

Traumatic Brain Injury

The most common causes of traumatic brain injury (TBI) are falls, motor vehicle accidents, assaults/blows and explosive blasts (military). Severity ranges from “mild” - in which there is a brief change in mental state or consciousness, to “severe” - in which there is an extended period of unconsciousness or amnesia after the injury. Although not life threatening, the long term effects of even a “mild” TBI can be serious.

Common Symptoms Immediately After Injury

- ★ Being dazed, confused, or “seeing stars”
- ★ Not remembering the injury
- ★ Losing consciousness (knocked out)

All brain injuries are different and so is recovery. Most people with mild injuries recover fully, but it can take time. Some symptoms can last for days, weeks, or longer.

Common Symptoms Later On

Motor & Sensory Symptoms

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| ★ Headaches | ★ Fatigue | ★ Sleep disturbances |
| ★ Dizziness | ★ Seizures | ★ Hydrocephalus |
| ★ Pain | ★ Spasticity | |
| ★ Sensory deficits - Visual, Vestibular, Strength & Coordination | | |

Cognitive & Emotional Symptoms

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| ★ Irritability | ★ Impaired judgement | ★ Personality change |
| ★ Lability | ★ Slower thinking | ★ Substance abuse |
| ★ Disinhibition | ★ Physical aggression | ★ Depression |
| ★ Decreased concentration & focus | | |
| ★ Poor control over basic physical urges | | |
| ★ Impulsive/disruptive behavior | | |
| ★ No 'filter' on thoughts or actions | | |

Mild TBI, commonly known as concussion, is one of the most common neurologic disorders.

Early mild TBI symptoms may appear subtle, but they can lead to significant, life-long impairment in an individual's ability to function physically, cognitively, and emotionally.

Medical Evaluation

- ★ **Evaluate** and treat patients who present early for somatic complaints and document baseline neurological findings, including cognitive and emotional state
- ★ **Assess** the ability of the patient to return to everyday activities, such as sports, work, or operating motor vehicles

Treatment/Clinical Management

- ★ **Educate** patients and their families about the treatment plan, expected outcomes, and the importance of avoiding substances that can worsen symptoms such as alcohol, caffeine, diet and energy supplements, and some cold medications
- ★ **Prescribe** medication, as appropriate, for significant anxiety or depression - these patients are more vulnerable to side effects, so “**start low and go slow**”
- ★ **Avoid medications that can impair cognition, cause oversedation, or diminish neuronal recovery** such as benzodiazepines, anticholinergic and antidopaminergic agents

Physicians can improve patient outcomes when mild TBI is suspected or diagnosed by implementing early treatment. Refer patients, as appropriate, when physical, emotional or cognitive symptoms interfere with normal routines and relationships.

Resources:

Heads Up: Brain Injury in Your Practice
<http://www.cdc.gov/headsup/providers>

Defense and Veterans Brain Injury Center
<http://www.dvbic.org/cms.php?p=Education>