

A PEEK INSIDE A CLOSED HEAD INJURY CLAIM

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A PEEK INSIDE A CLOSED HEAD INJURY CLAIM

Closed head injuries occur when a sudden trauma (an event), such as a bump, blow or jolt to the head disrupts the normal function of the brain.¹ This can occur when one's head strikes the windshield or the dashboard during a car accident. However, head injuries can also materialize when the head is jolted with sufficient force for the brain to move within the skull. These types of injuries range from mild to severe.²

Mild traumatic brain injuries (MTBI) are defined to have occurred when a person exhibits the following as a result of an event:

- 1. Any period of loss of consciousness;
- 2. Any loss of memory for events immediately before or after the accident;
- 3. Any alteration in mental state at the time of the accident (i.e. feeling dazed, disoriented, or confused); and
- 4. Focal neurological deficits that may or may not be transient;

but where the severity of the injury does not exceed the following:

- 1. Loss of consciousness of approximately 30 minutes or less;
- 2. After 30 minutes, an initial Glasgow Coma Scale (GCS) of 13-15; and
- 3. Post-traumatic amnesia (PTA) not greater than 24 hours.³

This definition includes the head being struck, the head striking an object, and the brain undergoing an acceleration/deceleration movement, i.e. whiplash, without direct external trauma to the head.⁴ It, however, excludes stroke, anoxia, tumor, encephalitis, etc.⁵

Moderate traumatic brain injury is defined by a loss of consciousness lasting 20 minutes to six hours, and a GCS of 9 to 12. A severe traumatic brain injury results in a prolonged unconscious state or coma that may last days, weeks, or months and a GCS of 3 to 8. It is important to note that imaging studies for a MTBI often show no damage. Conversely, imaging studies of moderate and severe brain injuries often reveal some abnormalities. Also, some persons with severe traumatic brain injuries suffer from permanent physical, cognitive, or behavioral impairments to some degree.⁶

SYMPTOMATOLOGY

Once you determine that an event has occurred, you must evaluate the symptoms a person exhibits. These cases become problematic because symptoms of brain injury may or may not persist for varying lengths of time after the precipitating event. In order to be successful in a MTBI case, a Plaintiff must demonstrate that these cognitive deficits have actually and effectively decreased the person's ability to function in normal, everyday activities. Symptoms can be present alone or in combination and must have begun in the appropriate time frames, listed above, to qualify for diagnosis.

Symptoms generally fall into one of the following categories: (1) physical symptoms that cannot be accounted for by other causes, such as headaches, blurred vision, ringing in ears, fatigue, nausea, sleep disturbance, or pupil dilation; (2) cognitive deficits that cannot be completely accounted for by a person's emotional state or other causes, such as problems with memory, concentration, attention, perception, speech, and reasoning; and (3) behavioral changes that cannot be accounted for by psychological reaction to physical or emotional stress or other causes, such as irritability, quickness to anger, anxiety, social inappropriateness, and other emotional problems.⁸

To qualify as a MTBI, these symptoms cannot be due to the use of drugs, medications, alcohol, by other injuries, treatment of other injuries. MTBI symptoms usually occur in the immediate days following the event. They are usually resolved within three months to a year. They are usually resolved within three months to a year.

Additionally, there must be objective evidence of impairment of cognitive abilities as a result of cognitive assessments and neuropsychological testing. A person also must report three or more symptoms of MTBI lasting at least three months.¹¹ According to the International Classification of Diseases [ICD-10], a person must have a history of head trauma severe enough to result in a loss of consciousness.¹²

CRITICAL INFORMATION

Information critical to evaluating MTBI injuries and claims includes, but is not limited to:

- 1. Police reports;
- 2. Eyewitness statements and allegations of loss of consciousness from the accident;
- 3. EMS records;
- 4. Imaging Studies;
- 5. Emergency room records;
- 6. Pre and post-accident school and employment records;
- 7. All medical records; and
- 8. Raw test scores from neuropsychological evaluations.

Information such as police reports, eye witness statements and other information compiled by a government agency, except those portions exempt from public disclosure, may be retrieved prior to commencement of litigation through Freedom of Information Act requests. Other private and confidential employment, education, and medical records, protected from public disclosure, must be retrieved through discovery procedures or the use of records authorizations and releases. For example, The Ethical Code of the American Psychological Association, Ethical Standard allows for the release of test data, "raw and scaled scores, client-patient responses to test questions or stimuli and psychologist's notes and recording concerning the client-patient statements and behavior during examinations," by the psychologist, pursuant to a client/patient release, court order, or by law.¹³

One of the initial sources of information usually contained in EMS and medical records is the GCS. The GCS is a common scoring system used to gauge the severity of a perceived traumatic brain injury.¹⁴ It has been found to be a reliable and objective way of recording the initial and subsequent levels of consciousness in a person following a brain injury.¹⁵ The GCS measures the following functions:

Eye Opening

- 4 = spontaneous (open with blinking at baseline)
- 3 = to voice (command and speech)
- 2 = to pain (not applied to face)

• 1 = no response

Verbal Response

- 5 = normal conversation
- 4 = disoriented conversation (confused speech, but able to answer question)
- 3 = words, but no content (inappropriate words)
- 2 = no words, only sounds (incomprehensible speech)
- 1 = no response

Motor Response

- 6 = normal (obeys commands for movement)
- 5 = localized to pain (purposeful movement to painful stimuli)
- 4 = withdraws in response to pain
- 3 = decorticate posture (flexion in response to pain)
- 2 = decerebrate posturing (extension response to pain)
- $1 = \text{no response}^{16}$

Clinicians, first responders, and medical personnel use the scale to rate the best response in each category. The final score is the sum of the numbers from each section, between three and fifteen. Brain injury is then classified as follows:

- 3-8 = severe.
- 9-12 = moderate, and
- 13-15= mild (indication of MTBI)¹⁷

Factors that could result in inaccurate scores by altering a person's level of consciousness include drug use, alcohol intoxication, shock, or low blood oxygen. An adjuster must be sure to rule out such factors.

MULTPIPLE V. SINGULAR CONCUSSIVE EVENTS: NFL STUDY

In the National Football League (NFL), MTBI is a common injury sustained by professional football players.¹⁸ In an attempt to understand MTBI in the NFL, the NFL's Committee on Mild Traumatic Brain Injury supervised the collection of data of MTBI sustained by NFL players from 1996 to 2001.¹⁹ The study found that the most common initial symptoms for players who sustained concussions

were headaches, dizziness, memory problems, cognitive problems, and somatic complaints (no medical explanation).²⁰ Additionally, the majority of players suffering MTBI did not result in "prolonged disability or prolonged absence from play."²¹ Based on the study, 56.5% of players with concussions returned to play the same day of the injury, 97.1% returned to play within nine days, and 2.9% of players missed more than nine days before returning.²² Only 9.3% of players studied experienced a loss of consciousness (58 of 623 reported cases).²³

Even based on the above statistics, "recurrent injury caused by an increased vulnerability in the immediate postconcussion period does not seem to be a factor in professional football players." Overall, there was no evidence of increased severity in multiple compared to single MTBI cases, and the incidence of loss of consciousness at the time of MTBI was no different with successive concussions. However, new research suggests the possibility of chronic brain changes in some individuals who have had recurrent head injuries.

NEUROPSYCHOLOGICAL EVALUATION IN HEAD INJURY

WHAT IS CLINICAL NEUROPSYCHOLOGY?

- A. Subspecialty of psychology
- B. Scientific study of brain-behavior relationships
- C. Understanding the behavioral manifestations of brain dysfunction

GOALS OF CLINICAL NEUROPSYCHOLOGY

- A. To Establish:
 - 1. Diagnosis
 - a. Identify neuropsychological deficits
 - b. Understand the nature and extent of neuropsychological impairment
 - c. Differentiate neurological vs. psychological/functional impairment
 - 2. Prognosis
 - 3. Functional capability
 - 4. Treatment and rehabilitation plans

- B. Treatment and rehabilitation
 - 1. Neurocognitive rehabilitation
 - 2. Psychological intervention
 - 3. Multi-disciplinary collaboration
 - a. Neurology & Neurosurgery
 - b. Psychiatry
 - c. Speech therapy, PT, OT
 - d. Vocational rehabilitation

WHO IS A CLINICAL NEUROPSYCHOLOGIST?

- A. Doctoral-level psychologist
- B. Appropriate graduate training at an accredited university
- C. Two or more years of supervision
- D. Licensed to provide psychological services

BASIC ASSUMPTIONS IN NEUROPSYCHOLOGY

- A. The brain is the organ of behavior
- B. Brain function is complex
- C. Comprehensive and systematic assessment is needed

WHAT IS NEUROPSYCHOLOGICAL ASSESSMENT?

- A. Evaluate neurocognitive abilities
 - 1. Intelligence
 - 2. Academic skills
 - 3. Higher cognitive abilities
 - a. abstract reasoning and problem-solving
 - b. memory and learning
 - c. attention and concentration
 - d. language
 - e. visual-spatial function
 - 4. Sensorimotor abilities
- B. Evaluate psychological factors
 - 1. Current emotional status
 - 2. Past emotional function
 - 3. Psycho-social issues
- C. Determine relationship between neuropsychological, psychological, and neurological factors

ASSESSMENT APPROACH

- A. Cognitive Domain/Function approach
- B. Standardized test battery
- C. Established scientific and clinical validity

STANDARD BATTERY APPROACH

- A. Halstead-Reitan Neuropsychological Test Battery
- B. Allied procedures
 - 1. Wechsler Intelligence Scales
 - 2. Academic Tests
 - 3. Psychological Tests
 - 4. Clinical interview and record review

NEUROPSYCHOLOGICAL REPORT

- A. Historical information
- B. Intelligence and academic skills
- C. Neuropsychological function
- D. Diagnostic impression
- E. Implications and recommendations

KEY ASPECTS OF A NEUROPSYCHOLOGICAL REPORT

- A. Comprehensive testing of function
- B. Interpretation of test performance
- C. Integration of results
- D. Cohesive implications and recommendations

About The Authors:

Douglas D. Fletcher –Founding and Senior Partner, for over 20 years, Doug has successfully litigated over 145 trials to verdict in matters ranging from complex personal injury, transportation, product liability, premises liability, Dram Shop liability and many other matters involving serious exposure to the firm's corporate clients.

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ENDNOTES

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<sup>1</sup> Traumatic Brain Injury. Centers for Disease Control and Prevention. 6 Mar 2014. Web. 17 Mar 2014.
<sup>3</sup> Kay T, Harrington D, Adams R, et al. Definition of mild traumatic brain injury. J Head Trauma Rehabil 1993,
8(3), pgs. 86-87.
<sup>4</sup> Id.
<sup>5</sup> Id.
<sup>6</sup> Severe TBI Symptoms, Traumaticbraininjury.com, n.p., n.d., Web. 27 Mar 2014.
<sup>9</sup> Iverson & Lange, Examination of Post Concussion-Like Symptoms in a Health Sample. Applied Neuropsychology
2003, Vol. 10, No. 3, pgs. 137-144.
<sup>10</sup> Carroll (2004)
<sup>11</sup> Id.
^{12} Id.
<sup>13</sup> APA Ethics Code (2002).
<sup>14</sup> What Is the Glasgow Coma Scale?, Brainline. n.p., n.d., Web. 19 Mar. 2014.
<sup>15</sup> Id
<sup>16</sup> Id. <sup>17</sup> Id.
<sup>18</sup> Concussion in Professional Football: Summary of the Research Conducted by the National Football League's
Committee on Mild Traumatic Brain Injury. Neurosurg Focus, 2006, 21(4).
<sup>19</sup> Id.
<sup>20</sup> Id.
<sup>21</sup> Id.
<sup>22</sup> Id.
<sup>23</sup> Id.
<sup>24</sup> Id.
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²⁵ *Id*.