After a head injury, know when to get help

Call 911 after a head injury for danger signs such as repeated vomiting, a worsening headache that will not go away, a seizure, new weakness or difficulty waking the person.

Each year, millions of Americans suffer a traumatic brain injury (TBI). These injuries can occur when a bump, blow, or jolt to the head causes damage to the brain. More than half of these injuries are severe enough to require medical attention at a hospital. A mild traumatic brain injury is known as a concussion. More severe traumatic brain injuries can cause permanent neurological damage and even death. Motor vehicle accidents are one of the most common sources of traumatic brain injuries. Military personnel should also be aware of traumatic brain injury symptoms, as they are at risk when serving in combat zones.

Symptoms Of TBI

Traumatic brain injury symptoms can vary depending on the severity of the injury. In the case of a mild traumatic brain injury, signs might include a headache or neck pain, nausea, ringing in the ears, dizziness, and tiredness.

However, characteristics of traumatic brain injury that is more moderate or severe include:

- A headache that gets worse or doesn't go away
- Repeated nausea or vomiting
- Seizures or convulsions
- Inability to be awakened from sleep
- Slurred speech
- Numbness or weakness in the arms and legs
- Dilated pupils
- Loss of coordination

Anyone suffering a blow to the head should know that traumatic brain injury symptoms may not appear until days or weeks following their injury. In order to fully diagnose the condition of a patient who has suffered a head trauma, a healthcare professional will need to perform a neurological exam, which may include imaging tests, to assess the severity of a traumatic brain injury. Serious injuries require immediate emergency treatment. Outcomes depend on how severe the injury is and how quickly medical attention was administered. Patients with severe injuries may be prescribed traumatic brain injury medications along with rehabilitation therapies to help them recover.

What Are Some Complications Of A Traumatic Brain Injury?

If a patient has suffered from a traumatic brain injury, they may later develop high blood pressure, a low heart rate, pupil dilation or irregular breathing. Depending on the severity of the injury, treatment for these complications may include traumatic brain injury medications, rehabilitation or brain surgery.

Additional cognitive complications can include impairments of memory, learning, reasoning, or concentration; recovering patients may need rehabilitation therapy to relearn tasks such as problem-solving or decision-making.

Communication skills may require rehabilitation support as well. Some patients have trouble understanding speech or writing, or expressing their own thoughts and ideas. These communication-related characteristics of traumatic brain injury can also include difficulty taking turns in conversation, understanding the meaning of other people's changes in pitch, tone, or emphasis, or interpreting their nonverbal cues.

Different complications can also arise from repeated head injuries, rather than a single traumatic incident. Chronic traumatic encephalopathy is a progressive disease sometimes found in athletes and military veterans who have experienced head trauma. This condition can lead to memory loss, confusion, behavior or personality changes, motor impairment and cases of violence. Surgery, medication and physical and behavioral rehabilitation can be effective forms of treatment depending on the severity of each individual case.

What Does Recovery From A Traumatic Brain Injury Look Like?

The most common hospital setting is one that provides short-term acute care for patients with urgent medical issues — emergencies brought on by illness, violence, or an accident, such as a TBI. The immediate objective is to stabilize patients and help them recover as quickly as possible.

Some people need continued hospital care after a traumatic brain injury. Rehabilitation planning starts with the person's current level of awareness, movement, communication and safety needs.

Medical and rehabilitation staff assess the effects of traumatic brain injury on awareness, behavior, communication, swallowing, mobility and self-care. Family observations about function before the injury can guide goals.

Plans may include:

- Brain monitoring (onsite EEG and CT scanning)
- Onsite surgical removal of hardware
- Patient/family education regarding brain injury, stages of recovery, and the patient's specific care plan
- Special precautions to prevent deep vein thrombosis, stress ulcers, aspiration, infection, wounds, and falls
- An environment supporting neurological recovery
- Respiratory therapy, including ventilator weaning and tracheostomy management
- Cardiac monitoring, including telemetry
- Nutritional assessment and support
- Rehabilitation, including physical, occupational, and speech therapies
- Bowel and bladder training
- Professional caregiver referrals

TBIs often occur when there is an external injury from something like an accident or fall. Patients often need caregivers with expertise in rehabilitation and wound care in addition to neurological expertise.

Archived recovery account

This account describes care in an earlier setting. The course, timing and outcome belong to that individual.

Well on Her Way to Regaining Her Independence

The patient suffered a fall resulting in a traumatic brain injury. She was rushed to the hospital for emergency surgery, which involved the temporary removal of a portion of her skull to relieve the pressure building inside it from the injury.

The patient then faced a long road to recovery. Initial attempts to disconnect her from the ventilator supporting her lungs were unsuccessful, so she came to the treating hospital to begin her brain rehabilitation.

In addition to the delicate physical state she was in, the patient also suffered from an altered mental state from the fall, had developed pneumonia at the previous hospital, and was severely malnourished. Her care team at the treating hospital worked diligently with her, and soon she no longer required ventilator support or additional oxygen. Weaning from the ventilator allowed her to drink and eat a simple diet, which in turn helped her regain her strength. Before long, the patient was able to participate more actively in her physical and occupational therapy sessions.

When she left the treating hospital, she was well on her way to regaining her independence and taking care of her daily needs. The patient's family is at her side every day and provides valuable support and encouragement to her.

Resources:

https://medlineplus.gov/traumaticbraininjury.html

MedlinePlus offers related resources on the brain, spinal cord and nerves for families learning about changes in function after a traumatic injury. https://medlineplus.gov/brainandnerves.html

The National Institute of Neurological Disorders and Stroke explains traumatic brain injury and the range of effects a person may experience after an injury. https://www.ninds.nih.gov/health-information/disorders/traumatic-brain-injury-tbi

Talk with Lakeview

For questions about a possible stay, call Lakeview Admissions at (262) 534-8509. During a stay, ask the bedside nurse who can help with your question.

https://www.lakeviewsystem.com/brain-injury