Traumatic Brain Injury: A Disease Process, Not an Event

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Abstract

Traumatic brain injury (TBI) is seen by the insurance industry and many health care providers as an "event." Once treated and provided with a brief period of rehabilitation, the perception exists that patients with a TBI require little further treatment and face no lasting effects on the central nervous system or other organ systems. In fact, TBI is a chronic disease process, one that fits the World Health Organization definition as having one or more of the following characteristics: it is permanent, caused by non-reversible pathological alterations, requires special training of the patient for rehabilitation, and/or may require a long period of observation, supervision, or care. TBI increases long-term mortality and reduces life expectancy. It is associated with increased incidences of seizures, sleep disorders, neurodegenerative diseases, neuroendocrine dysregulation, and psychiatric diseases, as well as non-neurological disorders such as sexual dysfunction, bladder and bowel incontinence, and systemic metabolic dysregulation that may arise and/or persist for months to years post-injury. The purpose of this article is to encourage the classification of TBI as the beginning of an ongoing, perhaps lifelong process, that impacts multiple organ systems and may be disease causative and accelerative. Our intent is not to discourage patients with TBI or their families and caregivers, but rather to emphasize that TBI should be managed as a chronic disease and defined as such by health care and insurance providers. Furthermore, if the chronic nature of TBI is recognized by government and private funding agencies, research can be directed at discovering therapies that may interrupt the disease processes months or even years after the initiating event.