

Early Intervention in Chronic Pain in Worker's Comp

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Learning Objectives

The attendee will gain an understanding of:

- The psychoneurobiology of chronic pain
- The psychoneurobiology of opioid use
- The components of Cognitive Behavioral Therapy (CBT)
- The psychoneurobiology mechanism of effect of CBT
- The evidence base for CBT
- Methods to identify patients that would benefit from CBT
- How to refer work comp patients for CBT

*For literature review and references please review the companion article:
Cognitive Behavioral Therapy for Chronic Pain: 2015 Update*

What is Chronic Pain and How can we COPE with Pain?

The important role brain and emotions play in chronic pain is well recognized in the psychological and medical literature.

Pain is both a sensation from an injury area as well as our emotional and brain response to the pain.

Pain is a deeply personal (subjective) experience; no one else can experience how your pain feels

Biopsychosocial Model of Chronic Pain

Neurobehavioral Effects of Opioids

The goal of CBT is to assist patients with chronic pain

- (#1) understand their pain,
- (#2) increase function by COPING with their pain, and
- (#3) re-wire their brain-pain pathways

**** CBT is used in tandem with the physicians' medical pain management therapies.**

The brain is constantly mediating a "decision" between reward processing or the avoidance of pain being valued as more important to survival.

CBT is used in tandem with the physicians' medical pain management therapies.

This is 'Good Brain'

This is 'Down Pain'

When the brain '**turns on**' the pain receptors for a long period of time (Chronic Pain)....

The brain '**smudges**' pain beyond the area of the original acute pain

The '**Pain Switch**' can get stuck in the '**ON**' position

This is 'Bad Brain'

When the brain '**turns on**' the pain receptors for a long period of time (Chronic Pain)....

It is natural to have negative, angry and fearful thoughts and feelings about pain

Our primal brain fight-flight or freeze SAR response triggers these thoughts and emotions, and if left turned on....

Has a significant and long lasting effect on our pain brain

We end up living in our emotional brain instead of our thinking brain

This is 'Bad Brain'

When the brain '**turns on**' the pain receptors for a long period of time (Chronic Pain)....

With acute pain, the anti-inflammatory system gets activated

When anti-inflammatory processes stay turned on, and with the combination of prolonged SAR processes, a "inflammatory soup" leads to central sensitization

Chemical and neural changes occur

- at the site of tissue injury in the body,
- at the nerve endings of pain fibers
- along their axons,
- at first-order synapses,
- both pre- and postsynaptically in the dorsal horn of the spinal cord
- and/or in supra-spinal pain-processing areas

This is 'Bad Brain' / 'Down Pain'

Long term opioid pain medications 'sedate' the thinking brain and 'reward' the emotional brain

Our emotional brain reward system becomes dependent on the drugs and leads to a drug '*craving*' that is associated as pain

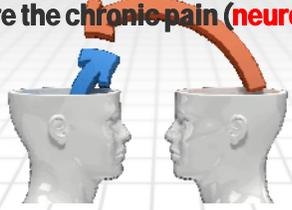
Taking dopamine reward medication paired with pain leads to paired association

"what fires together, gets wired together"

This is really 'Bad Brain'



Patients can learn **Cognitive** (*the way we think*) and **Behavioral** (*actions we take*) therapies to develop strategies to **COPE** with Pain and to re-train the brain back to the way it was before the chronic pain (**neuroplasticity**).



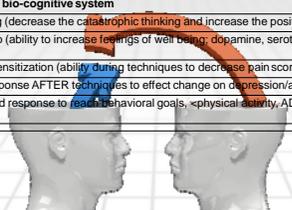
Cognitive Behavioral Therapy (CBT)

- ✓ CBT is brief and time-limited.
- ✓ A sound therapeutic relationship is necessary for effective therapy, but not the focus.
- ✓ CBT is a collaborative effort between therapist and client.
- ✓ CBT is based on stoic philosophy.
- ✓ CBT is structured and directive.
- ✓ CBT is based on an educational model.
- ✓ Homework is a central feature of CBT.

Cognitive Strategies

Cognitive Reframing: 'I can COPE with my Pain'

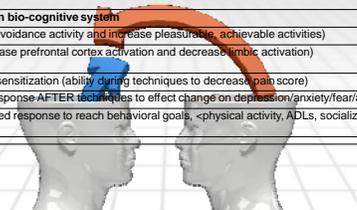
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|--|
| Outcome: effect on bio-cognitive system |
| Catastrophic thinking (decrease the catastrophic thinking and increase the positive thinking) |
| Psychoneuroimmuno (ability to increase feelings of well being; dopamine, serotonin, norepinephrine) |
| Somatosensory desensitization (ability during techniques to decrease pain score) |
| Mood (sustained response AFTER techniques to effect change on depression/anxiety/fear/anger) |
| Behavioral (sustained response to reach behavioral goals, <physical activity, ADLs, socialization, work) |



Cognitive Strategies

Problem Solving: 'What can I do to COPE with my Pain'

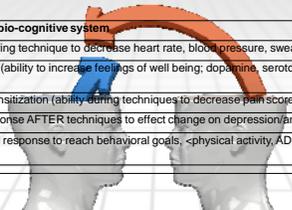
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| Outcome: effect on bio-cognitive system |
| Activity (decrease avoidance activity and increase pleasurable, achievable activities) |
| Psychoneuro (increase prefrontal cortex activation and decrease limbic activation) |
| Somatosensory desensitization (ability during techniques to decrease pain score) |
| Mood (sustained response AFTER techniques to effect change on depression/anxiety/fear/anger) |
| Behavioral (sustained response to reach behavioral goals, <physical activity, ADLs, socialization, work) |



Behavioral Strategies

Relaxation/SAR wind down: Progressive Muscle Relaxation, Autohypnosis, Mindfulness, Biofeedback, Guided Imagery

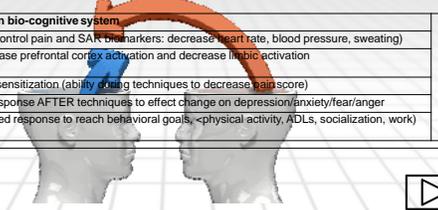
| |
|--|
| Outcome: effect on bio-cognitive system |
| Autonomic (ability during technique to decrease heart rate, blood pressure, sweating) |
| Psychoneuroimmuno (ability to increase feelings of well being; dopamine, serotonin, norepinephrine) |
| Somatosensory desensitization (ability during techniques to decrease pain score) |
| Mood (sustained response AFTER techniques to effect change on depression/anxiety/fear/anger) |
| Behavioral (sustained response to reach behavioral goals, <physical activity, ADLs, socialization, work) |



Behavioral Strategies

Activity Pacing: Graded Activity Pacing, Systematic Desensitization, Active Exercise, Stay at Work/Return to Work

| | |
|--|--|
| Outcome: effect on bio-cognitive system | |
| Autonomic (ability control pain and SAK biomarkers: decrease heart rate, blood pressure, sweating) | |
| Psychoneuro (increase prefrontal cortex activation and decrease limbic activation) | |
| Somatosensory desensitization (ability coping techniques to decrease pain score) | |
| Mood (sustained response AFTER techniques to effect change on depression/anxiety/fear/anger) | |
| Behavioral (sustained response to reach behavioral goals, ~physical activity, ADLs, socialization, work) | |



Identification of Patients for CBT Referral

- Inadequate or delayed recovery
 - Failed conservative care (guarding behavior, failed PT)
 - Subjective complaints outweigh objective findings
 - Medically Unexplained Symptoms (MUPS)
 - 'Chronic Pain, Generalized pain, Migrating' pain, Central sensitization pain
 - Lack of functional improvement
- Hx of Substance Abuse, Medication issues and / or drug problems and / or aberrant UDS; opioid / benzo use over expected durations
- Compliance issues with prescribed medical treatment
- Psychosocial / Psychiatric factors negatively impacting recovery
- Pre-surgical clearance for back surgery, pump, spinal stimulator
- PTSD overlay
- CRPS, Phantom Limb,
- Catastrophic injuries: SCI, TBI, Burns, Electric Shock
- Behavioral Issues: Insomnia, Obesity, Smoking

**For a patient with an established medical condition and who does not have frank psychopathology secondary to work injury:
Order "Health & Behavior" Assessment and Intervention instead of 'Psych Eval and Treatment'**

New codes established (2003 into CPT code book, 2009 into Medicare)
Psychiatric diagnosis and treatment codes are **NOT used**
The Physical Diagnosis is the working diagnosis

| CPT Code | Descriptor |
|----------|--|
| 96150 | Initial assessment to determine biological, psychological and social factors affecting health and any treatment problems |
| 96152 | The intervention service to modify the psychological, behavioral, cognitive and social factors affecting health and well-being |

Crucial Conversation with the Patient: What to 'label' the professional you are referring to

What name to use for the Cognitive Behavioral Therapy 'specialist':

- Health Psychologist
- Pain Psychologist
- Behavioral Medicine Specialist
- Rehab Psychologist
- Psychologist
- Addiction Specialist
- Counselor
- Mental Health Professional

Crucial Conversation with the Patient: Preamble

Pain is a complex phenomena that involves both your pain generator (which is what I treat), plus your personal response to the pain. That is what the specialist I am going to refer you to treats.

Additionally there can be risks and side effects to the medications you are on and these need to be managed collaboratively with this specialist

Crucial Conversation with the Patient: Reason for Referral

Delayed Recovery\MUPS: I am referring you to a *specialist* to assist you to COPE with your pain.

Chronic Pain: I am referring you to a *specialist* because your pain is going to be something that you learn to self manage, as 'curative' medical treatments are coming to an end.

Medication Issues: I am referring you to a *specialist* because the medications you are on can create a powerful dependency and affect the brain and behavior.

CRPS\Phantom Limb\Failed Back: I am referring you to a *specialist* because there are specific neurobehavioral treatments that can help with the severity of your pain (please refer early).

Mood Disorder, PTSD: I am referring you to a *specialist* because your injury (and/or your pre-existing condition) is presenting with (anxiety, depression) symptoms that are affecting your recovery from this injury

**Crucial Conversation with the Patient:
What the *Specialist* will do**

You and your *specialist* will discuss your medical and personal background, the injury / illness that led to the pain, and your current medical pain care. You will be asked to participate in a series of questionnaires that explore your response to your pain, how you and your family are coping with your pain, your stressors and supports, the effect on your mood, your lifestyle and your attitudes towards your recovery from your pain and your health care.

This specialist will assist you to:

- Learn behavioral techniques to control and offset pain. Maybe you have heard of some of these in the media: like biofeedback, mindfulness, hypnosis,
- Promote changes in the way to think about your pain,
- Coach you to increase your activity using techniques just like a sports coach might use,
- Help with lifestyle changes that may be impacting your pain.

**Crucial Conversation with the Patient:
Frequently Asked Questions**

"I don't know about going to a shrink. Do I have to tell them everything about my life?"

This referral is about your pain, and treatment for your pain. However, there may be some other areas of your life you talk about, but this specialist has privacy ethics that they will discuss with you to reassure you about your privacy.

"I am not an addict. I take my drugs as prescribed. Why do I need to see a shrink?"

You're right. Most people do not get addicted, but these are powerful drugs you have been on for a long time and we are learning more about the effects they have on everyone's brain, and I want you to develop other ways of coping with your pain as I wean you off.

"How long do I have to go to this type of treatment?"

This type of treatment typically involves 1 session per week for 4-12 weeks, as you will learn steps to COPE with pain, and generalize them to your daily life.

Integrated Medical Care

Attending Treating Physician

- Medical Treatment
- Orders for Pharmacotherapy, Physical Therapy

Treating Psychologist

- Cognitive Behavioral Therapy

Employer/TPA/InsCo

- Case Management
- Return to Work Coordination



Treatment

RTW Outcomes

| | Control Group | Intervention Group | |
|--------------------------------|------------------------------|--------------------|----------------|
| | High Risk and Very High Risk | High Risk | Very High Risk |
| Sample Size | 36 | 62 | 109 |
| % claims closed at 26 weeks | 33% | 76% | 62% |
| % working at 26 weeks | 17% | 68% | 39% |
| Avg claim duration at 26 weeks | 24 weeks | 18.7 weeks | 20.2 weeks |

Coupland, M., Margison, D. Early Intervention in Psychosocial Risk Factors for Chronic Pain, Musculoskeletal Disorders and Chronic Pain Conference, Feb 2011, Los Angeles, CA

Treatment

Outcomes @26 wks+

High Risk vs. Low Risk Psychosocial

- 9% Fewer Pt. get Physical Therapy
- 10% Fewer Pt. get Imaging Studies
- 13% Fewer Pt. get Injections
- 6% Fewer Pt. get Surgeries
- 5% More Pt. get Vocational Rehabilitation

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MMI / RTW under H&B codes

- ✓ Physical diagnosis is the ONLY compensable diagnosis
- ✓ Attending Medical Provider is solely responsible for work restrictions
- ✓ No MMI or Impairment Rating by Psychologist

