

Concussion - Pathway to Recovery Program

Session 1 - Patient guide

Session goal

- What is concussion?
 - What is cognitive behavioral therapy, and how can brain training help me to improve after brain injury?
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What is concussion and traumatic brain injury?

- A concussion is a traumatic brain injury that affects your brain function. Effects are usually temporary but can include headaches and problems with concentration, memory, balance and coordination.
 - TBI's are a commonly seen diagnosis that vary in severity and are most commonly caused by falls or motor vehicle accident. Humans are naturally "top heavy" (meaning our heads are relatively heavy!), and as a result we are more anatomically prone to falls and head injuries.
 - While our brains may have a post-injury limitation as far as repairing or creating new brain cells, our brain has a way to work around this limitation. Our brains possess the ability to rewire routes of neuronal communication post-injury, bypassing broken connections and choosing new ones to do what is required to execute a thought, task, or action.
 - With most TBI's, most individuals recover in approximately 3 months, and further recovery and rehabilitation happens for months to years afterward.
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What are common misconceptions about TBI?

- *Mild TBI's are not debilitating.* This is entirely false! Mild TBIs can have pervasive and long-lasting symptoms. These symptoms can include but are not limited to headaches, dizziness, nausea, and mood changes.
- *Loss of consciousness is required for a TBI.* The belief that a period of loss of consciousness was often considered necessary to meet criteria for a TBI diagnosis but has since proven to be inaccurate. Mild TBI's should not be discounted in proper

rehabilitation and aftercare because it is considered a “less severe” diagnosis in comparison to more severe head injuries.

- *All people with TBI have the same symptoms.* While there are a few more commonly observed symptoms, TBI symptoms vary by individual and can be affected by the individual's physical state at the time of the accident, past incidence of head injury, and other factors.
- *Recovering from TBI is a straightforward, quick process.* Like many injuries, rehabilitation takes time and commitment in order to be successful. A treatment and rehabilitation plan that is tailored to the patient's symptoms and needs is key to seeing improvement or dissipation of symptoms. The majority of healing takes place within the first year after an accident, but some individuals continue living and managing symptoms for the remainder of their lives.

How the brain heals itself

- As discussed during session, our brain is capable of using its pliability and flexibility to adjust to your new state of health after your injury. TBI's do not manifest symptoms that we can see, but symptoms that the patient alone can feel. This can lead to an “it's all in my head” way of thinking or less recognition for the pain that you're living through. While we are aware that the amount of pain experienced is typically mediated in the brain, did you know that the brain can reduce or amplify the amount of pain that we are feeling?

What is cognitive therapy?

- We can teach the “brain to heal itself” after head injury
- There are important links between the brain, fatigue, pain, stress, memory loss and other postconcussional symptoms.
- We can use stress reduction techniques, mindfulness, and other CBT techniques to improve the way our brain recovers from head trauma.
- By learning how to change thoughts, emotions, and focus, we can improve concussion symptoms
- During the next 12 weeks we will:
 - Understand cognitive patterns affecting recovery from concussion

- Set specific goals
- Learn the following methods
 - Diaphragmatic breathing
 - Stress reduction and progressive relaxation
 - Mindfulness meditation
 - Fear avoidance
 - Examine unhelpful thoughts