

Concussions:

Symptoms You May Experience And Why

1

VESTIBULAR

- **Difficulty reading:** Reading requires the eyes to move quickly across the page and jump from one edge to the other once you reach the end of a line. This utilizes the vestibular-ocular reflex that moves at quick frequency and is often slowed following concussion. This function can be re-trained with progressive exercises in therapy.
- **Sensitivity to busy environments:** This situation requires head-eye movement coordination at a fast pace and is often impaired following concussion. These mismatched signals can cause “information overload” for the brain and provoke symptoms. This function can be re-trained with progressive exercises in therapy. Understanding what environments are provocative will allow you to adjust your behaviors temporarily, giving the brain help with processing information.

2

OCULAR

- **Difficulty tracking objects:** The eye muscles are very close to the brain and, just like any injured muscle, can have delayed action or may fatigue easily after a concussion. This may cause slowed or increased effort required for watching moving objects. This function can be re-trained with exercises in therapy.
- **Double or blurred vision:** This can happen when the eyes go “out of focus” due to impaired muscle activity preventing the eyes from working together. This can be re-trained with exercises in therapy.

3

ANXIETY

- **Difficulty calming thoughts or experiencing increased worry or concern:** Chemical imbalances and delayed information processing in the brain can cause a sense of anxiety following concussion. This improves over time but exercises and planning techniques can reduce the emotional response to unpredictable changes and prevent the “panic button” from being pressed.

4

POST-TRAUMATIC MIGRAINES

- **Increase in Headaches, Nausea, and Sensitivity to light or noise:** Similar to anxiety and mood changes, imbalances in the brain following concussion do not allow the brain to recover as well with a history of migraine. Understand this will improve over time and have patience with yourself. Allowing “brain breaks” as needed will help prevent increased symptoms.

5

CERVICOGENIC HEADACHE & NECK PAIN

- **Stiffness and soreness:** Particularly following an impact injury or trauma, the neck muscles become tight and restrict motion causing stiffness and pain with neck movement. Manual treatment and re-training exercises can help reduce this pain and return function more quickly.
- **Neck-induced Headaches:** Muscle protective tension can cause compression on nerves around the head and neck causing headaches. This is most commonly noticed with prolonged sitting or desk postures and can be treated with manual treatment and re-training exercises.

6

COGNITIVE & FATIGUE

- **Difficulty concentrating or easily distracted:** The brain will fatigue more quickly following a concussion. This will prevent you from focusing on a challenging task for a long period of time. Taking “brain breaks” during the day initially, while the brain heals, will help from over fatigue and feeling distracted.
- **Poor retention of new information:** While the brain is healing, the storing of new information is impaired. This improves over time as the chemical and electrical signals return to regular function. Keeping a daily log, allowing a “brain break”, and re-training exercises in therapy can help this process.
- **Poor multi-tasking:** Both of the above impairments will prevent efficient multi-tasking because of fatigue and poor retention of information making it hard for the brain to “switch” focus between tasks. Re-training exercises in therapy and limiting to short bouts of multi-tasking can help avoid fatigue of the brain.

7

BPPV

(Benign Paroxysmal Positional Vertigo)

- **Vertigo and Dizziness with positional changes:** Particularly following an impact injury or trauma, you can have a sense of spinning due to crystals being loose in the balance center of the inner ear. This will be most noticeable with lying down, rolling over in bed, or with forward bending to pick up objects off the floor. This can be treated with manual maneuvers and prevention exercises.

It is important to know that you may experience one or many of these symptoms and your symptoms will present differently than others that have experienced a concussion injury. Be patient with yourself and take comfort in the fact that concussions are treatable, and with the correct treatment you can return to activities you enjoyed before your concussion.

To hear more about Vestibular and Exertion Physical Therapy and how it can help you, please visit our website at mobilizept.com. Checkout our Concussion Corner or look us up on Facebook or Instagram at Mobilize Physical Therapy for videos explaining examination and treatment for the above symptoms with Concussion.