Concussion

**Definition:** A concussion is actually an injury to the brain caused by a direct blow to the head. Conussions are graded in various methods according to the signs and symptoms presented.

**Common Terms:** The most common term used to describe this injury is a concussion. Secondary Impact Syndrome is also a term that relates to concussions. Secondary Impact Syndrome describes a timeframe of symptoms when a second concussion occurs before the first one has healed, and poses an increased risk for further brain injury.

**Typical Mechanism of Injury:** A direct impact to the head is by far the most common mechanism of encountering a concussion. It can be caused by a stable object like the floor or from an object in motion, like a baseball or hockey stick. Sporting activities, such as football and hockey, that involve greater levels of contact and collision will present with increased risk of concussion injuries.

**Common Signs and Symptoms:** Symptoms following a concussion can vary from person to person. Loss of consciousness, blurry vision, dizziness, confusion, nausea, vomiting, headache, change in emotion, trouble concentrating, memory loss, ringing in the ears, and a loss of balance can occur. Individuals with a concussion may have one or more of these symptoms, all are not required to be present. It is also important to recognize that individuals without a concussion might also present with some of these symptoms.

**Common Treatment:** With a concussion, symptoms are treated as they appear. A person should be removed from activity and receive a thorough assessment from a physician. Medical professionals will assist in determining when it is safe for a person to return to sport and/or activity. A person who has experienced a loss of consciousness as the result of a concussion should absolutely not return until cleared by a physician. Rehabilitation may involve both physical and cognitive exercises to prepare one for normalizing the brain’s methods of working.

**Prevention:** In some cases it might be difficult to fully prevent a concussion from occurring. However, wearing the proper protective equipment and making sure that it fits properly and using appropriate technique (such as keeping your head up in football tackling) can be effective. Prevention against second impact syndrome is critically important, and can be accomplished by recognizing the signs and symptoms of an original concussion as well as being compliant with return to play decisions that put safety first.

**Expectations:** Concussions are not taken lightly. These days, we have become much more knowledgeable in assessing and treating concussions. Most concussions will sideline a person for approximately one week, and more severe cases will take longer for a full recovery. Close communication and trust with your medical staff is the key to a safe return. Symptoms may last for unknown periods of times, and follow-up testing may be required and be useful in assisting one’s ability to safely return to sporting activity.