

Concussion - Pathway to Recovery Program

Session 4 - Patient guide

Concussion and head/neck pain

Session goal

- Understanding of the connection between the mind and pain
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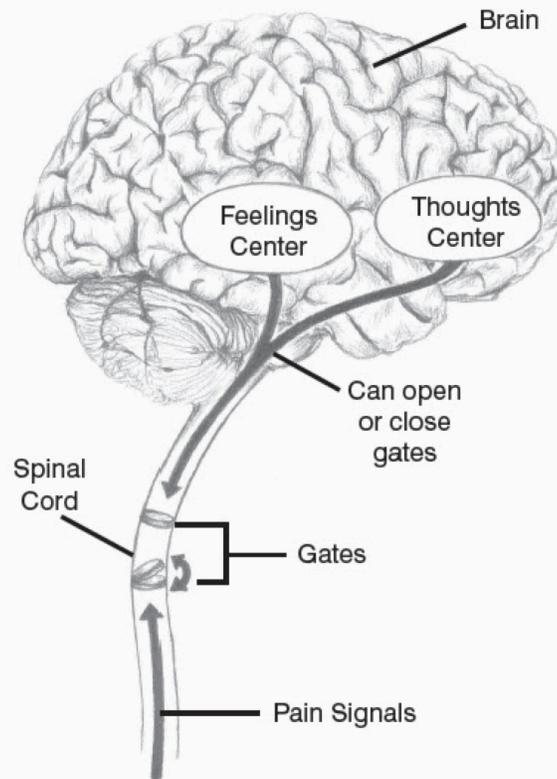
Learning more about the mind/body connection with pain

- For hundreds of years, it was thought that the amount of pain you experience is directly related to the extent of bodily injury or disease; that is, the more injury or tissue damage, the more pain you would experience. There are many examples proving that this is not true. Here is just one: two people with the same type of cancer, the same progression of disease, and the same life expectancy can be totally different in terms of the amount of pain and suffering they experience. This means that there is not a one-to-one correspondence between the amount of pain someone has and the extent of an injury or disease. We now know that the amount of pain you experience has to do with the type of activity taking place in the brain. The experience of pain, the amount we suffer from it, and how we cope with it all depend on what is going on in the brain— the same organ that sorts through thoughts and feelings, stores and retrieves memories, responds to stress, and translates all incoming information into meaning. A basic understanding of how the brain does this allows us to tap into the way the brain processes pain and to use the brain to our benefit. We now know that the brain itself can exert its own control over the experience of pain— it can turn up the volume on pain, and it can also turn down the volume.
- This is sometimes called the “gate control theory of pain.” When you hurt yourself— let’s say, stub your toe— pain signals from the hurt toe do get transmitted to the brain via nerves in the spinal cord. But the brain is not just a passive receiver of those pain signals. The brain itself has the ability to dampen down those pain signals or ramp them up. Two important areas of the brain that are involved in pain volume control are the “thoughts” center of the brain and the “emotions” center of the brain. Activity in these areas of the brain can change the actual experience of the pain— for better or worse. You might want to imagine pain signals as going through a type of gate in the spinal cord. The

CLIENT HANDOUT 1.4

The Brain and Pain

Use this handout to list things that could open the gate to more pain signals or close the gate to fewer pain signals. [Hint: Thoughts and emotions can be particularly strong “gate openers” or “gate closers.”]



List some things that can open the pain gate:

List some things that can close the pain gate:

gate is generally open to a certain level of pain signals, but activity in the brain (in the thoughts and emotions centers) can make that gate wider, letting in more pain signals, or it can narrow the gate, letting in fewer pain signals.

- We want to make that gate as small as possible when it comes to letting in pain signals! Based on what you’ve heard so far, what kinds of things do you think might make the gate wide— that is, let in more pain signals?

- Thoughts, such as “This pain is ruining my life,” “I can’t take it anymore”; negative emotions, such as depression, anger, anxiety].)
 - What kinds of things do you think might narrow the gate?
 - Certain thoughts, such as “there are things I can do to help myself manage my pain,” or “I am learning about other ways to cope with pain”; positive emotions, such as hope, caring, calmness].)
 - There are some things that could go on either side of the list: medication, surgery, physical activity, heat, or cold. For example, we might put pain medication in the “close the gate” category because it might help with our pain levels, but if you take too much over a long period of time, your body might get used to it and medication might “open the gate.”
 - Similarly, physical activity, if not overdone, can be a gate-closer, but overdoing it can open the gate. The point of knowing all this is that, with coaching and practice, we can use the power of our brain to quiet down the pain chatter.
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Self-statements for coping with pain

- **Targeting cognitive/thoughts to interfere with the pattern of TBI**
 - One way to interrupt the pain pattern is to create positive coping statements that we can use throughout the day as reminders to ourselves about the ways we do cope. These coping self-statements serve as the emotional “cheerleaders” in our coping toolbox. Coping self-statements can be pain-specific (meaning that they can be statements specifically about the pain level or our ability to deal with the pain), or they can be much more general (meaning that they can be statements about our ability to deal with emotions or stress, or about our self-concept in general). Can anyone think of a coping statement they already use?
- Coping cards
 - Write down 5 positive statements that you can transfer to a blank, colored 3” × 5” index cards.
- Examples of Pain-Related Coping Self-Statements
 - I am not my pain.
 - I have managed worse pain than this before.

- I won't let the pain ruin my life.
- I pause and am grateful today.
- I am learning ways to help me help myself.
- I am not alone. I am loved.
- Others care about me.
- The pain is only part of my larger life.
- I am learning to focus on what I can do instead of what I can't do.
- I am learning to love myself!

Homework

- Homework
 - Practice 1-2 self statements 2-3 times daily
 - Continue breathing exercises
 - Continue progressive relaxation exercises