



The Return To Play (RTP) decision-making process after concussion is one of the most complicated in sports medicine. Despite ongoing research, the current assessment of concussion relies on clinical evaluations of symptoms, cognitive function, and balance. Of significance is our current understanding from the research literature that the signs and symptoms of concussion are dynamic, often non-specific, and evolve over time. Consequently, symptoms may not be present until hours or days following the initial blow(s). Cognitive function and balance are also commonly affected during concussion and these, along with symptoms, should return to baseline levels of function prior to return to contact play. The weight of clinical and empirical evidence suggests that the RTP decision-making process should be individualized, taking into account an athlete's history of injury, and prior concussion history including other modifiers (e.g. history of migraine headache, attention deficit hyperactivity disorder/learning disability, anxiety/depression history).

CONCUSSION DEFINED (CONCUSSION IN SPORT GROUP, 2013):

Concussion is a brain injury and is defined as a complex pathophysiological process affecting the brain, induced by biomechanical forces. Several common features that incorporate clinical, pathologic and biomechanical injury constructs that maybe utilized in defining the nature of a concussive head injury include:

- 1** Concussion may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an 'impulsive' force transmitted to the head.
- 2** Concussion typically results in the rapid onset of short-lived impairment of neurologic function that resolves spontaneously. However, in some cases, symptoms and signs may evolve over a number of minutes to hours.
- 3** Concussion may result in neuropathological changes, but the acute clinical symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies.
- 4** Concussion results in a graded set of clinical symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive symptoms typically follows a sequential course. However, it is important to note that in some cases, post-concussive symptoms may be prolonged.

EARLY SIGNS & SYMPTOMS OF CONCUSSION:

Cognitive features: unaware of game specifics (opposition colors, score of game, last play); confusion; amnesia (does not recall events prior to the hit or after the hit); alteration in consciousness; not oriented to time, place, or date; Slowed information processing speed; decreased attention and concentration.

Physical symptoms: Headache, dizziness, nausea, unsteadiness/loss of balance, feeling "dinged" or stunned or "dazed," seeing stars or flashing lights, ringing in the ears, and double vision.

Psychological symptoms: Depression, anxiety, anger, irritability, and difficulty controlling emotions.

Sleep Disturbance: Too much sleep, difficulty falling asleep or staying asleep.

BASELINE TESTING

All NEW players to development academy will be baseline tested with either a combination of the Standardized Concussion Assessment Tool 3 (SCAT3) and a computerized neurocognitive test such as ImpACT or similar program administered by a certified Athletic Trainer (ATC) or other team medical staff member once rostered to the team.

- It is recommended that baseline testing occurs every 2 years unless the athlete sustains a concussion
- If the athlete has a baseline within the last 2 years from their physician or other medical provider on file, permission to obtain that baseline should be secured.