## **Concussion Care**

## **Brown Health Services Patient Education Series**

What is a concussion? A concussion is a temporary alteration in normal brain function usually due to a direct impact, jolt, or blow to the head. Common causes of concussion include high impact sports, car accidents, and falls. Most concussions improve with time and rest. There are no blood tests, x-rays, or brain scans that can definitively prove that you have had a concussion. The diagnosis of concussion comes from an assessment of the mechanism of injury and presenting symptoms. The effects of concussion rarely have long-term consequences or serious complications. Chronic traumatic encephalopathy (CTE) has gained public attention as a potential long-term consequence of repetitive head injuries. The exact cause of CTE is unknown and continues to be actively studied. If the symptoms of a concussion persist or if you develop new or worsening symptoms shortly after the injury, please speak to your healthcare provider.

**What to do:** If you are concerned that you may have had a concussion, we suggest that you visit with a healthcare professional or athletic trainer for an evaluation. If you have severe symptoms it is appropriate to contact EMS for evaluation or transport to a local emergency department. Varsity athletes at Brown are evaluated by an athletic trainer and will be removed from play if there are any concerns of a concussion.

What not to do: During the first 24-48 hours, you should not drink alcohol, drive or operate heavy machinery, exercise, or participate in heavy lifting or strenuous activity. "Brain rest" initially may help diminish symptoms, thus, we recommend limited academic work and screen time. You may need to sleep somewhat more than usual. If you have a headache you may take acetaminophen (*brand name Tylenol*), but should avoid the use of ibuprofen (*brand names Advil, Motrin*) until you are cleared to do so by a healthcare provider.

The steps to recovery: Most concussions improve within several days and are fully back to normal within 2 weeks. The most up-to-date recovery protocols encourage "active rehabilitation". Studies demonstrate more rapid healing with prompt reintroduction of mild exercise, cognitive (thinking) or academic work, and social interactions early in the recovery process. We recommend active rehabilitation after 1 to 3 days so long as there is some progress in your symptoms. Active rehabilitation includes light aerobic exercise. We suggest you start with 10 to 20 minutes of light exercise such as stretching and/or walking twice daily and advance time and intensity as tolerated. We also recommend that you reintroduce academic work in regular, brief intervals using your symptoms as a guide. If you may have "overdone it", simply rest, decrease your activities and then reintroduce activities as tolerated.

These trials of advancing your physical and cognitive activity will not cause brain damage even if symptoms increase temporarily.

**Confounding factor:**. The symptoms of concussion are indistinguishable from symptoms seen with anxiety or depression. Concussion itself may bring on anxiety or sadness, or exacerbate a previous history of anxiety or depression. Prolonged recovery or long-standing symptoms from concussion may be due to anxiety and/or depression, and will improve much more quickly when the rehabilitation approach includes a strong component of anxiety/depression treatment. Failing to treat underlying anxiety and depression will slow down recovery.

**Return to athletics and academics**: Your clinician and athletic trainer will work with you to monitor your symptoms and provide recommendations to you and the Student Support Deans about academic expectations, athletic participation, and special accommodations. Should your symptoms lead to significant impairment of function over time, you will likely be referred to the SEAS office to discuss long-term accommodations, the Student Support Dean's office to discuss possible alterations in classes and exams, a community-based sports medicine specialist, or a mental health specialist to ensure your long-term success and well-being.

## **Support contacts at Brown:**

Brown Health Services- 401-863-3953. https://www.brown.edu/campus-life/health/services/

**Brown Counseling and Psychological Services (CAPS)-** 401-863-3476.

https://www.brown.edu/campus-life/support/counseling-and-psychological-services/

**Brown Student Support Services-**401-863-3145.

https://www.brown.edu/offices/student-support/student-support-services

**Brown Student and Employee Accessibility Services (SEAS)-** 401-863-9588.

https://www.brown.edu/campus-life/support/accessibility-services/

Brown Emergency Medical Services (BEMS). 401-863-4111.

https://www.brown.edu/campus-life/health/ems/brown-student-emts