#### **Beyond Symptom Management:**

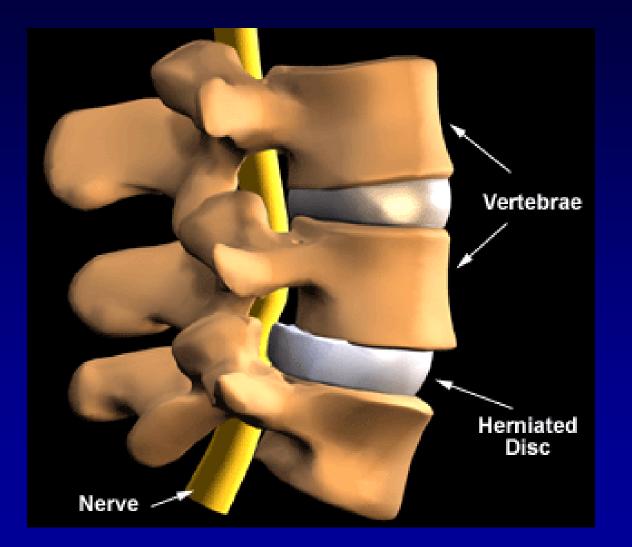
#### Mindfulness and Rehabilitation Practices for Chronic Pain

#### **Dr. Ronald D. Siegel**

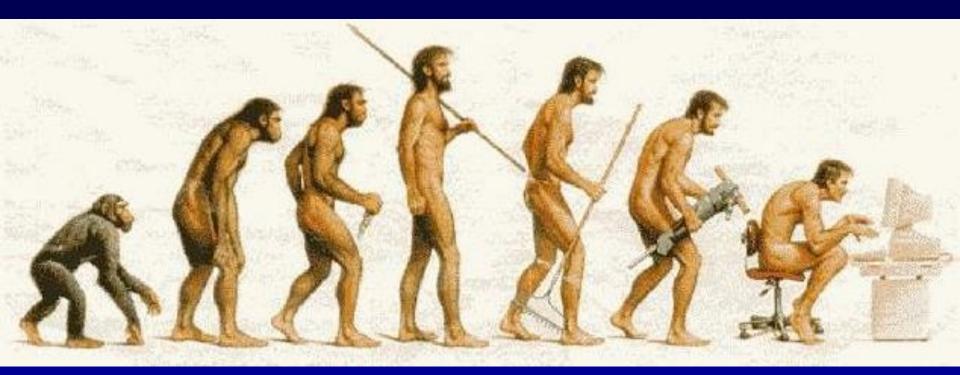
Center for Mindfulness and Compassion Cambridge Health Alliance Harvard Medical School

#### **Chronic Back Pain**

#### Bad Back?



### The Orthopedic Story



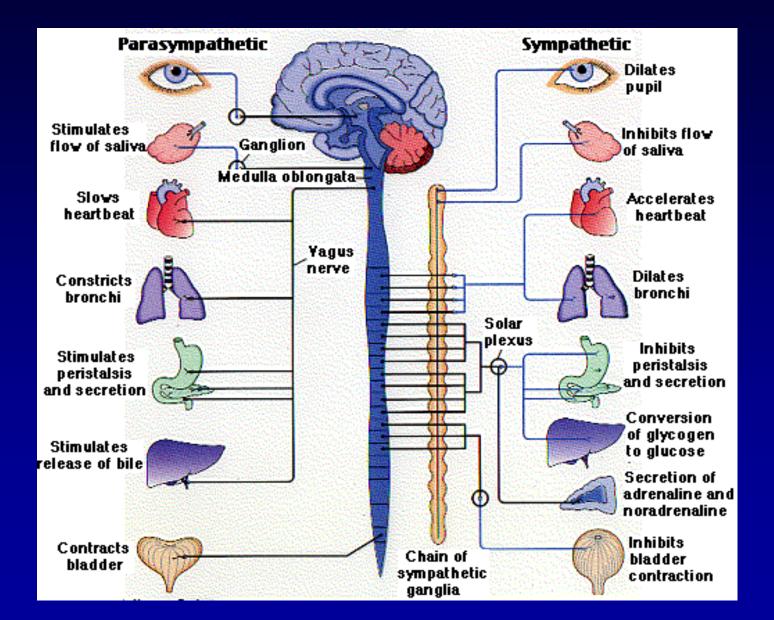
#### What's the Evidence?

- 2/3 of people who have never suffered from serious back pain have the same sorts of "abnormal" back structures that are often blamed for the pain
- Millions of people who suffer from chronic back pain show no "abnormalities" in their backs
- Many people continue to have pain after "successful" surgical repair

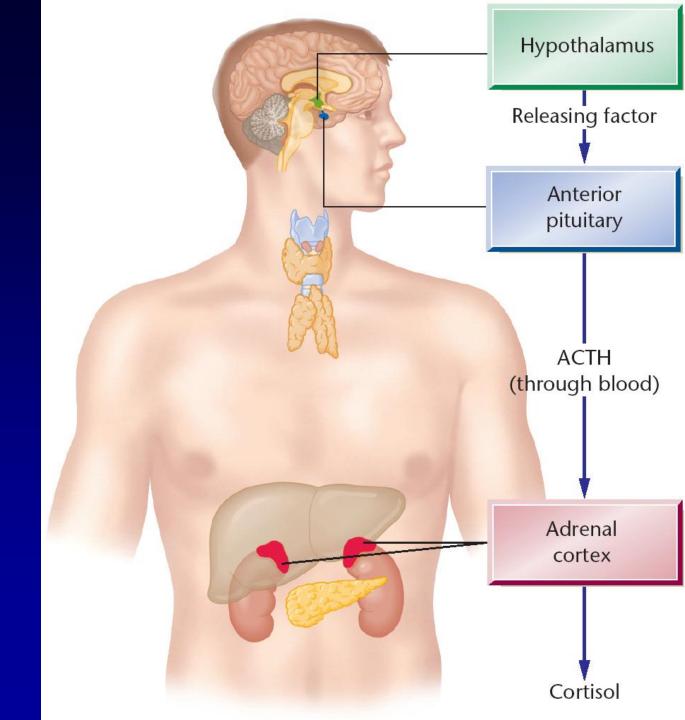
#### "Smoking Gun" Studies

- What countries have chronic back pain epidemics?
- Who gets chronic back pain?
- What is the quickest way out of acute back pain?

#### Autonomic Nervous System

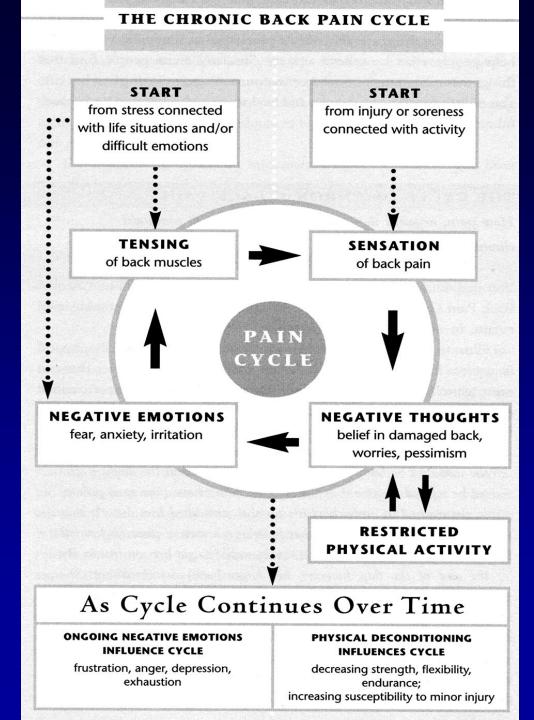


# HPA Axis



#### A Well-Adjusted Brain





# Not Imaginary Pain

- While psychological stressors of all types can contribute to chronic back pain, the pain is not imagined or "All in the head"
- Caused by real muscle tension
- Patients need to hear this *repeatedly*

#### Mindfulness for Rehabilitation

- 1. Medical Evaluation
- 2. Cognitive Restructuring
- 3. Resuming Normal Activity
- 4. Working with Negative Emotions



When touched with a feeling of pain, the uninstructed run-of-the-mill person sorrows, grieves, & laments, beats his breast, becomes distraught. So he feels two pains, physical & mental. Just as if they were to shoot a man with an arrow and, right afterward, were to shoot him with another one, so that he would feel the pains of two arrows (*Salllatha Sutta* [The Arrow] ).

# (Pain) x (Resistance) = Suffering

- Pain can be observed to be separate from "suffering"
- Apparently solid pain states are observed to be like frames in a movie, everchanging

# Pain is Inevitable, Suffering is Optional

- Suffering Includes:
  - Grimacing, wincing, bracing.
  - Aversive thoughts.
  - Wishes for relief.
  - Self-punitive thoughts.
  - Anger, fear, depression regarding condition.

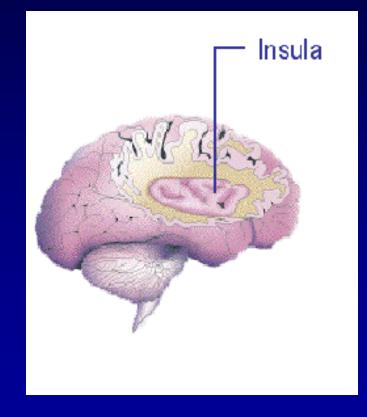
# Mindfulness for Experimentally Induced Pain

- Compared to novices, Experienced Meditators:
  - find pain less unpleasant
  - can observe pain less reactively
  - find that open monitoring reduces pain unpleasantness
  - have less anticipatory pain anxiety



#### Insula

- Associated with interoception
  - Visceral and "gut" feelings
  - Processes transient body sensations
- Activated during meditation practice



#### Prefrontal Cortex (PFC)

- Evaluates emotional responses and regulates emotion
  - "Yes, looks like a lion, but lions aren't found here, so it's probably a beige rock"

## Neurobiology of Mindfulness and Pain

- Meditators practicing mindfulness when exposed to pain:
  - had decreased activity in the lateral prefrontal cortex (IPFC) – evaluates sensation
  - had increased activation in the posterior insula – registers sensation

# Mindfulness & Cognitive Restructuring

# Seeing Thoughts as Thoughts

- Mindfulness increases cognitive flexibility
- Seeing role of beliefs in the problem
- Not pain sensations themselves, but our reactions that determine suffering

## Enhancing Metacognitive Awareness

- Notice prevalence of anxious thought and feeling
- Notice future-oriented catastrophizing
- Notice "budgeting" activity

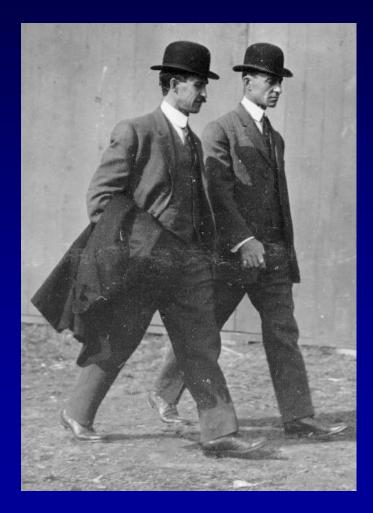
# Mindfulness & Resuming Normal Life

Attachment to Symptom Reduction Perpetuates Disorders



#### **Resuming Lost Activities**

- Exposure and response prevention central to treating kinesiophobia
- Resume activities often enough to be convinced that they are not damaging



### Increasing Symptom Tolerance

- Pain as object of awareness
- Bring attention to wider area if necessary



#### **To Receive Free Materials**

#### Send a blank email to:

# handouts@yahoo.com

#### Subject line: KOREA

# Mindfulness & Working with Negative Emotions

## Opening to Painful Emotions

- Not "my," but "the"
  - Sadness
  - Fear
  - Anger



#### **Other Pain Disorders**

#### Same 4 Steps

- 1. Medical Evaluation
- 2. Cognitive Restructuring
- 3. Resuming Normal Activity
- 4. Working with Negative Emotions



## Other Muscle Tension Disorders

- Dynamics very similar to chronic back pain
  - Headaches; TMJ; neck, knee, foot, wrist, shoulder pain
- Need to rule out treatable causes
  - Then follow same steps

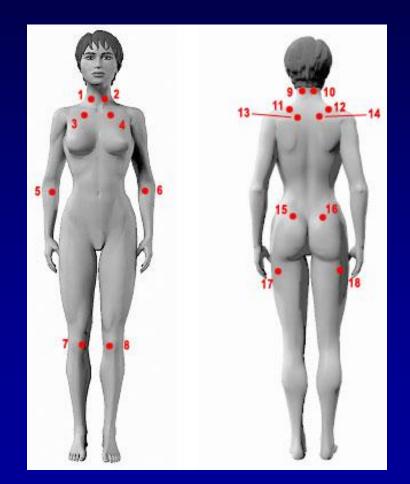
#### Hyperacusis

- Fear of discomfort amplifies sound
- Avoidance hypersensitizes hearing
- Mindful acceptance resolves disorder



## Fibromyalgia

...we are creating an illness rather than curing one."
-- Dr. Frederick Wolfe



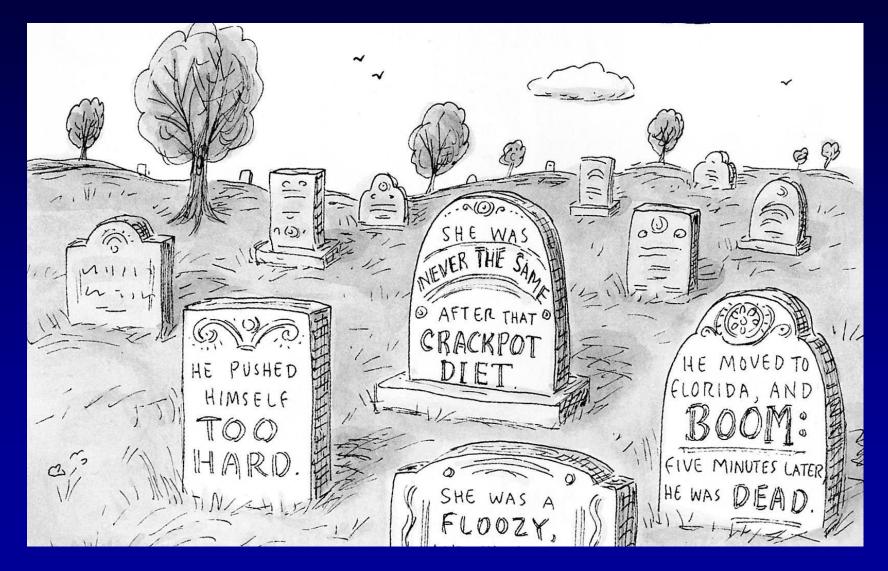
#### It's Probably Nothing



#### It's Probably Something Serious



#### New Age Guilt



#### **To Receive Free Materials**

#### Send a blank email to:

# handouts@yahoo.com

#### Subject line: KOREA

#### For back pain worksheets, visit: www.backsense.org

For recorded meditations, visit: www.mindfulness-solution.com

#### email:

rsiegel@hms.harvard.edu