A.A.O. CONVOCATION

“The Balance Point: Bringing the Science and Art of Osteopathic Medicine Together”

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Osteopathic Problem Solving: Finding the “Key S/D”

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KYCOM
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What makes you think finding the “key S/D” is so important clinically?
Without data you're just another person with an opinion.

W. Edwards Deming

**Data Supporting AGR / sequencing clinical strategy you will learn today**

**Research strategies:**
( pre & post sequenced OMT )

- **Gracovetsky: SpinoScope**
  intervertebral movement

- **SpinoScope and sEMG**
  M.A.P. changes ( Cholewicki )

- **G.R.F. ( Ground Reactive Force )**
  total body changes

- **Golf performance**
  12 amateurs / immediate changes
“Your theory determines what you see”

Albert Einstein, PhD

“your paradigm determines what you see, do, how you think, how you Dx/Rx, etc.

Robert Davis, PhD
Pikeville College

Mitchell, Sr. - stool HV/LA demonstration
( Paradigm Shift for me )
How do you clinically view your patients?

My Goal:
to change your clinical model
MESOKINETIC SYSTEM

Meso (mesoderm): gives rise to

- Connective tissues & fascia
- Cartilage
- Bone
- Striated and smooth muscle
- Myocardium and pericardium
- Blood and lymph vessels
- Kidneys and ureters
- Adrenal cortex
- Gonads
- Tubes, uterus and upper vagina
- Serous membranes lining the body cavities (T, A & P)
- GI fascial support system
- Spleen

**Kinetic:**

Related to movement of physical objects

**NOTE:**

More comprehensive definition of M/S/S for OPP-ECOP / ACGME

( demonstrates built-in PR/SEC Machinery inter-relationship )

Netter’s Atlas of Human Embryology
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Kinetic:

- Related to movement of physical objects
- How does this reality change your understanding about visceral manipulation?
- Stiles’ visceral perspective?
- “treating” mesentery?
- Importance of finding the “key S/D”?

NOTE:

More comprehensive definition of M/S/S for OPP-ECOP / ACGME (demonstrates built-in PR/SEC Machinery inter-relationship)

Netter’s Atlas of Human Embryology
Tensegrity systems are:

- Light weight
- Much stronger than experts had predicted
- Multi / Omni - directional
- Whole system adapts to stressors
- Protects the “weakest link” / the A.G.R.
- Structures defy gravity
- Non-metallic materials, organized in a Tensegrity arrangement, can conduct electricity
- Conduct vibratory information
- Would it not make sense to identify, the A.G.R. (area of greatest restriction - hindrance) in this flexible & adaptive system?

LBP:
A.G.R. Stiles
(100 patients)
- 60% T/RC
- 24% lumbar
- 11% L.E.
Total = 95%
The “New” 21st Century Concepts and Language

- **Cybernetics**: Bill Johnston and Charles Bowles: Functional Methods 1966
- **Autopoiesis**: complex and dynamic structure-functional relationships (term now in the literature)

21st Century Concepts & Language now available to F.P., specialties and O.P.P. residencies

Body is a complex, dynamic, functional unit made up of multiple inter-connected & inter-woven systems
“Nature knows more than our rational minds do.”
( Lewis: From Dry Bones to the Living Man )

“Rationality and Knowledge do not matter to Complex Adaptive Systems”
( Complexity & Family Practice, Annals of Family Medicine vol 12, no 1 Jan / Feb 2014 )
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Attractors: (managers)

the preferred set of behaviors
(naturally built in)
- **Static** / Power-Line
- **Dynamic** / “strange”
pretty fractal pictures

**additional attractor examples:**
- Normal heart beat attractor
- Fibrillation attractor

**Sequenced OMT**
can change Attractors!
How do you clinically view your patient?

**Stiles’ Current Perspective**

complex, dynamic, inter-connected & inter-woven, multiple-simultaneously functioning systems, non-linear, autopoietic functional unit
Gordian Knot

- often used as a metaphor for an intractable or intricate problem
- Goal: dis-entangling the impossible knot
  - The problem is “easily solved by loophole” or by “thinking out side the box.”
- A metaphor for A.G.R. / sequencing the complicated patient?
Host + Disease

Illness emerges

How the Patient “presents”

Boyd Button, DO, FACOP:
pathologist at Waterville Osteopathic Hospital

- If you look at the pathology slides of 100 patients with the same medical diagnosis, the slides will look similar
  BUT

the clinical presentations will all be somewhat unique (appendicitis) WHY?
  (melody of a tune vs. jazz variations)

I.M. Korr, PhD:
you can have 100 patients with the same medical disease
  BUT

remember they all got there by a different route.

Wm. Osler, MD:
The good physicians treat the disease,
The great physicians treat the patient who has the disease
What things might adversely impact a “healthy attractor”?

Healthy ATTRACTOR (manager)

S/D-H can adversely impact:
- One arm
- All arms
- Any combination

Could those S/D-H mechanisms:
- Stimulate the attractor / manager?
- Inhibit the attractor / manager?
- Eliminate the attractor / manager?
- Insert a new attractor / manager?

What initiated Chaos Thinking?
The Lorenz weather computer @ M.I.T. In 1960
Entered “correct data” back into the loop... Predicted weather (shortcut: re-entered 0.506 but original number was 0.506127)
The longer that one thousand % error / variation persisted, the greater the divergent outcomes.
"Dr. Still was keen on being very specific. He looked at the patient as a Totality. He looked for the Elusive Key Lesion – Hindrance that people have quoted for years”.

That is what He looked for and when He found it, He fixed it and then left it alone. He said that once done, the body will do its own work because it is designed to do its own work. Our job is to find the Key Restriction – Hindrance to homeostatic integrity, and once restored to normalcy, to rest assured that the body will take care of the rest of the work".
Where do I start?

How do I find the Key S/D?

How do I problem-solve this very complicated patient?
Screening Examination

• Standing: both sides
• Sitting: both sides
  (occiput to S/IJ)

**Key:**

using LAW III of spinal mechanics

• Use **slow deliberate movements**
  (miss restrictions when screen fast)

• **Blend**
  into the “feather edge” of the restrictive barrier
  (getting into joint mechanics vs just soft tissues)

• **Palpate / “listen”**
  to the tissue response
  (developing a “cybernetic loop”)

• looking for the **most restricted area**
  (may be a **very localized area**)

• that has the **hardest end-feel**
  (has lost its variability & least healthy feel)
First question: after screen is it upper half or lower half problem?

Upper half of the body (T₁₂ is reference point)
- Cervical?
- Atypical: O/A, AA?
  - Muscular?
  - Dural?
  - Typical: C₂-₇?
- Thoracic?
  - Thoracic spine?
  - Restriction more central (which thoracic vertebra?)
    - Rib cage?
  - Restriction more lateral along the related rib (screen rib cage)
    - Group pattern / key rib?
    - Isolated rib dysfunction?
- Upper extremity?

Lower half of the body
- Is it lumbar spine?
- Is it sacrum or pelvis?
- Is it lower extremity?
  - If STFBT > than SIFBT = lower extremity
  - If SIFBT > than STFBT = lumbar, sacrum or pelvis
    - (R/O lumbar or S/IJ)
  - Pelvis Rx sequence (Mitchell axis model)
    - Up/down shears
    - Pubes dysfunctions
  - Sacrum: if L₅ is out of pattern, treat it before sacrum; then sacrum
    - Innominates
- NOTE: guidelines, not fixed laws
Benefits: of finding AGR / sequencing
Note: this is only one way but helps to organize your problem solving

- Patient realizes you are looking at them as a unique individual and not just “cook booking” a treatment.
- Findings frequently confirms the patient’s story.
- Patient amazed you find their painful areas because with other physicians and care givers they had to point out the pain location.
- The sequenced finding & clinical response enable you to develop a patient specific patho-physiological hypothesis
  - When you treat the A.G.R., not only does it change but several other areas of S/D-H will also change ( compensations ). Saving time !
  - Often, only 3 or 4 areas need to be treated and it clears out 90% of the S/D in the body. ( Billing issues )
  - Match the technique to the restrictive barrier.
- Each subsequent visit, the S/D-H should localize into smaller areas.
- If only the treated area changes and / or you feel like your swimming in peanut butter, you are probably treating out of sequence !
  - Sequencing analogies: peeling layers of an onion, opening a complicated lock, solving a Rubic Cube, etc.

consider Still quotes and references in next slide
**Sequencing**
- adds order to our application of knowledge

**Sequencing**
- adds Intelligence and Skill to our assessment of the sick . . . Dysfunctional

**To obtain good results,**
we must blend ourselves with and travel in harmony with Natures’ Truths
( honor patient’s uniqueness and complexity )

A.T. Still, MD, DO

**Note:**
Don’t have to stretch or tone . . . Stimulate or inhibit “Find it, fix it and leave alone” . . . A.T. Still, MD, DO

**BUTTERFLY**
- Before
- After

A.G.R. / sequenced + Gait O.M.T.
- sEMG and M.A.P.s
- Center of Pressure (COP)
  - Balance
  - Gait
  - Distillation of the total movements of the body

Analogy: “M/S H.R.V.”
Sequencing adds order to our application of knowledge. Sequencing adds intelligence and skill to our assessment of the sick. Dysfunctional.

To obtain good results, we must blend ourselves with and travel in harmony with Natures' Truths (honor patient's uniqueness and complexity).

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Outcomes following OMT + Gait Dx/Rx

• Confirms A.T. Still’s concepts changed protocols or exercise
• Attractors sequenced OMT, protocols or exercise
• Non-sequenced A.T. Still’s concepts did not produce similar dramatic changes

A.G.R. / sequenced + Gait O.M.T.

• SEMG and M.A.P.
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Analogy: “M/S H.R.V.”
Without data you're just another person with an opinion.

W. Edwards Deming

**Note:**
I am not saying this is the only way to approach patients!

but

our data suggests it is an **effective clinical strategy**
Thank You

Each patient is unique and one of a kind!

can’t “cook book” quality

Osteopathic Care