Managing the Effects of TBI

An estimated 5.3 million Americans are living with a disability related to a traumatic brain injury (TBI), according to the Centers for Disease Control and Prevention.

The severity of TBI covers a wide spectrum. Mild injuries, often referred to as concussions, may be due to a blow to the head during sports or recreational activity and can cause a brief change in mental status. More severe injuries can be the result of rapid acceleration or deceleration of head movements in a high-speed motor vehicle accident or from a penetrating injury from a bullet or other weapon. Severe injuries often cause an extended period of unconsciousness and amnesia. TBI has the potential to lead to short- or long-term disability and suffering.

If someone you know has sustained a TBI, you should contact a physician, go to the emergency room or call 911. While it's fairly obvious that a person suffering from a severe brain injury needs to go to the hospital as soon as possible, people who suffer a mild brain injury are often sent home after a visit to the emergency room or following a discussion with a health care practitioner.

You may have been told it's dangerous to fall asleep after a concussion. While sleep isn't dangerous, it may mask the onset of signs suggestive of bleeding within the skull. During the 12 to 24 hours after a concussion, someone should stay with the person to monitor warning signs. You should also wake the person at 1- to 2-hour intervals after going to bed. Some signs of concern include:

- increased confusion and decreased responsiveness
- dilated or unequal pupil size
- onset of weakness or changes in sensation (numness or tingling)
- difficulty speaking
- vision changes, such as double vision or decreased eye movement
- nausea and vomiting
- severe headaches
- seizures or convulsions.

Other symptoms may include: dizziness or balance problems; lethargy or getting tired easily; ringing in the ears or changes in the ability to hear; difficulty with thinking, memory and attention span; and inappropriate emotional responses and irritability.

You should also take a break from mental or physical stress until symptoms resolve. And avoid alcohol. Though concussion symptoms usually resolve after several weeks, some people may continue to experience problems. Follow up with a health care provider if the following signs and symptoms appear:

- persistent headaches or neck pain
- difficulty remembering, concentrating or making decisions
- slow thinking, speaking, acting or reading
- getting lost or easily confused
- feeling tired or having no energy or motivation
- mood changes, such as sadness or anger for no reason
- irritability and having a low tolerance for frustration
- changes in sleep patterns, such as sleeping more or having a hard time sleeping
- light-headedness, dizziness or loss of balance
- increased sensitivity to lights, sounds or distractions
- blurred vision or eyes that tire easily
- losing a sense of smell or taste
- ringing in the ears.

Your health care provider can refer you to specialists who can determine the extent of the brain injury, provide therapy to maximize function and share other resources, such as support groups. Getting help soon after an injury by trained specialists can speed recovery.

How TBI affects you depends on the type and extent of the injury. Some patients recover completely; others have life-long effects.

The goal of rehab is to develop a treatment plan unique to a person's situation, needs and goals, and to regain as much independence as possible. Treatment options can include inpatient rehab for those with more severe disabilities or outpatient therapy for those less affected. Physical therapists work on mobility; occupational therapists assist with activities of daily living; and speech-language pathologists work on language, thinking and swallowing dysfunction. You can also use community re-entry programs, day programs, pain and headache management, neuropsychology services and support groups to help achieve maximal independence and symptom relief.

A traumatic brain injury can change your life. But arming yourself with knowledge and understanding can help you and your family cope better and adapt. ■

This Patient Handout was written by **Andrew Dennison, MD**. Dr. Dennison is a brain injury specialist at Walton Rehabilitation Health System in Augusta, Ga. He's board-certified in physical medicine and rehabilitation and fellowship-trained in brain injury.

NOTES

Your doctor or therapist has given you this patient handout to further explain or remind you about an issue related to your health. This handout is a general guide only. If you have specific questions, discuss them with your doctor or therapist.

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