite 5050, Beaverton, Oregon 97006, (503) 466-2445
• Many others

Urinary estrogen profile (Estronex)
• MetaMetrix Clinical Laboratory
4855 Peachtree Ind. Blvd.
Norcross, GA 30092
(770) 446-5483
Ammonia Sniff Test & Bleach Sniff Test