

Conquer Your Brain

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Bay Area Pain & Wellness Center







Objectives? Have a great life with CRPS.



Structure and Function

- Gray matter- hardware
- White matter- cables and cords
- CRPS- changes in brain structure lead to changes in function



The Brain Game

- Neuroplasticity
- Neurogenesis
- Epigenetics
- Glial cells
- You've got the power!

CRPS Brain

- Impaired motor function
- Distorted body perception
- Neglect of involved limb
- Extreme sensitivity to touch
- **Temperature changes**
- Mood changes



Conquering the Pain Brain

- Create structural change
- Use the Rs- remodel, re-work, revise, reconfigure, regenerate, rejuvenate, repetition



5 Key Elements of Success

- Mobility
- Interaction
- Independence
- Validation
- Love

Conquer Your Brain, Peter Abaci M.D., Medical Director

The Storm

- Trauma- mood swings, flashbacks, panic attacks, social isolation, nightmares
- Fight, flight...or freeze?
- The three faces of trauma
- Trauma symptoms- hyperarousal of the limbic system- amygdala, hippocampus, anterior cingulate cortex, insula, thalamus, hypothalamus



Calming the Storm

- Meditation- still or active, alters brain structure and function, more gray and better white
- Breathing exercises- parasympathetic induction
- Art therapy-periaqueductal gray, dorsolateral prefrontal cortex
- Yoga- neuroplastic changes, therapy not exercise
- EMDR- eye movement desensitization and reprocessing, uses rhythmic eye movements to quell traumatic feelings

Harmful Thoughts



Bad environment \Rightarrow toxic inflammation \Rightarrow epigenetic changes \Rightarrow alters structure and function \Rightarrow more pain



Harmful Thoughts- the Big 3

- Catastrophizing
- Fear
- Anger





Healing Thoughts

- Acceptance
- Gratitude Heals, energizes, and transforms lives" –Dr. Robert Emmons Improves mood, sleep and life satisfaction.
- Compassion Responding to the needs of others.
 Improves relationships, lowers heart disease, prolongs life

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Exercise and the Brain

- Powerful effect in enhancing brain function
- Stimulates the production of neurotrophic factors



- Increases gray matter in the hippocampus
- Improves function in numerous brain regions including stress regulation pathways, motor cortex, somatosensory cortex, anterior cingulate cortex, insula



Gut/Brain Connection

- Microbiome composition linked to health, chronic disease, immune function, mood disorders
- Two-way communication between microbes in the gut and the brain
- Microbiota can be disrupted by diet, opioids, antibiotics, and environmental toxins
- Rule of 7

Sleep

"A good laugh and a long sleep are the two best cures for anything."

- Sleep is key in the neuroplastic process
- The brain is very active during sleep when it consolidates learning
- Less sleep = more pain
- Sleep hygiene is a must
- CBT works better than pills



Harry Potter



Area Pair

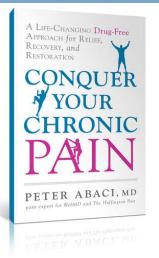
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Contact Information

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Movie Credits: Harry Potter and the Deathly Hallows: Part 2 (2011)

Director: David Yates

Writers: Steve Kloves (screen play), J.K. Rowling (novel)

Company Credits: Warner Brothers, Heyday Films, Moving Picture Company

Stars: Daniel Radcliffe,

Emma Watson, Rupert Watson

Resource www.painreliefrevolution.com