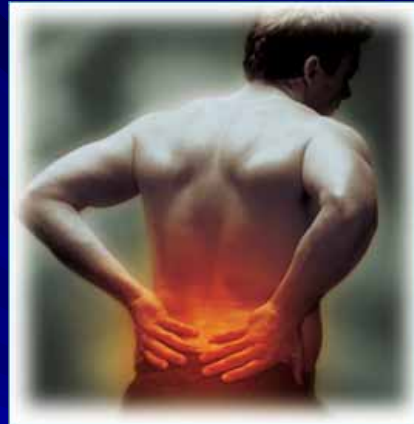


Integrative Approaches to Treatment of PAIN: A Solution to the Opiate Crisis



Peek 'n Peak CME

Jan Hendryx, DO, FAAO, FAAMA

March 2, 2018

Objectives Summary

1. Overview – What is Integrative Medicine? What Integrative modalities are effective in treating pain syndromes?
2. Anatomical Considerations – LBP
3. Greenman's Dirty Half Dozen
4. Muscle Imbalance
5. Cross Syndromes (esp. Lower for LBP)
6. Exercise Rx – “Conventional-FITT” vs Personalized (Greenman Model) 4 Steps
7. Don't forget the key lesion
8. Myofascial Trigger Points in LBP
9. OMT Options and other models
10. Integrative Approaches/Medical Acupuncture

Integrative Medicine

“Integrative Medicine” is defined as a healing-oriented medicine that take account of the whole person (body, mind, and spirit), including all aspects of lifestyle. It emphasizes the therapeutic relationship (between the patient and physician) and makes use of all appropriate therapies, both conventional and alternative. (Rakel, *Integrative Medicine*, 4th edition, 2017).

Hmm...
Sounds
familiar




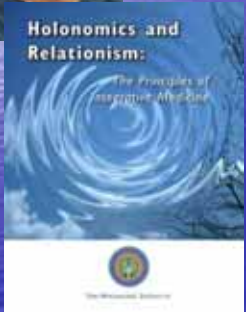
OSTEOPATHIC PHILOSOPHY, PRINCIPLES AND PRACTICE



Integrative Medicine

Conventional + “Complementary/Alternative”
Medicine (CAM)

“The best of both worlds”


Carlisle Holland, DO

Andrew Weil, MD

Integrative Medicine







THE UNIVERSITY OF ARIZONA
ARIZONA CENTER FOR
Integrative Medicine




Harman Arora, MD

Case Hx 1:

- Patient presents with acute/chronic **low back pain**
- **What do I need to know?**



DDx:

- Sprain/strain
 - Lumbar
 - Sacral
- Disc
- Degenerative Changes
- Stenosis
 - Foraminal
 - Central
- Visceral (Kidney)
- Cancer/Mets
 - Prostate
 - Multiple Myeloma
- Infection
- Fracture
- Emotional
- Other?***

Rx:

Meds:

- Muscle Relaxants
- NSAIDS
- Opiates***

Radiology

- X-rays
- MRI
- CT

Referrals

- PT ("Eval and Tx")
- PMR
- Orthopaedics
- Pain Specialist
- Neurologist
- Neurosurgeon
- Massage Therapist
- Chiropractor
- Other?***




Case Hx 2:

- Patient presents with chronic **low back pain** unresponsive to multiple interventions (PT, meds, facet blocks, epidurals, surgery); unable to work.
- What else do I need to know?
- What did I (they) miss??





Conventional Approach

1. Refer to Pain Management
2. Opiate Rx?



?

Evidence...

Chronic Low Back Pain: Evaluation and Management

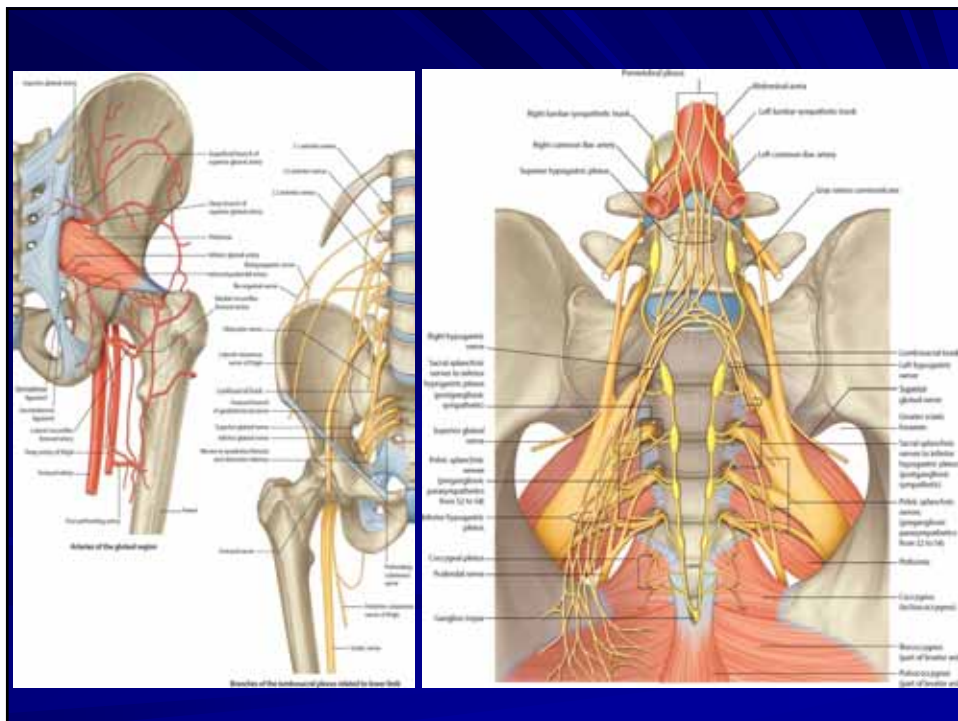
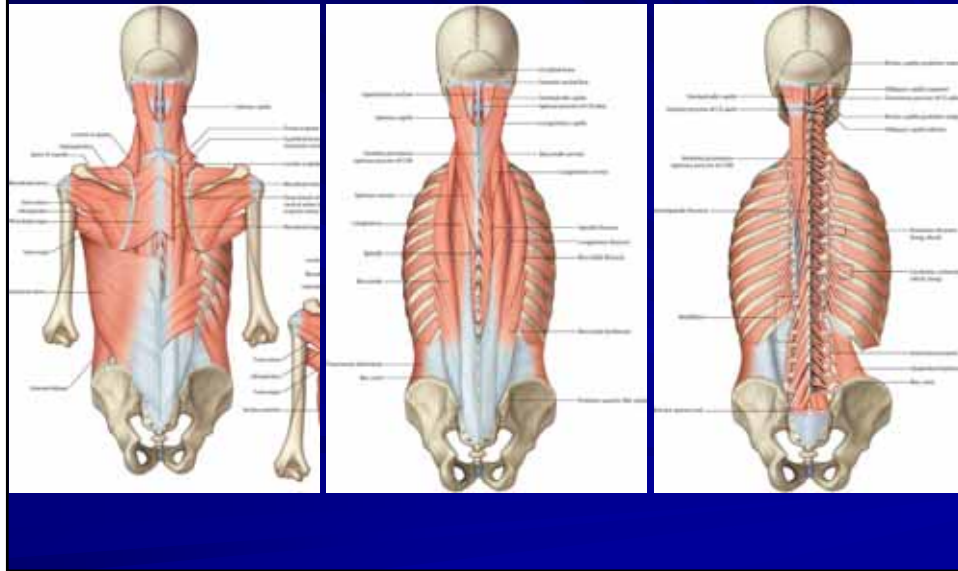
ALLEN R. LAST, MD, MPH, and KAREN HULBERT, MD, *Racine Family Medicine Residency Program, Medical College of Wisconsin, Racine, Wisconsin*

Chronic low back pain is a common problem in primary care. A history and physical examination should place patients into one of several categories: (1) nonspecific low back pain; (2) back pain associated with radiculopathy or spinal stenosis; (3) back pain referred from a nonspinal source; or (4) back pain associated with another specific spinal cause. For patients who have back pain associated with radiculopathy, spinal stenosis, or another specific spinal cause, magnetic resonance imaging or computed tomography may establish the diagnosis and guide management. Because evidence of improved outcomes is lacking, lumbar spine radiography should be delayed for at least one to two months in patients with nonspecific pain. Acetaminophen and nonsteroidal anti-inflammatory drugs are first-line medications for chronic low back pain. Tramadol, opioids, and other adjunctive medications may benefit some patients who do not respond to nonsteroidal anti-inflammatory drugs. Acupuncture, exercise therapy, multidisciplinary rehabilitation programs, massage, behavior therapy, and spinal manipulation are effective in certain clinical situations. Patients with radicular symptoms may benefit from epidural steroid injections, but studies have produced mixed results. Most patients with chronic low back pain will not benefit from surgery. A surgical evaluation may be considered for select patients with functional disabilities or refractory pain despite multiple nonsurgical treatments. (*Am Fam Physician*. 2009;79(12):1067-1074. Copyright © 2009 American Academy of Family Physicians.)

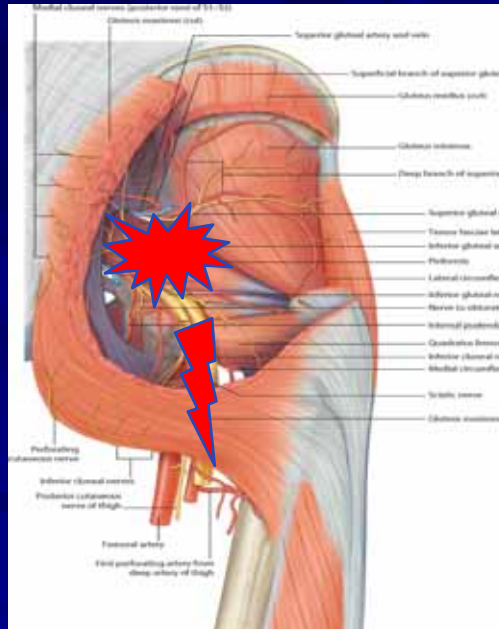
Integrative Approach

1. Look at other options
2. Revisit your Osteopathic Principles/Anatomy
3. Do a good osteopathic NMS exam
 - a. Diagnose Somatic Dysfunction and related conditions
4. If you can't remember how, refer to your DO NMM Specialist/LECOM OPP Faculty
5. Consider other models of treatment (i.e. acupuncture, prolotherapy)

Anatomy - Back



Sciatica - Piriformis Syndrome

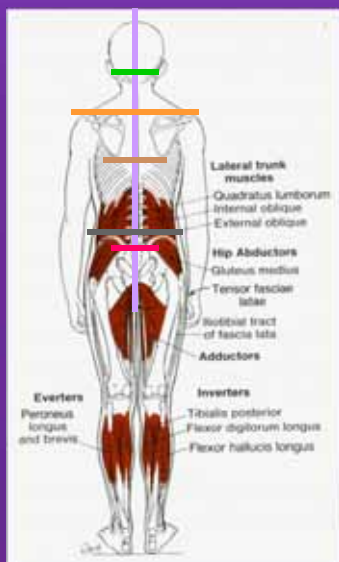


SOMATIC DYSFUNCTION

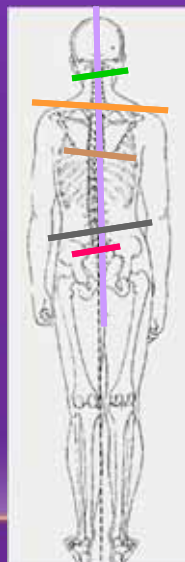
Impaired or altered function of the somatic (body framework) system, that includes skeletal, arthrodial and myofascial structures, and related vascular, lymphatic and neural elements. (ECOP Glossary)

If you Document and Dx Somatic Dysfunction (M990x), you treat with OMT and bill! (E/M + Procedure Code 9892x)

POSTERIOR EVALUATION



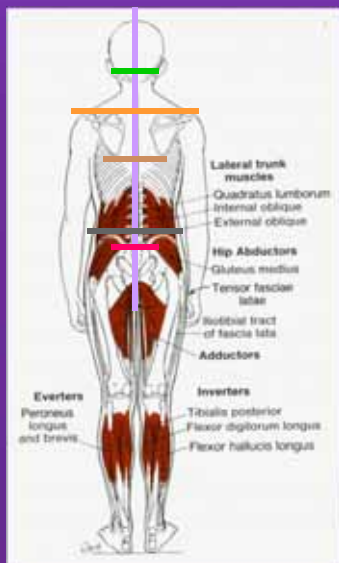
NORMAL



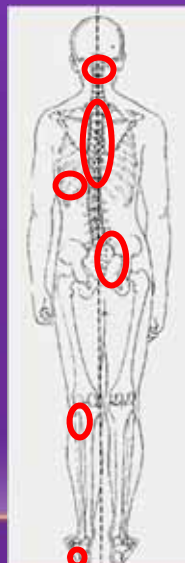
ABNORMAL



POSTERIOR EVALUATION



NORMAL



ABNORMAL

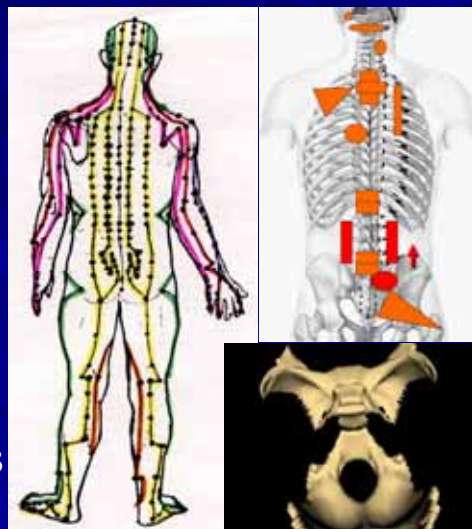


SOMATIC DYSFUNCTIONS IN LBP

- **Thoracic**
 - Vertebrae
 - Ribs (11,12)
- **Lumbar Spine**
 - Vertebrae (Type 1, 2)
 - Ligaments (ILL)
 - Muscles (Iliopsoas, QL, E. spinae, Multifidi, Counterstrain points, Myofascial TPs)
- **Pelvis**
 - Sacrum (Uni/Bilateral Flex-Ext, Torsions, SI joint)
 - Innominates (Sup/Inf Shears*, Rotations, Inflares/Outflares, Pubic Symphysis)
- **Lower Extremity** (Piriformis, Hip, Lower Cross Sn, Muscle Imbalance)
- **Secondary to other conditions** (scoliosis, spondylo...)
- **Viscerosomatic** (Urinary, GI, Reproductive)

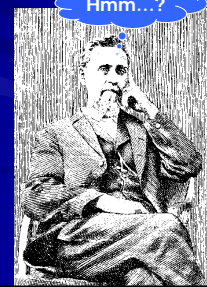
Other Considerations usually not Considered...

- Greenman's "Dirty Half Dozen"
- DX/TX Areas of Greatest Restrictions (AGR)/Key Lesions
- Bioenergetic Abnormalities
- Bioenergetic Treatments

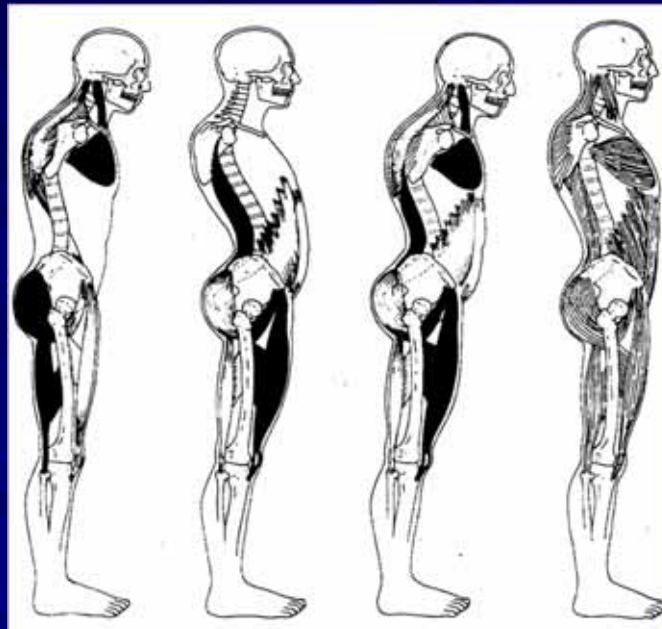


Greenman's "Dirty Half Dozen"

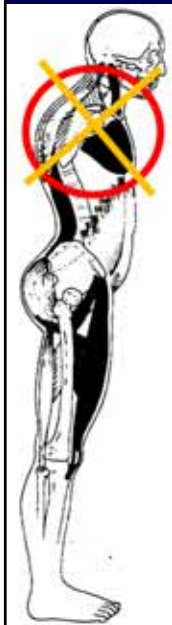
1. Muscle imbalance (>95%)
 - a. Cross Syndromes*
2. Type 2 SD (FRS/ERS 2:1) L-Spine
3. Pelvic SD Pubes (75% failed backs)
4. Short leg syndrome (65%)
5. Innominate Shear (25%)
6. Extended Sacrums



What is Muscle Imbalance?



Cross Syndromes



1. Upper Cross Syndrome

2. Lower Cross Syndrome* (LBP)



Response to Dysfunction in Two Groups of Muscles

■ Tonic (Postural)

- Facilitated
- Hypertonic
- Shortened

■ Phasic (Fast)

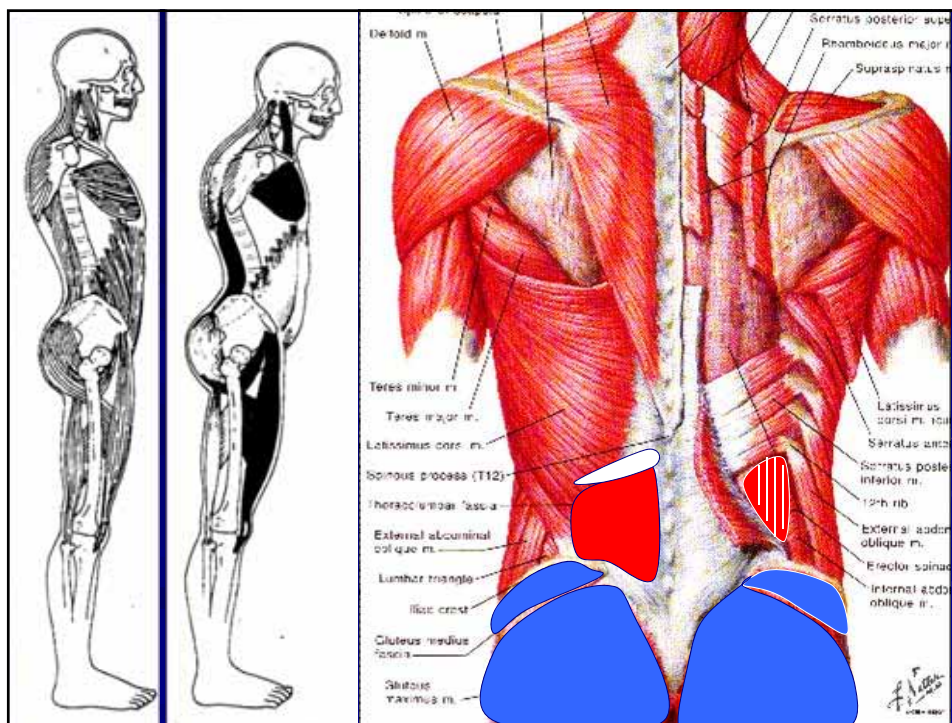
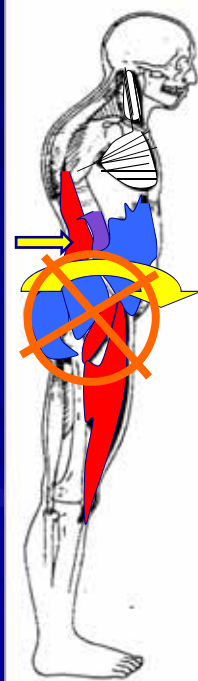
- Inhibited
- Hypotonic
- Weak

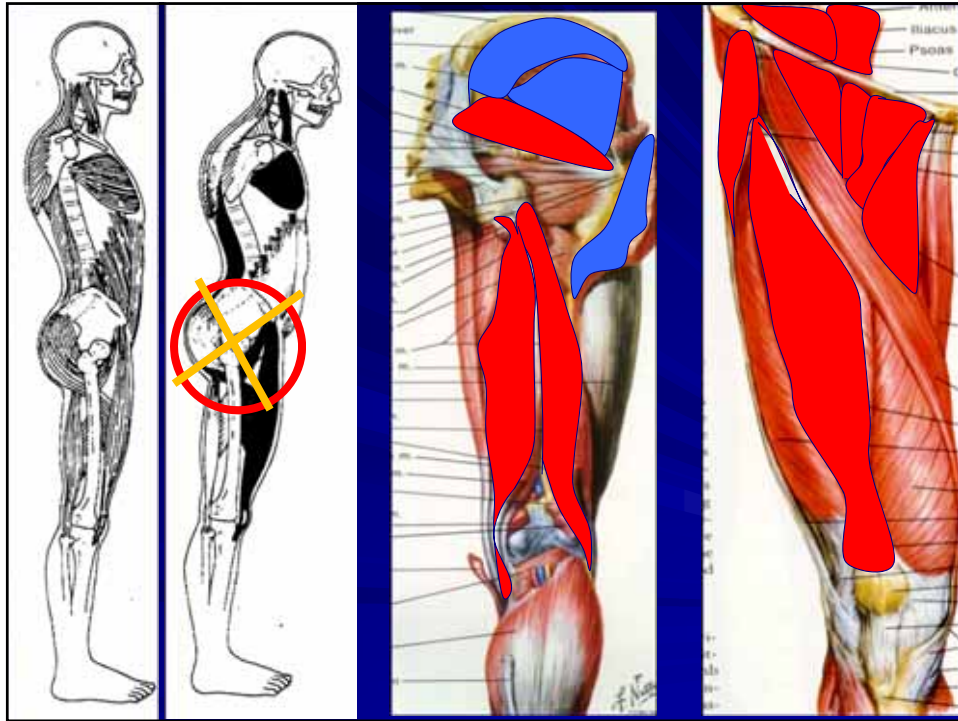
■ “Pseudoparesis”

Muscle Imbalance*

■ Lower Cross Syndrome* (Janda)

- Glute max **weak**
- Hip flexors (Iliopsoas) **tight**
- Abs **weak**
- E. spinae **tight**
- Glute med **weak**
- TFL/QL **tight**
- **Anterior pelvic tilt/increased L lordosis**
- **Hypermobility lower T/L spine**





Why is muscle balance important?

1. Chronic pain challenge
2. Proper rehabilitation (individualized)
3. PT Rx “evaluate and treat”
4. Maximize human performance (athlete, dancers, anyone)
5. Prevention

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L|E|C|O|M
20 Seton Hill Drive
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24 Oct 2017

Rx Exercise Prescription

Disp: Thoughtfully

Sig: Two reps BID

Kevin A. Thomas, D.O., M.S. D.O.

Substitution Permitted – Even Encouraged. Use the anatomy and skills you've acquired to be a Doctor.

FITT Principles - Exercise R_x

F – Frequency (# days/week)

I – Intensity (Scale of exertion, RPE)

T – Type (jogging, yoga, weight lifting, etc.)

T – Time (duration) (sec, min, hr)

CLASSICALLY* 4 variables to be considered when developing an exercise program.

Apply these to each category of exercise.

* **Osteopathically**, Exercise Rx Individualized based upon **patterns** of **muscle imbalance**

Approach to Patient with Muscle Imbalance?

■ Diagnosis of *SPECIFIC* problems

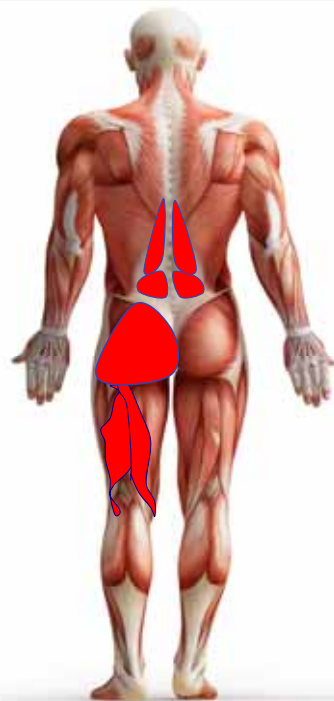
- NMS Osteopathic Exam
 - Observation
 - Palpation (SD, muscles)
 - **Muscle Firing Sequencing***
 - Special tests (i.e. Thomas Test)
- **Patterns?** Hypertonic/Hypotonic Muscles (i.e. Lower Cross Sn)
- **Proprioceptive Balance Testing**

Normal Muscle Firing Pattern Hip Extensors

■ Hip Extension

1. Hamstrings
2. Gluteus maximus
3. Contra QL
4. Ipsi QL
5. Contra E. spinae
6. Ipsi E. spinae

**Abnormal Firing Patterns
= Muscle Imbalance!**



Greenman Treatment Sequencing w/OMT

1. Proprioceptive Balance Training (PBT)*
2. Stretching tight muscles*
 - a. Muscle energy, articulatory, HVLA, FPR; teach home exercises
3. Strengthening (Retraining) weak muscles
4. Aerobic Exercise

***By giving patient exercise, puts the responsibility on them to get better**

Practice PBT*

1. Standing on one leg (shortened foot)
2. Tandem walking
3. Rocker board/trampoline
4. Orthotics/lifts





KEY LESION



- **Definition (Primary):** the *somatic dysfunction(s)* that maintains a total pattern of dysfunction, including other secondary dysfunctions.
- **Secondary:** somatic dysfunction arising either from mechanical or neurophysiologic response subsequent to or as a consequence of other etiologies.

ECOP Glossary 2011, p. 53.

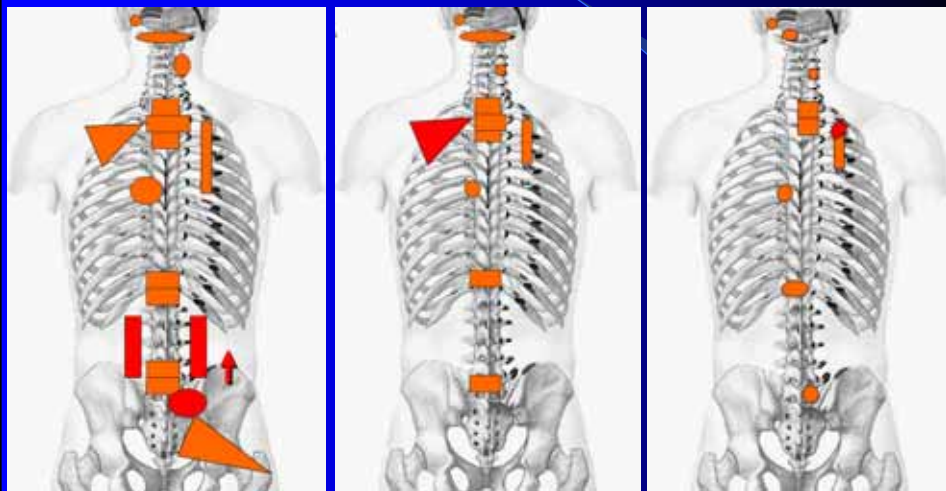
BROADER CONTEXT

The **DYSFUNCTION(S)** that maintains a total pattern of dysfunction, including other secondary dysfunctions.

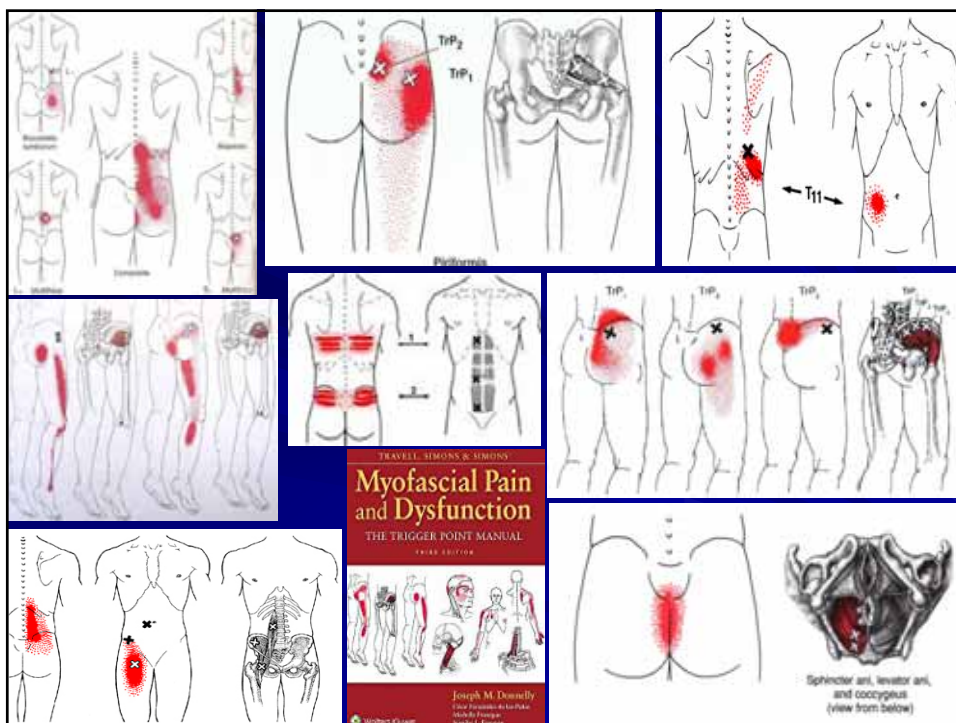
- Somatic
- Visceral
- Mental
- Emotional
- Spiritual
- Energetic
- Environmental
- Cultural
- Combinations
- All of the above



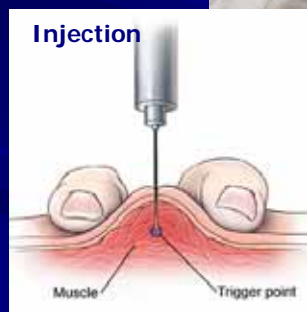
Benefits of Diagnosing and Treating AGR (Key Lesion)



Osteopathic Treatment to AGR



Myofascial Trigger Point Therapies



Trigger Point
Myotherapy



Dry Needling

Acupuncture



Acupuncture

- Extremely effective for treatment of acute or chronic pain
- Currently 3,000 physician-acupuncturists
- State CME requirements 200-300 hours
- Most physicians trained through AAMA



Acute and Chronic Pain Syndromes Effectively Treated with Acupuncture

- Myofascial Pain Syndrome
- Fibromyalgia
- Cervical, thoracic, rib, low back pain
- Sciatica
- Joint pain, TMJ, Arthritis (OA, RA)
- Facet syndrome
- Tendonitis, Repetitive Motion, Carpal Tunnel
- Sprains/Strains/Sports Injuries
- Migraines, Muscle-tension, Cluster HA
- Post-operative pain

...Continued

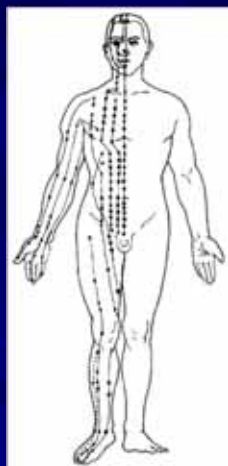
- RSD
- Polyneuropathy
- Raynaud's
- Radicular pain
- Post-stroke spasticity/weakness/pain
- Parkinson Ds
- Trigeminal neuralgia
- Odontalgia
- Sinusitis
- Menstrual Pain
- GERD/GI complaints of unknown etiology

Other Pain-Related Issues Effectively Treated with Acupuncture

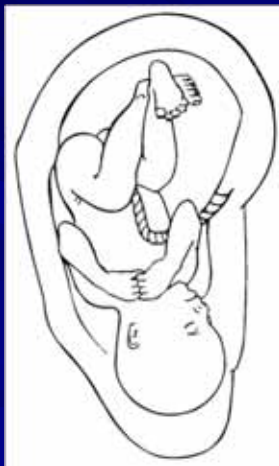
- Depression
- Anxiety
- Constipation
- Fatigue
- Insomnia
- Narcotic addiction
- Smoking addiction



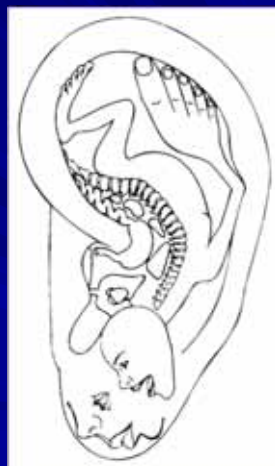
Systems of Acupuncture



Macro-Body

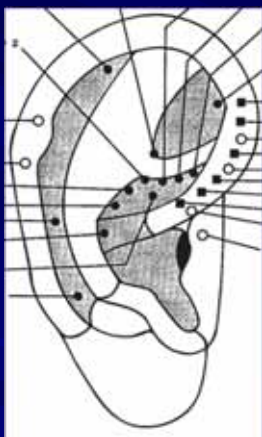


Micro - Ear

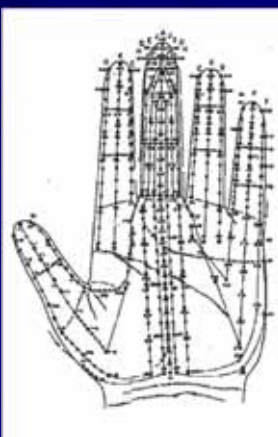


Ear Homunculus

Acupuncture Microsystems



Ear

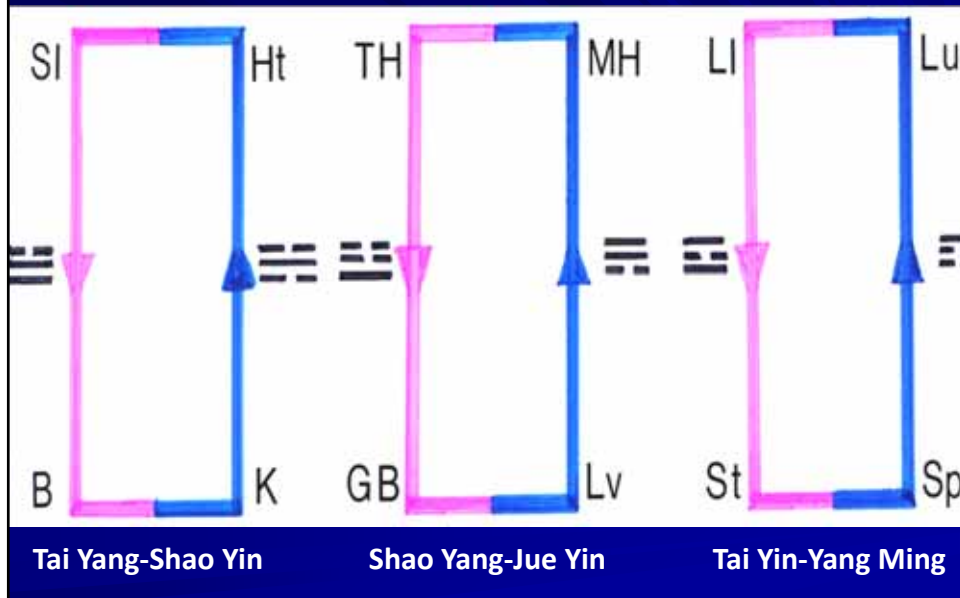


Korean Hand

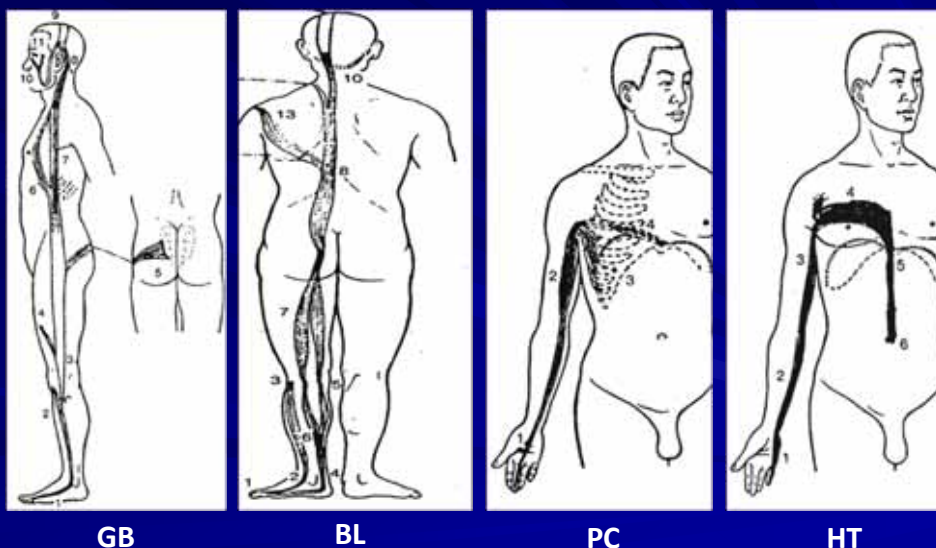


Scalp - YNSA

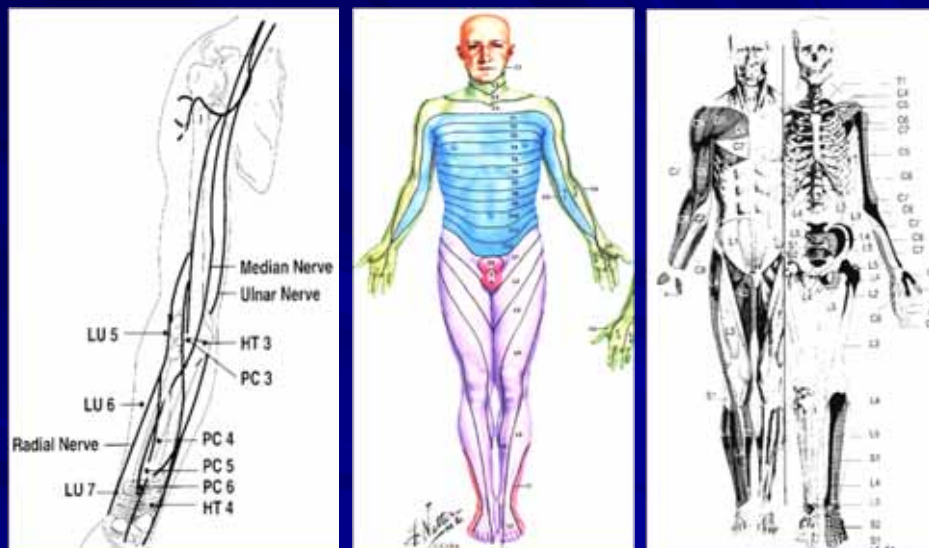
Meridian Subcircuits



Tendinomuscular Meridians for Acute Sprains & Strains

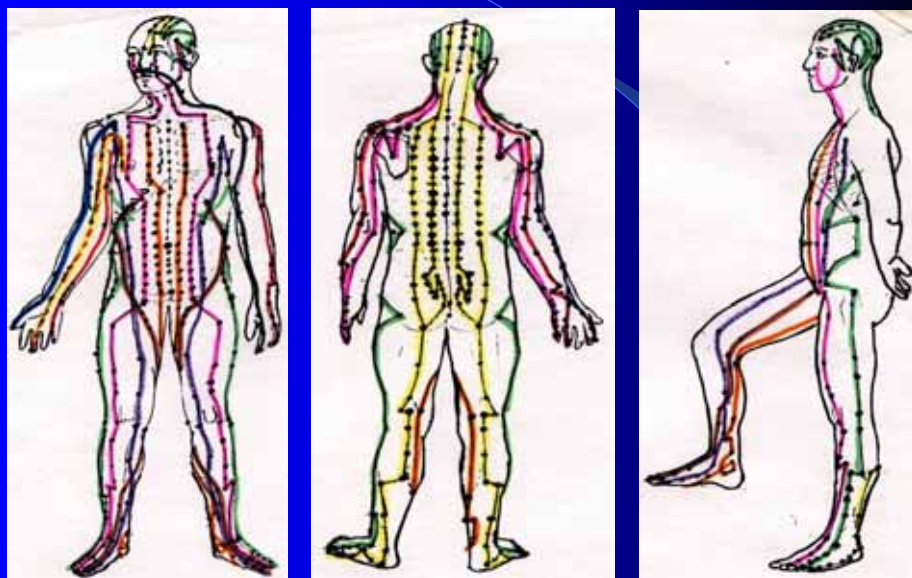


Neuroanatomical Model

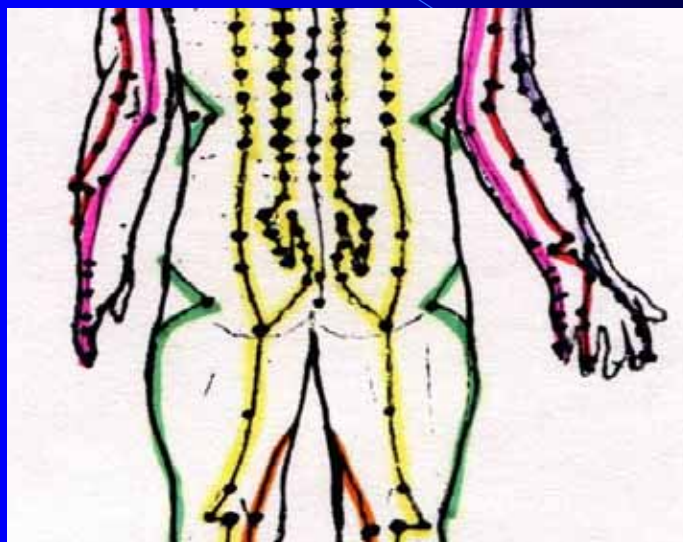


Dermatomes – Myotomes - Sclerotomes

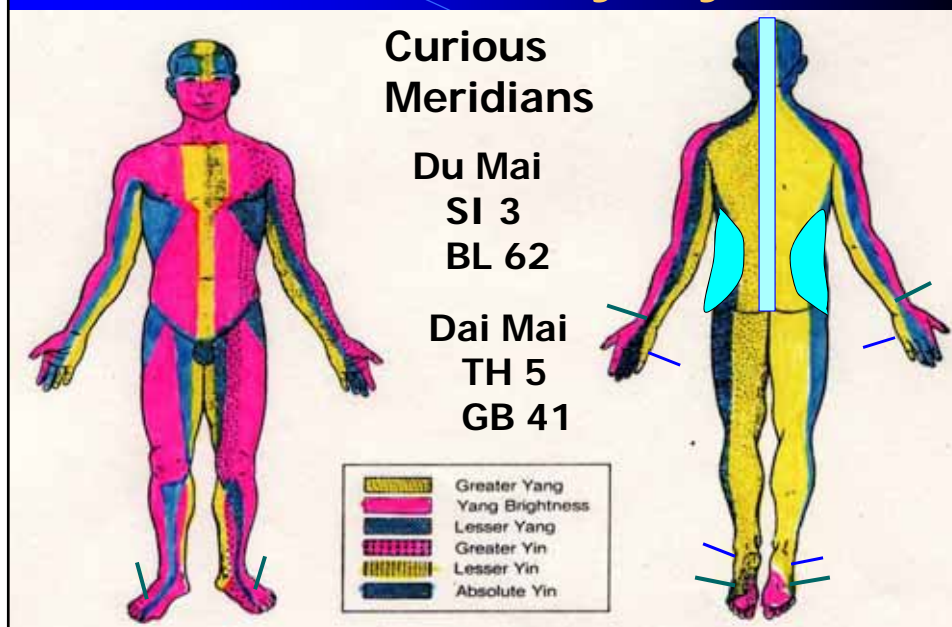
Body Acupuncture

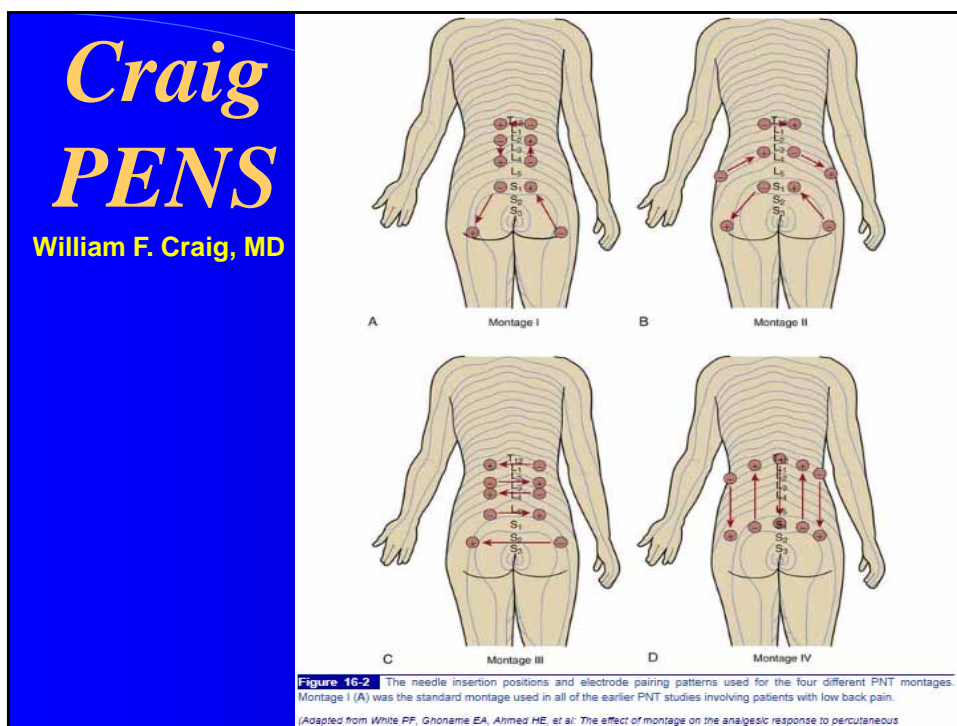


Body Acupuncture



Meridian Zones of Influence







OMT Options

- “Conventional” OMT

- Muscle Energy
- HVLA/Articulatory
- Myofascial Release/Soft Tissue
- Counterstrain
- Facilitated Positional Release (FPR)
- Still Technique
- Balanced Ligamentous Tension (BLT)
- Ligamentous Articular Strain (LAS)
- Visceral Manipulation

OMT Models

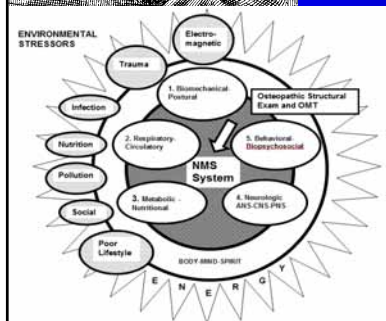
1. Direct
2. Indirect
3. Bioenergetic



OMT Options

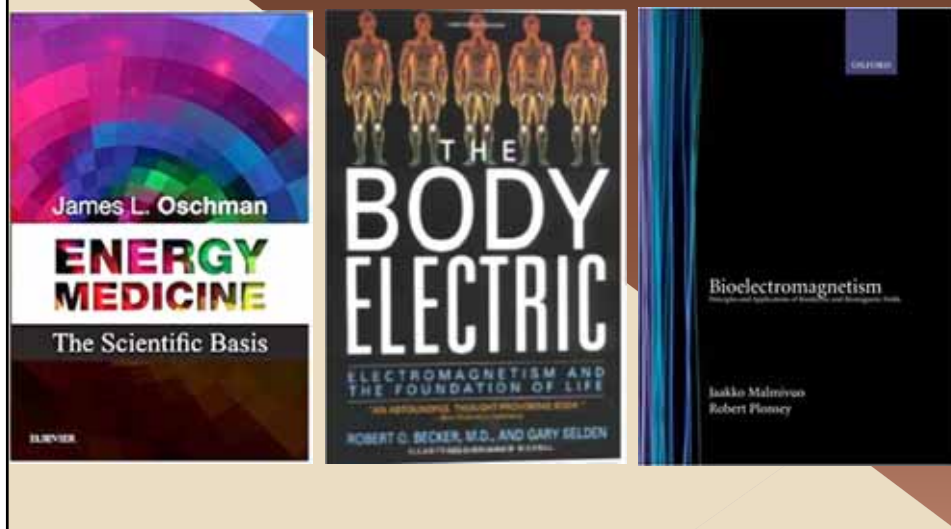
• Bioenergetic Model

- Dynamic Strain-Vector Release
- Neurofascial Release
- Fulford Percussion Hammer
- Biodynamics
- OCF
- Dynamical Medicine
- Bioelectric Fascial Activation
- Facilitated Oscillatory Release
- Others



Questions?

Energy Medicine Research



Energy Medicine Research



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