

Concussions

Understanding the Most Common Traumatic Brain Injuries







The brain is surrounded by cerebrospinal fluid that usually protects it from impact. However, if there is a significant force applied to the head, or a rapid change in acceleration or deceleration, the brain tissue can stretch or tear, causing a traumatic brain injury, commonly referred to as a TBI.

Concussion = Traumatic Brain Injury

All concussions, whether they are mild, moderate, or severe, are traumatic brain injuries.

SOME CAUSES OF TRAUMATIC BRAIN INJURIES CAN INCLUDE:

- · Car or motorcycle accidents
- Falls
- Sports-related injuries
- Any activity that can cause trauma to the head, including blast-related injuries experienced by military personnel in combat zones

The most common causes of TBIs, regardless of age, are falls, being struck by or hit against an object, and motor vehicle accidents.

This kind of injury can happen to anyone. Although we oftentimes hear about athletes, specifically football, soccer and hockey players, who have suffered numerous concussions over the course of their athletic careers, traumatic brain injuries are the most common cause of disability in people under 45 years of age worldwide.

WHAT IS A CONCUSSION?

"Concussions result from a severe blow, jarring or trauma to the head," explains Dr. Alan Sherr, founder of the Northport Wellness Center, a holistic wellness facility based on Long Island. It "can be anything from a hit in the head to a sudden movement of the head, without a hit." This trauma may occur from a car accident or during a full-contact sport like football when two players collide.

IF YOU THINK
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SEEK MEDICAL
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19.5%
percent of U.S.
adolescents have
been diagnosed
with at least one
concussion

5 OF 10 concussions go unreported or undetected

In 2013, there were about 2.5 million emergency room visits, 282,000 hospitalizations, and 56,000 deaths related to traumatic brain injuries (TBIs) in the United States.

2.5 MILLION



WHAT ARE THE SYMPTOMS OF A CONCUSSION?

Symptoms associated with concussions oftentimes vary. "The nature of the symptoms of an individual sometimes are dependent on where the actual injury occurs, whether it occurs in the front, the side, the top, or the back," explains Dr. Sherr, adding that typically, the affected area's location plays a role in the injury's seriousness. "You get hit in the back or the side or the top—it's definitely more severe than if you get hit in the front."

Symptoms of a severe traumatic brain injury or concussion can include severe motor disturbances such as paralysis of the lower or even entire body—paraplegia or quadriplegia, respectively—as well as the inability to eat, swallow, or speak. Mild to moderate symptoms of a traumatic brain injury can include memory loss, blurred vision, trouble speaking, constant headaches, and other side effects, such as the inability to focus.

"All symptoms should be taken seriously and warrant immediate attention and treatment to promote a most efficient healing and recovery," says Dr. Sherr.

If you think that you have symptoms of a concussion, seek medical attention as soon as possible. Don't put it off or you risk worsening your condition.

WHAT ARE THE DIFFERENT TYPES OF CONCUSSIONS?

There are three different types of concussions, or traumatic brain injuries. Each one is categorized by its level of severity.

Here's a brief rundown:

1. Mild

Also referred to as grade 1, a mild concussion can produce headaches, nausea and a lack of balance. At this level, memory loss usually doesn't occur, but if it does, the symptom tends to last for about 15 to 30 minutes. Generally, a person with a mild concussion is initially confused about what just happened and has trouble regaining their focus.

2. Moderate

A moderate concussion, or grade 2, is more serious because the chances of incurring memory loss are greater and those episodes usually last longer—sometimes up to 24 hours. With this type of concussion, symptoms of a mild concussion like nausea, dizziness and blurred vision occur but they often tend to be stronger, causing much more discomfort and pain.



A severe concussion, or grade 3, has the most serious symptoms and side effects. Following the impact or cause of the concussion, loss of consciousness typically takes place, lasting several minutes, depending on the situation. Memory loss occurs, as well. Someone suffering from a severe concussion is unable to concentrate, cannot see clearly for long periods of time, and may experience constant headaches.



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HOW LONG DOES IT TAKE TO RECOVER FROM A CONCUSSION?

Typically, it can take anywhere from days to months to recover from a concussion.

Someone with an acute concussion, may see an improvement in his or her condition anywhere from "a day to two to three months," whereas someone with a chronic concussion may not see improvement until "two to three weeks" after their injury or longer.

There are other factors that play a role in healing from a concussion. Age is one example. Younger patients "tend to adapt faster," as opposed to elderly ones, Dr. Sherr explains.

Regardless of age, the sooner a concussion is treated, the sooner healing and recovery may begin.

Every person who is challenged by a concussion must seek professional assistance to assure their individual health needs are being met. The longer you wait to be seen by a professional, the longer it may take you to recover.

HOW DO YOU RECOVER FROM A CONCUSSION?

How you recover from a concussion and how long it takes depends on your symptoms, health history, the severity of your injury, and your health care treatment plan.

Have a health care professional develop a recovery plan that meets your individual needs.

As with any other medical condition or injury, every person's situation is different, which is why a facility that offers a comprehensive concussion recovery program that can be tailored to meet your individual needs is so important. Treatment can include physical therapy, chiropractic, and other services that can put you on the right path to recovery.

"There are a number of approaches that one would then take, depending on the nature of the how, the when, the why, and the where," says Dr. Sherr. "Let's say an individual who has a car accident and they hit their head on the windshield—that's going to be a little bit different than an individual who is playing soccer and does a header with a soccer ball."



Treatment opportunities for a concussion include:

- Neuro-visual regime of exercise and glasses
- Hyperbaric oxygen therapy (HBOT)
- Physical therapy
- · Cognitive therapy
- Chiropractic care
- · Dietary changes
- · Neurobiofeedback therapy
- Optometry/Vision therapy
- Diagnostic tools/testing

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CONCUSSION TREATMENTS

Concussions can be treated by a variety of different approaches depending on your unique case. "Individuals suffering from a concussion may experience symptoms unique to their injury," says Dr. Sherr, "and therefore must be treated with a customized recovery plan that could include treatment varying from chiropractic adjustments and acupuncture to stem cell therapy and hyperbaric oxygen therapy."

Following the initial evaluation and testing, additional recommendations could be made.

While you may have heard of some of these treatments, including chiropractic care and physical therapy, others, such as neurobiofeedback or hyperbaric oxygen therapy, may not be as well known. Still, they can be quite effective in treating concussions.

Neurobiofeedback may also "help patients who are struggling to regain their normal brain function," Dr. Sherr explains. This type of brain-training program aims to alleviate a person's symptoms in a safe and non-invasive way by correcting any irregular brain-wave activity. During a session, a licensed professional places special sensors on the patient's head, which are used to measure brain waves as he or she views a non-violent movie or TV show. This passive engagement compels the brain to regulate.

Ultimately, the brain "creates a regulated brain-wave pattern and those symptoms diminish," explains Christina Gravinese, a neurobiofeedback provider at the Northport Wellness Center. "So, in return, when your brain is fully functioning and producing an organized pattern, you'll have improved sleep and you'll have improved attention," she adds.

Hyperbaric oxygen therapy (HBOT) has also shown to be a significant help to those with concussion. Used as both a sole and complementary treatment, this natural therapy provides pure oxygen to a patient in a controlled environment. When pressurized oxygen is introduced into the bloodstream, it is transported to cells in the body tissue. From there, the oxygen is released, potentially accelerating the reparation of damaged neurological tissue, which could improve cognitive and/or physical impairments.

Dr. Sherr stresses how important of a role HBOT plays in concussion recovery and recommends this therapy to anyone who has recently suffered a head injury. In fact, he founded independent HBOT provider Hyperbaric Medical Solutions in 2011 to give patients access to this innovative healing therapy so they can lead the healthiest lives possible. While many patients seek treatment as a result of a head injury, others find themselves inquiring about HBOT for various reasons. Some include decompression sickness, diabetic foot ulcers, radiation tissue damage, failed skin grafts, chronic pain, and multiple sclerosis.

THE MORE YOU TAKE TIME FOR YOURSELF—EATING RIGHT, GETTING A LOT OF SLEEP AND FOLLOWING A COMPREHENSIVE CONCUSSION RECOVERY PLAN— THE BETTER YOU'LL FEEL.

CONCUSSION RECOVERY TIPS

Dr. Alan Sherr points out, "Concussions do not discriminate. Anyone—male or female, from babies to the elderly—can get a concussion. While playing extreme sports or ones that involve high impact or collision, such as football, may put individuals at a higher risk for traumatic brain injury, you do not need to be an athlete to be at risk for a concussion."

So whether you are tackled by a linebacker, slip and fall down the stairs, or get into a car accident, the possibility of suffering from a concussion exists. If you or a loved one are suffer from a concussion, it needs to be addressed immediately.

Here are some tips that can help lead you down the road of recovery:

Rest, and rest some more.

Taking care of yourself is key to recovering from a concussion. You want to speed up the recovery process rather than prolong it unnecessarily. This means getting lots of rest.

The more you take time for yourself—eating right, getting a lot of sleep and following a comprehensive concussion recovery plan—the better you'll feel.

Be proactive after you've recovered

"At the Northport Wellness Center, we believe in living a life free from pain and certainly without fear," says Dr. Sherr. "We do not recommend avoiding beloved sports and activities that may put you at risk for injury. However, we do encourage our patients and friends to be cautious where possible, wearing bike helmets, for example, and not being reckless."

Taking care of your body on the inside and out is the key to accomplishing not only recovery and healing from a concussion but to achieving optimal health, as well, Dr. Sherr says.

CAN A CONCUSSION HAVE LONG-TERM EFFECTS?

Although some may notice an improvement in their condition immediately or after several months, others may continue to suffer lingering effects for much longer. If symptoms last more than three months, this is defined as post-concussion syndrome (PCS).



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PCS SYMPTOMS OFTEN INCLUDE, BUT ARE NOT LIMITED TO:

- · Headaches or migraines
- Personality changes
- Depression
- Sleep troubles
- Memory issues
- · Sensitivity to light and/or sound
- · Difficulties focusing
- · Light-headed or dizziness

According to a 2012 report titled "Long Term Consequences: Effects on Normal Development Profile after Concussion," shared by the U.S. National Library of Medicine, there are a variety of long-term effects of concussions or PCS that could still be impacting people a year after their initial injury.

"At one year post-injury, the most common symptoms appear to be a combination of the physical, the psychosocial, and the cognitive, with reports of headaches, dizziness, disturbances of senses, light and noise sensitivity, and various psychiatric symptoms, including depression, anxiety, coping issues, and psychosocial disability," the report states, adding that some can experience complications for even longer.

One concussion treatment that could help those suffering the long-term effects of concussions or PCS is hyperbaric oxygen therapy (HBOT). Used both as a sole and complementary treatment, HBOT introduces pressurized oxygen into the bloodstream, which is then transported to cells in body tissues. From there, the oxygen is released, and aims to accelerate the reparation of damaged neurological tissue, which could improve cognitive and/or physical impairments.

Healing from a concussion does not typically occur overnight. It's important to remember that concussion recovery is a journey. You may encounter some ups and downs along the way—and that's okay, as long as you continue to mind your overall health, follow up with your trusted health care provider and address your concerns as they arise.

To learn more about the Northport Wellness Center, please call (631) 262-8505 or visit www.northportwellnesscenter.com.

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