



Combine  
Sports  
Medicine.

# GOAT NOTES

Combine Academy Sports Medicine Newsletter



## CONCUSSION NEWSLETTER

### Students and Parents,

Concussions can be serious and potentially life-threatening injury in sports. Research indicates that if concussion symptoms are managed properly, an individual is very unlikely to have a prolonged recovery or long-term issues. In effort to manage these relatively common injuries, a concussion management protocol/policy is enforced.

### Baseline Testing

All athletes are required to complete a computerized baseline test. Combine Academy uses a computerized test called ImPACT (Immediate Post-Concussion Assessment and Cognitive Testing) which is a concussion management tool that is used by more than 7,400 high school and 1,000 colleges and universities. ImPACT is delivered in a controlled environment and measures attention span, working memory, sustained and selective attention time, non-verbal problem solving and reaction time. ImPACT is not a diagnostic tool, but an essential component of the assessment of an athlete's injury.

ImPACT takes about 35 minutes to complete. ImPACT is administered to multiple test-takers at the same time, but each athlete is encouraged to keep space between one another, and they are not allowed any communication with each other or on cellular devices.

### Recognizing Concussions

A concussion has been defined as a "trauma-induced alteration in mental status that may or may not involve loss of consciousness". Concussions occur from forces applied directly or indirectly to the skull that result in the rapid acceleration and deceleration of the brain. Signs and symptoms vary from person to person, with some symptoms happening right away and some are delayed.

## Red Flag Symptoms

Unequal pupil size  
Loss of Consciousness  
Seizures  
Headache that gets worse  
Projectile vomiting  
Slurred speech, weakness, numbness

## Reported Concussion Symptoms

Headache  
Nausea  
Bothered by light or noise  
Just not "feeling right" or "feeling down"  
Feeling sluggish, hazy or foggy  
Confused

## Concussion Evaluation Testing

SCAT5 is a standardized tool for evaluating injured athletes for concussions. SCAT stands for Sport Concussion Assessment Tool and focuses on symptoms evaluation, cognitive assessment, balance assessment, and coordination examination. SCAT5 is a Standardized Assessment of Concussion (SAC) that takes about 5 minutes to evaluate orientation, immediate memory, concentration and delayed recall. The SCAT5 is a tool that is used immediately after the injury has occurred.

## After Diagnosing

After diagnosing an athlete with a concussion, it is important to keep essential personnel in the loop with the athlete's recovery. Athletes will be given a concussion take home sheet after being diagnosed with a concussion by their athletic trainer. This sheet will have full instructions on what to do. If the concussion is bad enough, they will be referred to our team physician for further evaluations.

## Return to Play Protocol

Once the athlete is symptom free for 24 hours, they will take a postinjury ImPACT which will be compared to their baseline by a certified athletic trainer. This ensures that exertion does not cause symptoms to return. If the athlete does not have recurring symptoms after taking ImPACT, they are able to progress to the next step. If at any point the athlete reports the return of symptoms, they will discontinue any type of exertion until they do not have any symptoms for 24 hours. The athlete will then resume return to play progression at the most recent stage that they successfully completed with zero symptoms. Below are the required steps to return to play:

Rehabilitation Stage	Functional Exercise	Object of Stage	Criteria to Advance
1. No activity	Complete Physical & Cognitive Patience (rest)	Recovery	No symptoms at rest; neurocognitive and physical tests normal
2. Light aerobic exercise	Walking, swimming, or stationary bike <70% MHR	Increase Heart Rate	No return of symptoms; stage lasts <b>2</b> days
3. Sport-specific exercise	Running drills, shooting drills, ect... NO head impact activities	Add movement	No return of symptoms; stage lasts <b>1</b> day
4. Non-contact training	Participate with practice w/o head impact activities	Facilitate normal atmosphere, exercise, coordination, cognitive load	No return of symptoms; stage lasts <b>1</b> day
5. Full-contact practice	Participate in practice with no restrictions	Restore confidence, assessment of functional skills	No return of symptoms
New ImPACT Baseline and Exertion Completion Signed by both Athlete and Certified Athletic Trainer			
6. Full return to play	Normal game play		

## Clearance from Concussion

Clearance from a concussion can only be done after an athlete is symptom free, goes through the return to play protocol and has an exertion completion form signed. Clearance form must be signed by Athlete, Athletic trainer and Physician.

## References:

- American Medical Society for Sports Medicine Position Statement: Concussion in Sport  
Kimberly G. Harmon, MD,<sup>1</sup> Jonathan Drezner, MD,<sup>1</sup> Matthew Gammons, MD,<sup>2</sup> Kevin Guskiewicz, ATC, PhD,<sup>3</sup> Mark Halstead, MD,<sup>4</sup> Stan Herring, MD,<sup>1</sup> Jeff Kutcher, MD,<sup>5</sup> Andrea Pana, MD,<sup>6</sup> Margot Putukian, MD,<sup>7</sup> and William Roberts, MD<sup>8</sup> (Clin J Sport Med 2013;23:1 – 18)

- <http://wspahn.camel.ntupes.edu.tw/ezcatfiles/t063/download/attdown/0/ACSM%20Position%20Stand%20Concussion%20CJSM%202013%20Harmon.pdf>

## Director of Athletic Training



Andres earned his Bachelor's Degree from Nova Southeastern University and majored in Athletic Training. He is a member of the NATA and previously held a licensure as a Paramedic Firefighter. Andres is the father of two daughters, and husband to Mrs. Gutierrez, a pediatric ICU nurse. Mr. Gutierrez also has an immense amount of rehabilitation and physiotherapy experience, utilizing some of the most cutting edge science and athletic training practices with several NBA, NFL, MLS, and MLB professional clients.



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