

Pain Medicine Update

A New Paradigm

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Disclosures

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Objectives

- ◆ Describe current practice of Pain Medicine
- ◆ Delineate the central role of the Connective Tissue System in the maintenance of persistent pain
- ◆ Examine the link between brain and body in perpetuating and resolving persistent pain
- ◆ Describe a cohesive approach to care incorporating neuroplastic and somatoplastic treatment

Practitioners

- ◆ Pain Medicine equated with opioid medicine
- ◆ No central concept/core
- ◆ ‘Interventional/non-interventional’ = antiquated, fragmented
- ◆ Reimbursement driven model under attack
- ◆ Lip service to biopsychosocial
- ◆ No acknowledgment of dynamics of persistent pain; treatment applied acutely to chronic problem

Patients

- ◆ Large group of patients with chronic persistent pain treated over last 20-25 years trying to understand the changes in care and model
- ◆ Maintained on the polypharmacy of pain and experiencing the results of it
- ◆ Stuck in a passive model of pain care
- ◆ Patient set on some course of treatment
- ◆ Often continues in same way for months, years, no real progression or improvement with no discussion of expectation of big picture plan

Third Party Payors

- ◆ CMS/ 3rd party payors looking at outcomes
- ◆ Looking for ways to cut reimbursement
- ◆ Requiring evidence-based treatment
- ◆ Looking for a working model to apply across the country
- ◆ Practitioners trying to keep up with cuts and changes in 3rd party payor restrictions and coverage of services
- ◆ No understanding of evolving specialty of Pain Medicine

State of the State

- ◆ The Florida Quandry
- ◆ Legitimate practitioners and patients suffering the wrath of law enforcement and government interaction/mandates
- ◆ Legitimate patients denied access and medications
- ◆ Yearly unannounced inspections by DOH = \$1500
- ◆ Current bills proposing imposing requirements on Pain Medicine practitioners

State of the State

- ◆ Law Enforcement and Legislators trying to identify a public health issue and ensure safety
- ◆ abuse/diversion
- ◆ inadvertent death data
- ◆ unreliable or misinterpreted data due to lack of understanding of clinical and legal
- ◆ effects of long-term polypharmacy

State of Pain Medicine

- ◆ Interventional Model or ‘Non-Interventional’ Model
 - ◆ What is ‘Non-Interventional’?
- ◆ Multiple types of pain practitioners involved
- ◆ Multiple specialties involved
- ◆ Politics of an evolving specialty
- ◆ Multiple certifying boards
- ◆ Specialty or Sub-specialty? Residency or Fellowship?

What's Missing Clinically?

- ◆ Cohesive approach to treatment
- ◆ The Patient
- ◆ The Patient's Brain
- ◆ The Practitioner-Patient Partnership
- ◆ Realistic Treatment Plan with Goals
- ◆ Phasic Treatment Approach

Paradigm Shift

◆ Phasic Treatment (R.A.F.T.)

- ◆ Rescue: help the patient out of unbearable pain and hopelessness
- ◆ Adjustment: reduce pain in multi-modal treatment program
- ◆ Functionality: rebalance and focus on functional improvement
- ◆ Transformation: independent with skills and enjoying life

The Big Picture

- ◆ Cohesive plan requires understanding big picture of pain
- ◆ The Brain and Neuroplasticity
- ◆ Connective Tissue System
- ◆ Brain-Body link

The Missing Link

- ◆ If I only had a brain
- ◆ No Brain, No Pain
- ◆ The only organ capable of perceiving pain is the one we never acknowledge
- ◆ Perceives, maintains and is changed by persistent pain
- ◆ Puts pain in it's place and validates the patient and their pain
- ◆ The organ that integrates all of our experience
- ◆ Neuroplasticity as the basis for treatment

Neuroplasticity

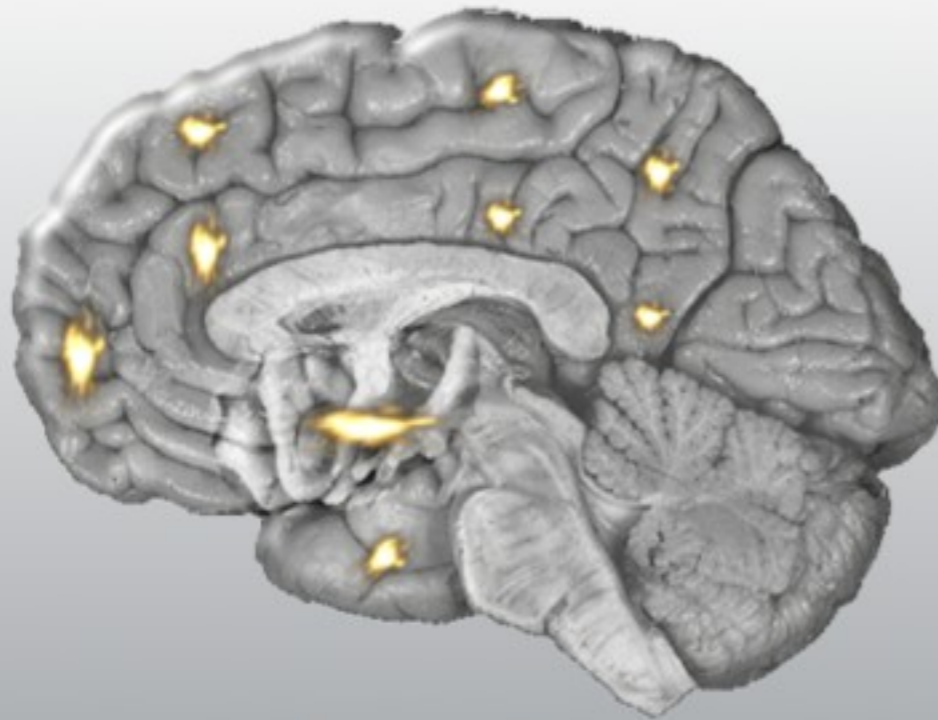
- ◆ Definition—the anatomical and physiological changes in the brain-body that occur from new learning
- ◆ Neuroplasticity occurs in the peripheral nervous system, the spinal cord and the brain
- ◆ The Brain/Body—every cell is connected to the brain for input and output

Body Brain

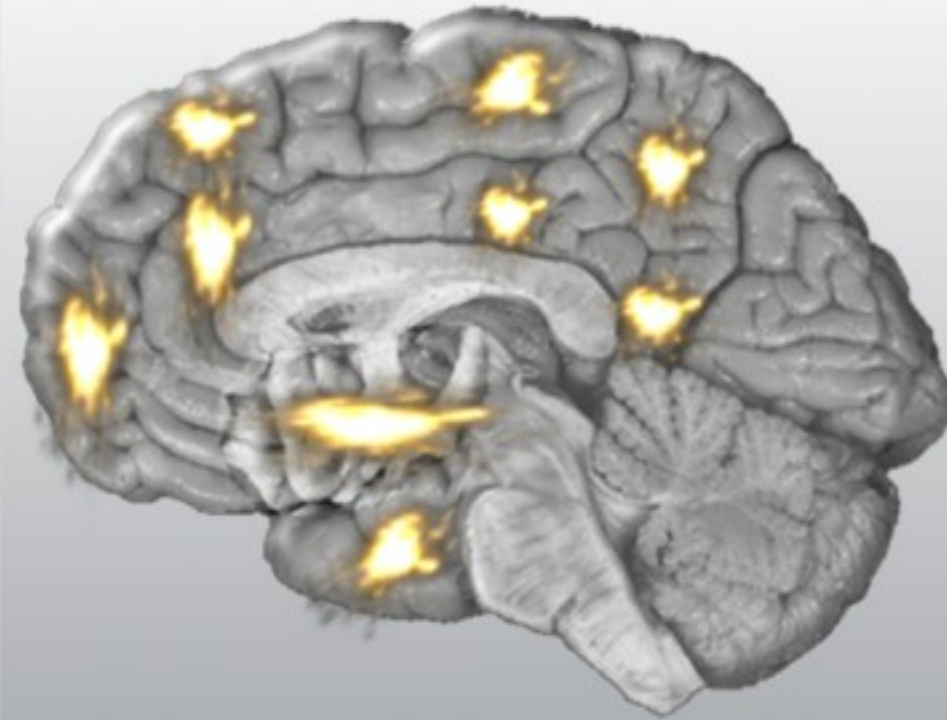
- ◆ Our bodies are our brains; our brains are our bodies
- ◆ They exist as one, the being, the whole simultaneously, instantly, always
- ◆ Sensory input from the body informs the brain and the brain adjusts the responses in the body 30 times a second over our entire lives
- ◆ Changing one part changes the whole

The Neuroplastic Brain

- ◆ The brain responds to the increased information sent from the periphery
- ◆ It recruits neurons to increase the pain processing network
- ◆ It induces constant firing independent of the peripheral input
- ◆ It assigns the traumatic painful experience into fight/flight brain centers



ACUTE PAIN
PERCEPTION



PERSISTENT PAIN
PERCEPTION

IN PERSISTENT PAIN THE BRAIN PAIN MAP EXPANDS UP TO 5 TIMES

The Brain Learns Pain

The Neuroplastic Body

- ◆ Fascia gives our body the ability to maintain its shape and move in space
- ◆ Fascia as the dynamic structural component of the ‘neural web’
- ◆ In areas of injury, the fascia reorganizes and recruits local nociceptive and non-nociceptive neurons
- ◆ Inflammatory response occurs in fascia and the entire Connective Tissue System

Key Players

- ◆ Still- Structure vs. function
 - ◆ ‘The rule of the artery is supreme’
- ◆ Sutherland- Cranial Osteopathy
 - ◆ Cranial sutures don’t fuse
- ◆ Rolf- fascia is the extension of the brain in the body
 - ◆ ‘Gel vs. sol’ state of the connective tissue
- ◆ Upledger- fascia exists in dynamic equilibrium
 - ◆ The ‘Dural Tube’
 - ◆ Craniosacral rhythm and CSF hydraulics

Key Players

- ◆ Ingber

 - ◆ Biomechanics of structure

 - ◆ Tensegrity

- ◆ Schleip

 - ◆ Fascia contracts in smooth muscle-like fashion

 - ◆ The neural dynamics of fascial plasticity

- ◆ Reed

 - ◆ Connective tissue directs changes in Interstitial Fluid Pressures

QuickTime™ and a
H.264 decompressor
are needed to see this picture.

Big Picture Intervention

- ◆ Based on pathophysiology of pain
- ◆ Interventions aimed at all levels of the persistent pain process
 - ◆ Molecular/Cellular
 - ◆ Connective Tissue System enhancement and preservation
 - ◆ Brain-neurons and glia

Unraveling Persistent Pain

- ◆ The same processes that lead to chronic pain can be used to reverse it
- ◆ Initial treatment is added to current approaches
- ◆ Changes in the brain-body can be effected to shrink the pain map and relieve pain
- ◆ Counter-stimulation of persistent pain can help to reduce pain
- ◆ Simultaneously soothe and stimulate

SHRINK THE PAIN MAP BY FLOODING THE BRAIN USING:

Thoughts.....Images.....Senses.....Memories.....Soothing Emotions.....Movement.....Beliefs

Prefrontal

Pain, Executive Function, Creativity, Planning, Empathy, Action, Emotional balance, Intuition, Morality

Anterior Cingulate

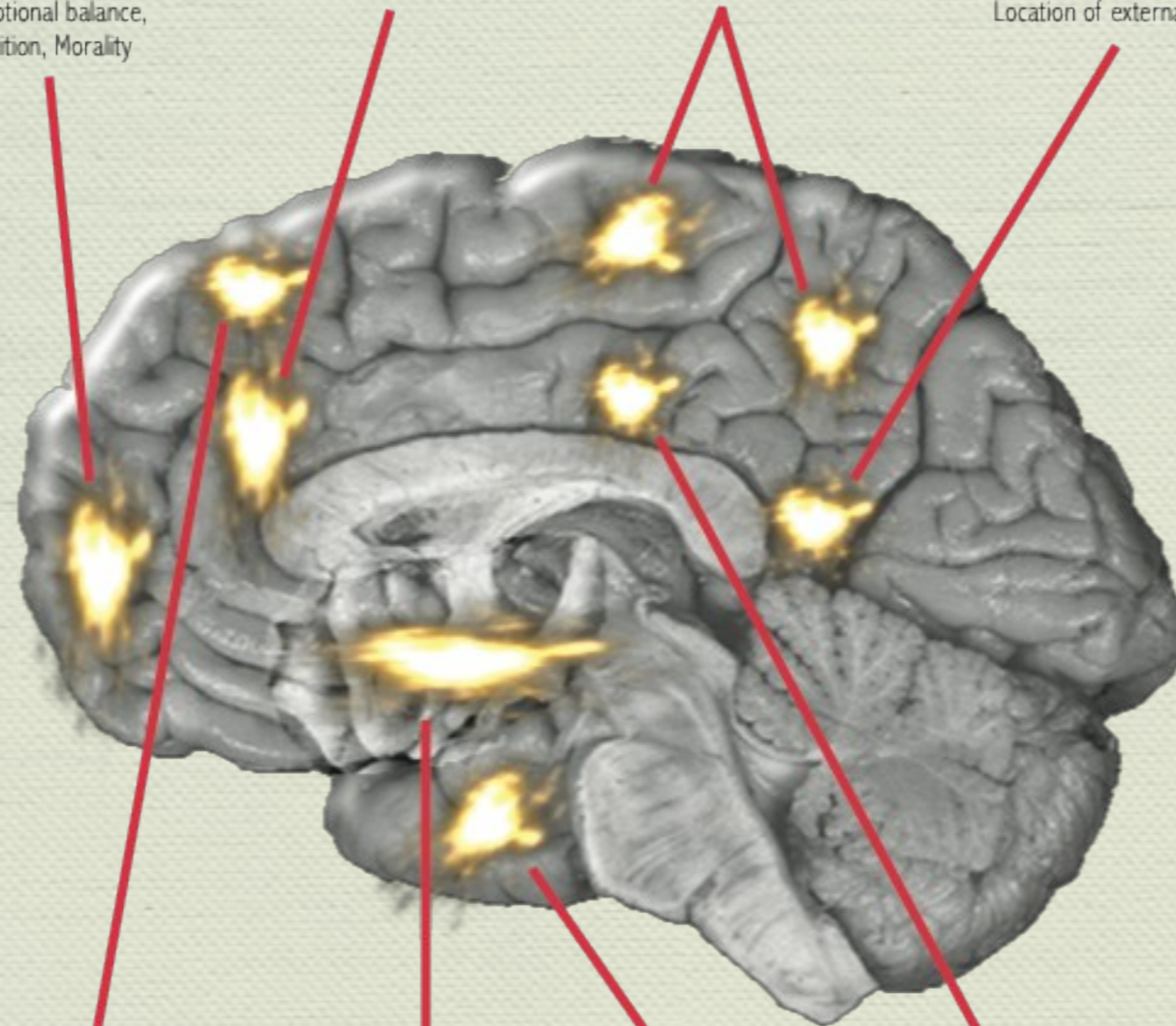
Pain, Emotional self control, Sympathetic control, Conflict detection, Problem solving

Somatosensory 1 & 2

Pain, Temperature, Pressure, Touch, Position, Vibration, Sensation of movement

Posterior Parietal

Pain, Sensory, Visual, Auditory Perception, Mirror neurons, Internal location of stimuli, Location of external space



Supplementary Motor

Pain, Planned movement, Mirror neurons

Insula

Pain, Temperature, Itch, Empathy, Emotional self Awareness, Quiets the amygdala, Sensual touch, Connects emotion with bodily sensation, Mirror neurons, disgust

Amygdala

Pain, Emotion, Emotional Memory, Emotional response, Pleasure, Sight, Smell, Fight, Flight, Freeze, Emotional extremes

Posterior Cingulate

Pain, Visuospatial cognition, Autobiographical memory retrieval

- ◆ Educate patients
- ◆ Set treatment goals and expectations
- ◆ Use the concept of Phases of treatment
- ◆ Help patients become active partners in their own care
- ◆ Thoughtful medication management

Conclusions

- ◆ Utilize the PDMP
- ◆ Stay aware of legislation, laws and rules
- ◆ Refer patients to Pain Medicine practitioners for more than blocks and/or opioids and expect improvement !
- ◆ Help patients understand their success is directly related to their commitment to their treatment program

QuickTime™ and a
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