Part II, Principles of Chiropractic Breakdown

PRINCIPLES OF CHIROPRACTIC

I. The Chiropractic Paradigm (12%)
   - Early concepts
   - Research and evolution

II. Concepts of Subluxation and Spinal Lesions (28%)
   - Proprioceptive insult / somatosomatic reflex models
   - Neural compression / traction models
   - Visceral reflex models
   - Vascular insufficiency models
   - Axonal aberration / trophic models
   - Neuroimmunomodulation models
   - Biomechanical models
   - Other

III. Basic Science Concepts in Chiropractic (30%)
   - Anatomical
   - Pathophysiological
   - Biomechanical

IV. Applied Chiropractic Principles (30%)
   - Subluxation etiologies
   - General effects of adjustment and manipulation
   - Wellness
Part II, Principles of Chiropractic Sources


How to Take The National Boards

Keep your perspective
The “Ten Commandments”

- much of this works for any test...
- There is a "cycle" to the tests

The Ten Commandments

1. Don’t check your brain at the door

2. Dress in layers
   - you never know what the climate will be in the testing area

3. Eat an early breakfast
   - about an hour before the test (your brain needs “brain food”)

4. Sleep is a weapon - BE ARMED AND DANGEROUS

5. If you don’t have a clue, skip the question and move on...come back later... DO NOT WASTE TIME.

6. NEVER change an answer ...unless GOD tells you to
7. Use your lucky pencil, socks, gun, etc..
   • Whatever it takes to *feel* comfortable

8. When in doubt, eliminate the answers down to 2 possibilities…guess if you have to. (a 50% chance means a monkey could pass…)

9. RE-READ #6
   (6. NEVER change an answer………..)

10. Read the questions and underline the key words.
    • Read the last line first on long questions, find out what they’re asking - avoid eating “word salad”
    • Sometimes reading the answers after reading the last line helps….
    • The Past is Prologue

❖ Pre - Chiropractic Forerunners
   ➢ Ancient Cultures
     • Greeks, Romans, South American, Native American, etc.
   ➢ Bonesetters – Sir Herbert Barker
     • Hx used to demonstrate the long standing depth of resentment against anything outside organized medicine (New Zealand 1979)
   ➢ Magnetic Healing
     • Osteopathy & A.T. Still
     • Chiropractic & D.D. Palmer

The Past is Prologue

❖ Chiropractic History
   ➢ D.D. Palmer - “The Founder”
     • Tone
   ➢ B.J. Palmer - “The Developer”
     • MOPI
     • The BJ Palmer Research Clinic (1935 - 51)
     • WOC & WHO
   ➢ Solon Langworthy
     • Subluxation
     • Modernized Chiropractic (Langworthy, Paxson & Smith)
Principles of Chiropractic
(It’s Time for a Part II Board Review!!)
Dr. David Browning

- **C.O. Watkins**
  - Researcher in the 1940’s (NCA affiliation)

- **Willard Carver - “The Constructor”**
  - Palmer family friend...lawyer & later D.C.
  - Called school “The Science Head”
  - Authored 18 books...

- **John Howard**
  - National College of Chiropractic
  - Started in the Ryan Building
  - Moved to Chicago - became primary broad-scope school after being sold to an M.D. in 1914 (mixers)

- **Tullius Ratledge**
  - Ratledge College of Chiro - sold to Carl Cleveland in 1951
  - Key figure in California licensure

Déjà vu Review

- **Chiropractic History**
  - Philosophy as a defense...
    - Shegataro Morikubo
    - Vocabulary / our lexicon

- **Models of Subluxation**
  - Faye – 5 Component
  - Lantz – 9 Component
  - Kent – 3 Component
  - Harrison – Postural
  - Dysafferentation

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**The Crib Sheet**

- Inflammation Hypothesis
- Segmental Dysfunction Hypothesis
- Fixation Theory (Korr)
- Fixation Theory (Gillet)
- Instability Hypothesis
**Déjà vu Review**

- Inflammation Hypothesis
  - Pre-stages spinal lesions
  - SHLRP
  - Acute vs. chronic
  - Immobilization initiates inflammation
  - VSC phase 1

- Segmental Dysfunction
  - Neurobiologic Subsets
    - Non-inflammatory
      - Korr
      - Patterson - Steinmetz
    - Inflammatory
      - Gatterman - Goe
      - Mense
      - Dvorak
      - Evins

- Segmental Dysfunction
  - VSC phase 1
  - All lead to segmental facilitation
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- Instability Hypothesis
  - Medical x-ray criteria
  - Why did you take those films, doctor?
  - Etiology - posture, trauma
  - VSC phase 2
  - Terminology
    - Intervertebral subluxation

- Immobilization Degeneration
  - Use it or lose it...
  - Immobilization leads to permanent impairment
  - VSC phase 3
  - Sandoz & Kirkaldy - Willis models
    Look them up if you need to in Leach's book, Chapter 1

- Neuropathology
  - Electrical Stuff
    - conductivity, amplitude of action potentials, nerve transmission, frequency of firing, etc...
  - LMNL S & Sx's
    - DTR's, Paresis, Flaccid paralysis, Hypotonia, Paresthesia, Fasciculations

- Axoplasmic Aberration
  - Protein Stuff
  - Pain "movement"...
  - Axoplasmic Flow (generally ssssslow)
    - Antegrade (faster)
      - NGF (nerve growth factor)
    - Retrograde
      - NGF
      - Reg. of enzymes in neurotransmitter synthesis
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- **Neuroimmune Hypothesis**
  - Immune Stuff
  - Hans Selye
    - General Adaptation Syndrome
      - Alarm, Resistance / Adaptation, Exhaustion
  - Stress Induced Immune Suppression

- **Somatoautonomic Reflex Hypothesis**
  - Central Modulation
    - Descending inhibition
  - Peripheral Modulation
    - Peripheral bombardment
  - Most widely accepted hypothesis

- **Spinal Reflexes**
  - It's all in the name...Cause ➔ effect...
  - "Mini-cases" / scenarios are usually presented
    - Somatosomatic
    - Somatovisceral
    - Viscerosomatic
    - Viscerovisceral

- **Vertebral Basilar Insufficiency**
  - Drop attacks
  - Most incidents in the early 30's
  - VSC phase 2 instability
  - Bizarre list of symptoms possible - can be intermittent
  - Note the CVA list on the crib sheet

- **Myelopathy Hypothesis**
  - B.J. Palmer
  - aka cord compression, compressive myelopathy
  - UMNLS & Sx’s
    - spastic paralysis, hyperreflexia, pathological reflexes, clonus, paresis
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- SIDS
  - Torticollis - 1° indicator of a SDF in kids
- Upper cervical technique / compromise

- Dural Torque
  - Upper cervical model (initially)
  - Concept of meningeal torsion
  - Boards: typically an alternate answer for an upper cervical based question
    - e.g. Myelopathy hypothesis S & Sx’s

- Proprioceptive Insult
  - “Absorbed” into the SAR Hypothesis
  - “Mechanoreceptor Funk”
  - Post traumatic / surgical aberrations
    - Altered biomechanics ....

- Congenital anomalies may predispose..
  - Hemi-vertebra, congenital fusion, etc.

- Somato Visceral Disease Mimicry Hypothesis
  - 1° Proponent = Nansel & Szlazak
  - Counterpoint to the SAR hypothesis
    - Insufficient data...
  - Interesting possibility
    - Nansel was one of my instructors....