Book Introduction

From high school football to the NFL, from shaken baby syndrome to battlefield injury, head trauma with its consequence of brain injury has become a major concern for not only to the medical and legal professions but also to the public as a whole. Traumatic brain injury (TBI) is a serious health problem resulting in a substantial number of deaths and cases of permanent disability each year. The Centers for Disease Control and Prevention estimate that, on average, approximately 1.7 million individuals incur a TBI each year.

A TBI disrupts brain functioning and can result from a significant blow or jolt to the head or by a penetrating injury to the head such as from a bullet. Not all cases of head trauma, however, cause a TBI, the reason that this book is titled *Head Injury and Brain Trauma*. The severity of the consequences of head trauma may vary from “mild,” with a brief episode of confusion, to “severe,” i.e., an extended period of loss of consciousness or amnesia or significant neurological deficits from the trauma or intracranial bleeding. Fortunately, the majority of cases of head trauma result in only mild concussions.

*Head Trauma and Brain Injury* is the fourth in the *ABA Medical-Legal Guides* series. This book provides in-depth medical–legal information regarding injury to the brain, that critical control center for the entire body as well as the spinal cord and those structures surrounding these components of the central nervous system. The text is divided into five parts:

*Part One* provides basic medical and legal discussions of head trauma. Chapters in this section will include discussions of terminology, anatomy of the head and neck, the pathophysiology, and mechanism of head trauma such as skull fracture but excluding brain injury.

*Part Two* of the text addresses specific neurological consequences of head and neck trauma including the concepts of TBI, contusion, bleeding, *coup* versus *contrecoup* injury, shear and axonal injury, evaluation and treatment of head injury, concussion, and long-term consequences of brain injury such as paralysis, epilepsy, and chronic traumatic encephalopathy. Both adult and pediatric populations are discussed.

*Part Three* of the book focuses on neuropsychological evaluation and rehabilitation including vocational issues and return to work.

*Part Four* examines injuries and issues resulting from specific causes including athletics (e.g., football, soccer, boxing), military, workers compensation, and motor vehicle and bicycle accidents.

*Part Five* of the book presents head injury from both plaintiff and defense positions. The issue of disability claims will also be examined.
Throughout the book, examinations of the legal cases on the topic are offered along with various legislative and professional organizational initiatives on head trauma. We are pleased to have chapter contributions from recognized professionals of different disciplines, discussing the topics within their expertise.

Finally, we would like to note that this is a rapidly evolving topic in both the medical and legal realms. By the nature of these changes, some aspects discussed in the various chapters may be out of date at the time of publication of this book. However, the basic concepts discussed in these chapters will not change.

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