

and ADHD

HEN TWO THINGS share similar characteristics, such as looking alike or sounding alike, it is reasonable to ask how they are related. Just because things appear to be similar does not necessarily mean they are. For example, two people may look very much alike, but that does not guarantee they are related. The key to determining if things are related is getting information about each one separately and comparing them. If two people who look alike share the last same name and home address, it's a good bet they are related. Similarly, an orange, lemon, and grapefruit look somewhat alike, are juicy, and need to be peeled to be eaten. They are related, but not identical. When comparing ADHD with concussion, it is important to understand the symptoms of each one individually. It is also important to understand what causes the symptoms, when the symptoms start, and what makes them better or worse over time to better determine if they are related.

Concussion is caused by a blow to the head, face, or body (you don't have to hit your head) that results in an immediate change in normal functioning. This can include feeling dazed, seeing stars, having problems focusing your eyes, feeling unsteady on your feet, having an upset stomach, being unable to think clearly, and generally experiencing confusion or disorientation (not remembering where you are or things like the score of the game).

These symptoms usually resolve quickly, but are often followed by headaches, problems with sleep, problems with balance, problems with concentration, sensitivity to bright lights and loud noises, and generally not feeling "normal." These delayed symptoms usually go away within seven to ten days, but some people will develop symptoms of longer duration, which can include feeling depressed, irritable, and finding it difficult to deal with stressful situations. These symptoms can last for weeks to months, and sometimes longer. This is called post-concussive syndrome or PCS. During the post-concussive period, some people experience difficulty in their ability to stay mentally focused and become forgetful. Other PCS symptoms include feeling jittery or nervous. Although people experiencing PCS report a large number of possible symptoms, over time the symptoms tend to improve gradually, without the need for medications.

ADHD emerges before early adolescence and generally runs in families. The symptoms include inattention, being easily distracted, having a difficult time staying on-task (especially when the task is not interesting to the person with ADHD), and having difficulty planning and completing life tasks. Some people with ADHD have a hard time sitting still and feel like their motor is running most of the time. They often have a hard time completing tasks like homework or tasks at work and at home, and very often are late for appointments. While in school, they tend to get lower grades than expected for their level of intelligence. The ADHD symptoms stay the same over time, unlike a headache which may last a few hours but goes away. For most people with ADHD, medications are helpful in treating their symptoms of distraction, inability to concentrate, and difficulty organizing their lives.

Although concussion and ADHD share some of the same symptoms, they are very different in what causes the symptoms. Concussion results from the brain being jolted around in the skull due to an outside impact, like falling or being hit. ADHD is a genetic disorder and affects how the brain develops and functions. Medications can help the ADHD brain be more efficient, but there are no approved medications to treat concussion symptoms yet.

Interestingly, people with ADHD are more likely to get a concussion compared to those without ADHD, and people who get concussions are more likely to have ADHD. No one is quite sure why this happens. It is more than just boys who cannot sit still as part of their ADHD. It might be related to way the brain works in ADHD and how it is affected after experiencing a concussion. As researchers learn more about what causes the symptoms in both ADHD and concussion, the link between the two will become clearer and may help in the discovery of new and better ways to treat them.

Our brains are like supercomputers. It is important to take good care of them. Any brain injury can worsen other problems with how a person thinks, feels, and behaves. •

David A. Baron, DO, is professor of clinical psychiatry and the behavioral sciences at the Keck School of Medicine, University of Southern California.