# What can cause emotional, behavioral, and cognitive problems after a Traumatic Brain Injury?



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How do we understand and treat the causes of emotional, behavioral, and cognitive problems resulting from Traumatic Brain Injury?

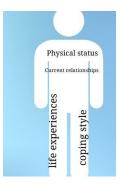
Evaluating the problems caused by brain injury can be complicated. For example, how can we tell the difference between cognitive impairments caused by brain injury, PTSD, depression, anxiety, pain, and medication side effects? What causes memory and attention problems after? What causes depression and irritability post-TBI?

Consider these potential causes and contributing factors to emotional, behavioral, and cognitive problems following traumatic brain injury:

- Brain damage from the impact.
- Bleeding in the brain.
- Increased pressure in the brain.
- Post-traumatic seizure disorder.
- Pain.
- Medication effects.
- Sleep disturbance.
- Impaired hearing, vision, balance.
- Post-traumatic stress disorder (PTSD.)
- Anxiety, depression, unconscious psychological issues (psychological reaction to trauma and impairments.)
- Depression caused directly by brain damage.
- Metabolic and hormonal abnormalities.
- Truthfulness of reporting.

These pre-injury factors should be considered:

- Age.
- Personality style.
- Developmental stage.
- Physical conditions.
- Mental health conditions.
- Physical health at the time of injury.
- Mental state at the time of injury.
- Use of alcohol and illicit substances.
- Emotional stressors.
- Financial stressors.
- Family and social support.



#### Evaluation of the above biological, psychological, and social factors may include:

- Lab tests to rule out anemia, low thyroid hormone, growth hormone deficiency, pituitary insufficiency.
- **Imaging (CT, MRI)** (e.g., rule out bleeding in the brain, diffuse axonal injury, white matter disturbance.)
- **EEG** to rule out post-traumatic seizures.
- Headache and other Pain evaluation.
- Vision, hearing, and balance evaluation.
- Sleep evaluation to rule out sleep disorder.
- Review of medications to rule out adverse effects and interactions.
- **Neuropsychological testing** to assess cognitive strengths and weaknesses, as well as truthfulness.
- **Psychological and Psychiatric evaluation** to assess for psychological reaction to injury, unconscious psychological reactions, and psychiatric conditions.
- Interviews with family, friends, co-workers, and employers.
- Case manager evaluation of brain injury survivor and family in the home.



#### The relative effects of the bio-psycho-social factors can vary greatly according to

1) the force of the impact and 2) the unique brain that is injured.

I believe that brain injury is best viewed from a biological, psychological, social perspective:

Injury occurs to a person with a particular physical status, particular life experiences and coping style, particular current relationships with individuals and organizations.

Every person is unique; so similar impacts may have dramatically different results.

The problems resulting from most concussions resolve in weeks or months after injury. But in some cases of (so-called) mild TBI, the resulting problems may be significant and long-lasting.

## Hopefully, our evaluation will take all these factors into account in carefully diagnosing and treating the causes of and contributors to a traumatic brain injury.

(Sir Charles Symonds c. 1937):

"Its not only the kind of injury that matters, but the kind of head."

### Also see:

Filtered **TBI literature searches** on topics concerning Traumatic Brain Injury evaluation and treatment.

Traumatic Brain Injury Psychiatry in San Diego

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