

Quicksand: Sinking into Post-Concussive Syndrome

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Abstract

The more the athlete struggles, the deeper they feel they sink into the debilitating symptoms of sports-related concussion syndrome. This poster will present cases from the successful treatment of many athletes with post-concussive syndrome.

These patients are seen in the Concussion Clinic of The Division of Sports Medicine Clinic at Boston Children's Hospital.

These are not the athletes who have concussions that remit in 7-10 days. For reasons that are unknown, 5-10 percent of those who experience a concussion have symptoms that persist beyond the generally accepted time frame for recovery. Most athletes get referred to the sport psychologist if there is a scary (impulsive looking depression that ensues) or the patient and patient's family has become fatigued by a process that seems fruitless and has no end in sight.

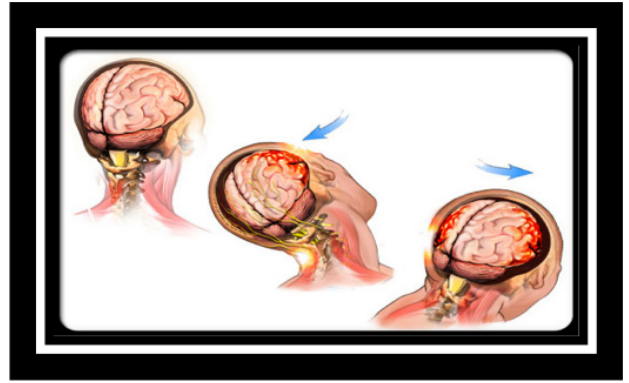
The sport psychologist enlisted to help needs to be grounded in psychological rehabilitation interventions for these symptoms and syndromes. The stresses of invisible injuries are presented and the role of worry about long-term health consequences will be explored as variables that can exacerbate symptoms.

The case example demonstrates effective interventions including CBT skills; supportive counseling; psycho-education; family counseling and acting as a liaison with coaches and schools. Mediating factors determining intervention efficacy include the number of concussions sustained, the time period between symptoms and the level of play of the athlete. Basic strategies utilizing cognitive behavioral therapy; relaxation training, and biofeedback will be introduced as therapeutic interventions to help athletes recover and tolerate the recovery time frame of their concussion symptoms.

What is a Concussion?

The slide illustrates how a blow to one side of the head throws your brain back toward the opposite side thus potentially causing damage to both sides of the brain. This leads to a concussion or closed brain injury that can cause mild or serious symptoms.

A concussion is defined as a blow to the head that results in disturbance of cerebral function. Concussions are the most common type of traumatic brain injury and can, in more severe injuries, cause permanent brain damage. The majority of concussions cause minor or no obvious lasting damage if the brain is allowed time to heal.



- Loss of consciousness
- Not remembering the blow to the head
- Dizziness
- Blurry vision
- Headache
- Nausea and/or vomiting
- Unclear thinking processes (confusion)
- Repeating phrases (for example asking, “What happened?” many times)

What is Post-Concussion Syndrome?

Post-concussion syndrome (PCS) is a complex disorder in which various symptoms — such as headaches and dizziness— last for weeks and sometimes months after the injury that caused the concussion.

Concussion is a mild traumatic brain injury, usually occurring after a blow to the head. Loss of consciousness is not required for a diagnosis of concussion or PCS. In fact, the risk of post-concussion syndrome doesn't appear to be associated with the severity of the initial injury.

In most people, PCS symptoms occur within the first 7-10 days and go away within three months, though they can persist for a year or more — with full resolution.

Clinical Objectives

1. You will gain a thorough understanding of the debilitating symptoms of post-concussion syndrome.
2. You will learn from case examples including young patients through adult patients; youth sports to professional.
3. You will gain access to helpful interventions for providing effective care to athletes presenting with post-concussive syndrome.

Case Example

“Ben”

- Issues with logging progress
- Obsessive tendencies prolong symptoms
- Invisible injury syndrome “My dad thinks I’m faking this”
- Loss of athletic identity
- Suicidal ideation
- Re-injury after water skiing
- Higher risk for PCS within two years of first syndrome
- Family dynamics and responses to and with anxiety/guilt
- When to push and when to support
- Develop Comeback plan/strategy
- Manage isolation and loss of peer support
- Missed 6 months of freshman year
- Symptoms took away student and athlete identity



How does a sport psychologist help the patient?

Mindfulness Techniques

- Visualization and guided imagery script for headaches and healing
- Use Deep Breathing (Long Deep Breathing App) 2x/day 3 minutes
- Practice appreciating the present moment- helps to tolerate losses and frustrations

CBT Techniques

- Reframing anxiety
- Target “Good Old Days Bias” (those with persistent symptoms tend to under-report normal/pre-injury symptom levels)
- Increasing tolerance for increased effort and activity (cognitive/physical/academic)
- Increase awareness of role of avoidance
- Re-attributing cognitive difficulties to causes rather than persisting direct effects of brain injury
- Focus on cog-B responses to symptoms rather than causes
- Rather than improving memory, improve confidence in memory

ImPACT Testing

The ImPACT Test **is**:

- One important piece of the overall concussion evaluation and management process.
- A sophisticated test of cognitive abilities
- The most scientifically researched concussion management tool
- A tool that can help health care professionals track recovery of cognitive processes following concussion
- A tool to help communicate post-concussion status to athletes, coaches, parents, clinicians
- A tool that helps health care professionals and educators make decisions about academic needs following concussion

The ImPACT Test **is not**:

- A “panacea” or cure-all for concussion, as there is no such thing. As long as contact to the head occurs, concussion will continue to happen
- A tool to diagnose concussion, which should always be diagnosed by a qualified health care provider
- A substitute for medical evaluation and treatment

Concussion Hype.... Helpful or Harmful?

PROs

- Education and dissemination of information leads to early intervention; better acute care; precise monitoring of individualized brain functioning; institution of baseline testing (ImPACT)
- Accommodations for work and school/ optimal rest leads to more complete recovery
- Attentive responsiveness to symptoms

CONs

- Consumed by worry and anxiety about long-term and short-term effects of damage to the brain
- Anxiety about symptoms can prolong recovery
- Too much rest can slow down recovery – fear of doing anything will lead to a set back

References

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