Helping patients move forward following traumatic brain injury

Although the potential negative consequences of TBI are many, positive patient outcomes can be achieved through careful interviewing and a combined treatment approach.

THE CASE
Declan M*, a 42-year-old man, presents as a new patient for general medical care. One year ago, he sustained a severe frontal traumatic brain injury (TBI) when he was hit by a car while crossing a street. He developed a subdural hematoma and was in a coma for 6 days. He also had fractured ribs and a fractured left foot. When he regained consciousness, he had posttraumatic amnesia. He also had executive function deficits and memory difficulties, so a guardian was appointed.

Mr. M no longer works as an auto mechanic, a career he once greatly enjoyed. Mr. M’s guardian reports that recently, Mr. M has lost interest in activities he’d previously enjoyed, is frequently irritable, has poor sleep, is socially isolated, and is spending increasing amounts of time at home. When his new primary care physician (PCP) enters the examining room, Mr. M is seated in a chair with his arms folded across his chest. He states that he is “fine” and just needs to “get a doctor.”

HOW WOULD YOU PROCEED WITH THIS PATIENT?
*This patient is an amalgam of patients for whom the author has provided care.

TBI ranges from mild to severe and can produce a number of profound effects that are a direct—or indirect—result of the physical injury. The location and the severity of the injury affect symptoms. Even mild TBI can cause impairment, and severe TBI can lead to broad cognitive, behavioral, and physical difficulties. As numbers of TBI cases increase globally, primary care providers need to recognize the symptoms and assess accordingly. The Acute Concussion Evaluation (ACE; Physician/Clinician Office Version) facilitates a structured evaluation for patients presenting with possible TBI symptoms. It can easily be accessed on the Centers for Disease Control and Prevention website.

Direct effects of TBI include impulsivity, depression, reduced frustration tolerance, reduced motivation, low awareness, and insomnia and other sleep difficulties. Depression may also result indirectly from, or be exacerbated by, new posttraumatic limitations and lifestyle changes as well as loss of career and community. Both direct and indirect depression often manifest as feelings of hopelessness and worthlessness and a lack of interest in once enjoyable activities. Depression can worsen other TBI sequelae such as difficulty concentrating, lack of initiation, flat affect, irritability, reduced independence, reduced...
Substance use disorders. The directionality of substance use disorders and TBI is not always clear; however, most evidence suggests that substance abuse is highly prevalent, premorbid, and often a contributing factor in TBI (e.g., car accidents). Alcohol abuse is the most common risk factor, followed by drug abuse. Substance abuse may be exacerbated after TBI when it becomes a coping mechanism under worsening stressors; additionally, executive function deficits or other neurologic problems may result in poor decision-making with regard to substance use. While substance abuse may decline in the immediate post-TBI period, it can return to pre-injury levels within a year.

Selecting serotonin reuptake inhibitors may help

Few studies have explored the efficacy of antidepressant medication in TBI survivors. In a controlled study of patients with TBI, Fann and colleagues found no significant improvement in depression symptoms between sertraline and a placebo. However, they did note some possibilities for this lack of significance: socially isolated TBI survivors in the placebo group may have demonstrated improvement in depression symptoms because of increased social interaction; members of both the sertraline and placebo groups had many psychosocial difficulties; and the study had a relatively small sample size. Worth noting: Subjects given sertraline did demonstrate improvement in information processing. Other research has found that sertraline improved both depression and quality of life for men with post-TBI depression. In a meta-analysis of 4 studies, Paraschakis and Katsanos found that sertraline demonstrated a “trend toward significance” in the treatment of depression among patients with TBI. Silverberg and Panenka argue that selective serotonin reuptake inhibitors should be used as first-line treatment for depression in survivors of TBI. They note that in non-randomized studies, treatment effects with antidepressants are significant. Additionally, patients who do not respond to the first antidepressant prescribed will often respond to adjunctive or different medications. Finally, they argue that

Additional TBI-associated health concerns

Grief and loss. We so often focus on death as the only cause for grief, but grief can occur for other types of loss, as well. Individuals with TBI often experience a radical negative change in self-concept after their injury, which is associated with feelings of grief. Helping patients recognize that they are grieving the loss of the person they once were can help set a framework for their experience.

Relationship loss. Many people with TBI lose close relationships. This can be due to life changes such as job loss, loss of function or ability to do previously enjoyed activities, or personality changes. These relationship losses can affect a person profoundly. Going forward, they may have difficulty trusting others, for example.

Existential issues. Many people with TBI also find that cognitive deficits prevent them from engaging in formerly meaningful work. For example, Mr. M lost his long-standing career as an auto mechanic and therefore part of his identity. Not being able to find purpose and meaning can be a strong contributor to coping difficulties in those with TBI.

Chronic pain. More than half of people with TBI experience chronic pain. Headaches are the most common pain condition among all TBI survivors.
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References