



Psychiatry & Behavioral Sciences

Section – 2007

I1 Multidisciplinary Session: Head and Brain Trauma

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After attending this presentation, attendees will have an understanding of different disciplines evaluate traumatic brain injury for the legal system.

This presentation will impact the forensic community and/or humanity by providing the bio-pathological, engineering, psychiatric, and legal aspects of traumatic brain injury cases.

Members from the psychiatry section will present information on the psychiatric component of subtle TBI cases. Dan Martell, MD will present the research on the psychiatric aspects of TBI. Questions he will address include: What does research show about a person who has a bump on the head, but no loss of consciousness? Is there any plausible way that such a person would have significant symptoms? William Bernet, MD, will discuss the principles for the forensic psychiatric evaluation of individuals who are describing emotional and cognitive symptoms following a head injury. Brief clinical vignettes will illustrate the three principles (thoroughness, moderate skepticism) and consideration of the differential diagnosis for the symptoms presented.

Laura L. Liptai, PhD, will present the Bio-Medical Engineer's unique role in head injury analysis, and will provide a wide variety of examples that illustrate the methods used to quantify the head/brain trauma sustained and calculate the statistical probability of injury. The Federal Standardized bases for this methodology will also be presented.

Mary E.S. Case, MD, Pathology/Biology, will discuss the forensic neuropathology issues in the area of traumatic brain injury at the level of concussion and mild diffuse axonal injury and present several cases illustrating these issues. Common forensic neuropathology issues include how to determine pathologically when loss of consciousness occurs in traumatic diffuse axonal injury, the pathological findings in common sports injuries and second impact syndrome, and how to detect and evaluate fictitious concussive head injury.

Elaine Whitfield Sharp, JD, will present a plain-English synopsis of the standards for the admissibility of scientific testimony in state and federal courts by explaining the principles of *Daubert* and *Frye*, and how these apply to testimony and to medical literature proffered as scientific in the area of TBI. For reference, a handout will include main holdings of the law of scientific evidence and will include a bibliography of books, treatises, and articles helpful in evaluating the scientific validity of medical and forensic literature.

Brain, Injury, Trauma