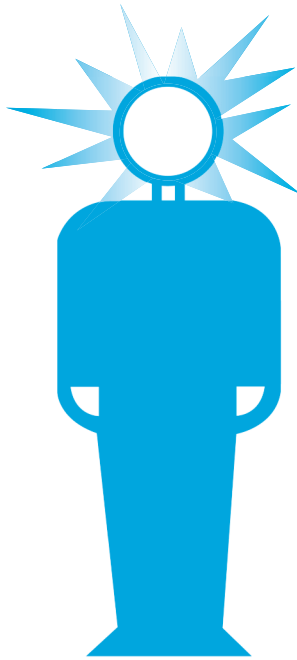


Traumatic Brain Injury & Dystonia

Traumatic brain injury (TBI) occurs when a sudden trauma damages to the brain. TBI can occur when the head suddenly and violently hits an object, or when an object pierces the skull and enters brain tissue. TBI is associated with various neurological symptoms, often including dystonia and other movement disorders.

Symptoms

- Symptoms of a TBI can be mild, moderate, or severe, depending on the extent of the damage to the brain.
- A person with a mild TBI, such as a concussion, may remain conscious or experience a loss of consciousness for a few seconds or minutes. Other symptoms of mild TBI include headache, confusion, lightheadedness, dizziness, blurred vision or tired eyes, ringing in the ears, bad taste in the mouth, fatigue or lethargy, a change in sleep patterns, behavioral or mood changes, and trouble with memory, concentration, attention, or thinking.
- A person with a moderate or severe TBI may show these same symptoms but may also have a headache that gets worse or does not go away, repeated vomiting or nausea, convulsions or seizures, an inability to awaken from sleep, dilation of one or both pupils of the eyes, slurred speech, weakness or numbness in the extremities, loss of coordination, and increased confusion, restlessness, or agitation.
- Some signs of TBI may not be immediately apparent following an injury. Symptoms of dystonia and other movement disorders may be delayed by several months or years after trauma.
- Dystonia symptoms following head trauma often affect the side of the body opposite to the side of the brain injured by the trauma. Dystonia causes muscles in the body to contract or spasm involuntarily, resulting in twisting, repetitive movements and sustained abnormal postures. Individuals who are affected by dystonia have difficulty controlling or predicting the movement of their bodies.
- Symptoms of dystonia associated with TBI may be chronic or occur in episodes. Dystonia symptoms associated with TBI may not respond to sensory tricks commonly used by individuals with dystonia and/or may persist during sleep.
- In addition to dystonia, individuals with TBI may experience symptoms of other movement disorders including parkinsonism, tremors, chorea, myoclonus, tics, and hemifacial or hemimasticatory spasm.
- Undiagnosed and untreated TBI is a significant problem among military service members, and especially veterans of the Iraq and Afghanistan wars. Veterans' advocates estimate that as many as one in five Iraq and Afghanistan veterans have experienced TBI.
- Although there is a documented connection between TBI and dystonia, a total number or percentage of individuals with TBI who develop dystonia is not known at this time. Increased awareness of the connection between dystonia and TBI is urgently needed.



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Diagnosis & Treatment

- TBI may involve physical, cognitive, and emotional injuries, so a multidisciplinary approach is often needed for diagnosis and treatment.
- Damage to the brain due to TBI will often manifest in brain lesions that can be observed by neuroimaging techniques.
- Treatment for dystonia and movement disorder symptoms may include oral medications, botulinum neurotoxin injections, neurological surgery, and/or rehabilitative therapy.
- Individuals with TBI are encouraged to seek treatment from a neurologist with training in treating brain injury. Movement disorder neurologists are typically trained to diagnose and treat various movement disorders, including those associated with injury to the brain and other parts of the nervous system.

Support

Individuals and families affected by TBI and dystonia are strongly encouraged to:

- Seek out the best medical care, including a multi-disciplinary team with experience treating traumatic brain injury and/or movement disorders.
- Learn as much as possible about TBI, dystonia, and treatment options.
- Use a multi-layered support system of support groups, online resources, friends, family, and mental health professionals, if needed.
- Investigate complementary therapies.
- Participate in the TBI and dystonia community.

MORE INFORMATION:



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