

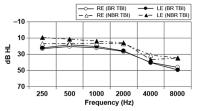
Posttraumatic stress disorder and posttraumatic stress disorder-like symptoms and mild traumatic brain injury

Jan E. Kennedy, PhD, et al.

We present current information about the development, course, and treatment of posttraumatic stress disorder (PTSD) and PTSD-like symptoms occurring in patients who have experienced mild traumatic brain injury (TBI) and concussion. Next, we describe areas of biological overlap between PTSD and TBI in addition to other mental disorders that often accompany PTSD and can occur following TBI. Finally, we present current treatments for PTSD, specifically for patients with mild TBI or concussive injuries. This topic is particularly relevant in the military environment.

Auditory dysfunction in traumatic brain injury

Henry L. Lew, MD, PhD, et al.



Effective communication is essential for successful rehabilitation, especially in patients with traumatic brain injury (TBI). This study examined the prevalence and charac-

teristics of hearing-related problems in patients with TBI who were admitted to a Department of Veterans Affairs TBI inpatient unit before and after the onset of Operation Iraqi Freedom (OIF). We found a high prevalence of hearing loss and tinnitus in this growing population of returning soldiers, which suggested that we need to develop and implement strategies for diagnosis and management of hearing loss and tinnitus in patients with TBI.

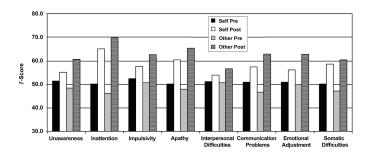
Visual function in patients of a polytrauma rehabilitation center: A descriptive study

Gregory L. Goodrich, PhD, et al.

We performed eye examinations on 50 polytrauma patients. Most patients complained of eye problems, including light sensitivity, blurred vision, or vision loss including blindness. Severe vision loss was most often found in patients whose injuries resulted from a blast (improvised explosive device, rocket propelled grenade, or other explosive). Vision loss was less likely to be caused by motor vehicle crashes, gunshot wounds, or falls. The results suggest that eye examinations should be part of the standard of care. Patients and families may benefit from discussing vision conditions with appropriate staff.

Awareness problems following moderate to severe traumatic brain injury: Prevalence, assessment methods, and injury correlates

Rodney D. Vanderploeg, PhD, et al.



Assessing and documenting problems in self-awareness following a traumatic brain injury are difficult. This study tested a methodology for assessing awareness of deficits. We demonstrated that several approaches can be used to assess awareness and that using both patient self-ratings and family member ratings on the Key Behaviors Change Inventory likely provides the best assessment. The results suggest that patients are generally good historians regarding their preinjury functioning but collateral sources provide valuable information during assessment of postinjury functioning.

A neuropsychiatric perspective on traumatic brain injury

Warren E. Lux, MD

This article is about what happens to the brain when a person has a closed-head traumatic brain injury (TBI). It covers mild injuries, which are called concussions, as

JRRD, Volume 44, Number 7, 2007

well as injuries that are more severe and describes the kinds of changes in thinking, emotions, and behavior that can result. A common feature of TBI is that it often affects an individual's ability to use a function in the real world as much or more than it affects the primary function itself. Also, we must remember that TBI needs to be understood as a condition that affects not just an individual but also the individual's interaction with all other persons and things in his or her environment. Thus, treatment needs to consider the environment as well. People who may benefit from reading this article include persons who have had closed-head injuries and their families, particularly if the person with the injury is having changes in thinking or behavior that seem difficult to understand or explain. This article will help them understand how the TBI can cause these changes.

Review of sports-related concussion: Potential for application in military settings

Henry L. Lew, MD, PhD, et al.

U.S. military service members are at risk for concussion not only from automobile accidents, falls, and explosive devices but also from participation in sports programs. The clinical features of concussion include dizziness, nausea, discoordination, visual disturbances, speech disturbances, headaches, and cognitive impairments such as confusion, slowed processing, and amnesia. Concussion grading scales, sideline evaluation tools, and cognitive testing help assess athletes with concussion. The recommendations in this review may be useful not only in military sports programs but also in other settings.

Motor impairment after severe traumatic brain injury: A longitudinal multicenter study

William C. Walker, MD; Treven C. Pickett, PsyD

The effects of traumatic brain injury (TBI) are of major importance to veterans. TBI is common during peacetime and is the signature injury of Operation Iraq Freedom. The Department of Veterans Affairs has four lead medical centers that provide specialized comprehensive inpatient TBI rehabilitation for veterans and active duty military personnel. We describe these patients with TBI and their neurological changes over time. Many patients had impaired walking balance during routine examination up to 2 years

after injury. This finding suggests that these patients need long-term medical follow-up for their physical problems in addition to their possible thinking and memory changes.

Objectively assessing balance deficits after TBI: Role of computerized posturography

Treven C. Pickett, PsyD, et al.



Balance problems are common after a severe traumatic brain injury (TBI), but the standard ways of measuring rehabilitation progress do not assess balance. Experts do not agree on the best way to objectively measure balance problems. Computerized

posturography provides a way to measure balance problems, but we need more information about using this technology with individuals with severe TBI. We used computerized posturography to assess balance in 21 participants with severe TBI who were admitted to a brain injury rehabilitation unit at a Defense and Veterans Brain Injury Center. Results show that computerized posturography was useful for assessing balance in this patient population and may help us decide which rehabilitation treatments will be most effective.

Using International Classification of Functioning, Disability and Health to understand challenges in community reintegration of injured veterans

Linda J. Resnik, PhD, PT, OCS; Susan M. Allen, PhD

This study was conducted to help us understand the challenges that Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) veterans face as they reintegrate into the community. Data were collected through interviews with veterans, caregivers, and clinicians. Numerous challenges faced by injured OEF/OIF veterans were described, and problems of veterans with and without polytraumatic injuries were compared. Identifying community reintegration challenges of OEF/OIF veterans early and promoting greater function in the community are important public health mandates. The findings of this study are useful in understanding the problems of these veterans and in guiding the development of community reintegration outcome measures.

JRRD at a Glance

Community-integrated brain injury rehabilitation: Treatment models and challenges for civilian, military, and veteran populations

Tina M. Trudel, PhD, et al.

Traumatic brain injury (TBI) is a major health problem among the military personnel, veterans, and civilians. TBI ranges from mild, without lasting problems, to severe, with need for extra treatment. Treatment may include rehabilitation services delivered in community-integrated settings. Research has shown that community-integrated rehabilitation may help military persons return to active duty, work roles, home, and family. We discuss four treatment models for community-integrated rehabilitation, review outcome measures and research, and describe program differences. The treatment model and pilot research of Virginia NeuroCare, a Defense and Veterans Brain Injury Center community reintegration program, are also discussed.

Military and VA telemedicine systems for patients with traumatic brain injury

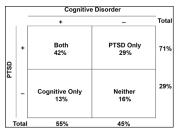
Philip Girard, MS



Current military operations place service members at increased risk of sustaining a traumatic brain injury (TBI). This article describes the technologies being used to improve access to healthcare in both the military and the Veterans Health Administration (VHA). Descriptions of traditional telemedicine services such as home telehealth and teleconsultation are presented along with newer concepts that are allowing distance identification, treatment, and rehabilitation of patients with TBI. Individuals with TBI will benefit from increased access to specialized care as the military and VHA continue to use technology to eliminate the distance between patients and providers.

Program development and defining characteristics of returning military in a VA Polytrauma Network Site

Henry L. Lew, MD, PhD, et al.



The conflicts in Iraq and Afghanistan have resulted in a new generation of combat survivors with complex physical injuries and emotional trauma. In this article, we describe the development of the Polytrauma Net-

work Site in Palo Alto, California, and the clinical characteristics of its first 62 patients. These patients had a high frequency of postconcussion symptoms, posttraumatic stress disorder, cognitive disorder, head and back pain, auditory and visual symptoms, and dizziness or balance problems. We hope that the lessons learned at this site will enhance the identification and treatment of veterans with multiple injuries across the country.