

WHO SHOULD BE SEEN?

We gladly treat athletes ages 10 to 30 and provide concussion management for a safe return back to the playing field and the classroom.

We will provide educational programs for coaches, athletes, parents and allied health professionals.

WHAT TO EXPECT DURING A VISIT?

Initial Evaluation ~ 50 minutes

- Detailed History
- Neurocognitive Testing: ImPACT
- Physical Examination
- Vestibulo-ocular Evaluation
- Individual Treatment Plan

OUR STAFF

Our providers are familiar with the current literature and have been treating sport-related concussion for over the past 20 years.

Our rehabilitation staff understands the demanded placed on an athlete and their competitive attitude. Throughout the management of the injury, we provide physical therapy and vestibulo-ocular therapy.

We also have a rapport with local health professionals, neuropsychology and speech pathology, to create a team of experts to help manage and treat your concussion.



MEET THE STAFF

Carl W. Nissen, MD
Orthopaedic Surgeon

Leanne Klepacki, PT
Physical Therapist

Matthew Milewski, MD
Orthopaedic Surgeon

Tricia Prokop, PT
Physical Therapist

Dave Wang, MD
Sports Medicine Physician

Danielle Suprenant, PT
Physical Therapist

Imran Hafeez, MD
Sports Medicine Physician

Nicholas Giampetruzzi, PT
Physical Therapist

AJ Ricciuti, PA, ATC
Physician's Assistant

Arthur Fredericks, PT
Physical Therapist

Kevin Fitzsimmons, MHS, PA-C
Physician's Assistant

Catherine McManus, PT
Physical Therapist

Regina Kostyun, ATC, MSED
*Athletic Trainer,
Concussion Program Coordinator*

Matthew Weston, PT
Physical Therapist

Kyle Kostyun, ATC, MS
*Athletic Trainer and Director of Transitional
Therapy Program*

Pam Rosow, RD
Sports Nutritionist

Our staff is here to help you.

Please call **860.284.0220**
to schedule an appointment.

WWW.ELITESPORTSMEDICINE.ORG

Connecticut Children's Medical Center is a nationally recognized, 187-bed not-for-profit children's hospital serving as the primary teaching hospital for the Department of Pediatrics at the University of Connecticut School of Medicine. Named among the best in the nation for two of its pediatric specialties in the annual *U.S. News & World Report* "Best Children's Hospitals" rankings, Connecticut Children's is the only free-standing children's hospital in Connecticut that offers comprehensive, world-class health care to children. Our pediatric services are available at Connecticut Children's Medical Center in Hartford and at Saint Mary's Hospital in Waterbury, with neonatal intensive care units at Hartford Hospital and the University of Connecticut Health Center, along with a state-of-the-art ambulatory surgery center, five specialty care centers and 11 other locations across the state. Connecticut Children's has a medical staff of nearly 1,100 practicing in more than 30 specialties.

For more information, visit

WWW.CONNECTICUTCHILDRENS.ORG

ELITE⁺ SPORTS MEDICINE

Connecticut Children's Medical Center

282 Washington Street, Hartford, CT 06106

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SPORTS-RELATED CONCUSSION PROGRAM

Getting you back in the game!



ELITE⁺ SPORTS MEDICINE

Connecticut Children's Medical Center

WHAT IS A CONCUSSION?

Concussion: a jarring injury of the brain

A concussion is a functional injury to the brain resulting from a traumatic hit to the head, face, neck or a blow to the body that delivers an impulsive force to the head (i.e. whiplash). A concussion injury occurs at the cellular level. After a hit occurs, calcium, which is located outside of the cell floods into the cell triggering an increased need for glucose from brain. Glucose is required for energy production which in turn is needed to allow healing to take place. In contrast, Potassium leaks out of the cell resulting in a surge of events that ultimately end in vaso-constriction, meaning a decrease in the normal amount of blood that is delivered to the brain. This neuro-metabolic cascade that is occurring within the cells of the brain is simply an energy crisis: the brain is demanding glucose to heal from the injury and the body is not supplying the blood that carries the glucose.

MANAGEMENT OF SPORT-RELATED CONCUSSION

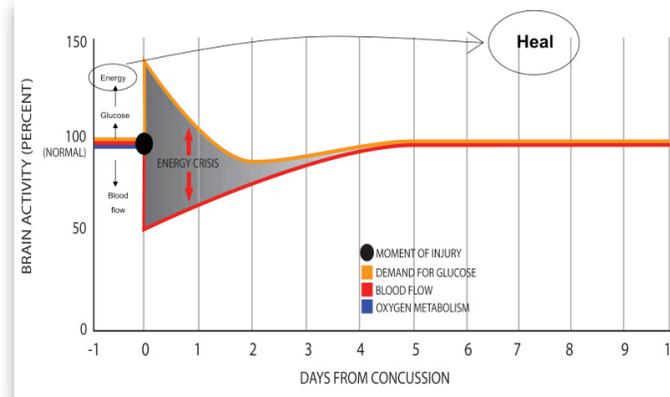
Recognize that a concussion has occurred. Be attentive and ask questions about how an athlete feels after they take a hit and blow. If they report signs or symptoms after a hit that were not present prior to the hit, a concussion has occurred.

Remove the athlete immediately from practice or competition. It is very dangerous to allow an athlete with symptoms to sustain another hit or blow.

Refer the athlete for medical care. It is critical that proper medical attention be given to an athlete with a concussion immediately to ensure the correct treatment is executed.

Rest, both physical and cognitive, is the only treatment for concussions. Again, a concussion is a functional injury and for the brain to heal properly any exertion that causes symptoms must be avoided.

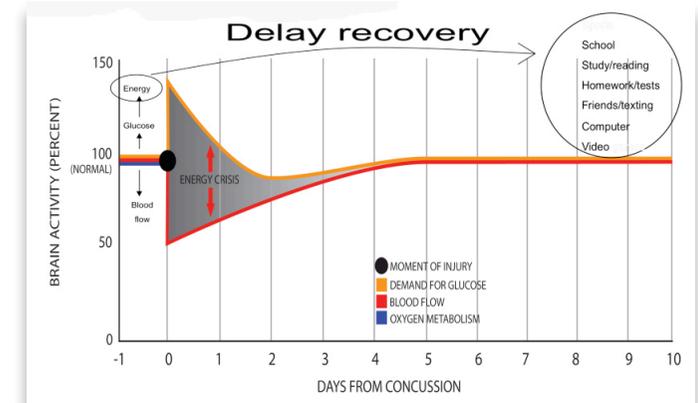
Athletes should be able to tolerate all cognitive activities prior to returning to the athletic field. Evaluation of cognitive function includes ability to



handle full school days without symptoms, athlete is receiving normal grades on tests and quizzes, work is completed in reasonable amount of time and neurocognitive testing is normal or back to baseline. Following normal cognitive function, a graded return back to physical activity is required.

Return to exertion

- Non-pounding aerobic activity
- Pounding aerobic activity
- Sport-related skills and drills or conditioning
- Full participation in practice
- Return to competition



MYTHS ABOUT CONCUSSIONS

Loss of consciousness must occur for an athlete to have a concussion.

False: Loss of consciousness is relatively uncommon and reported to occur in only 5-11% of adolescent sport-related concussions. The most commonly reported signs and symptoms are: *Headache, Feeling slowed down, "Fogginess", Difficulty concentrating, Nausea, Sensitivity to light, Fatigue, Sensitivity to noise Dizziness, Balance problems*

MRI and CT scan are negative and therefore the athlete does not have a concussion.

False: A concussion is a functional injury, not a structural injury. MRI and CT scan will detect if a skull fracture or bleed has occurred, but they currently are not sensitive enough to detect the cellular dysfunction.

Adolescent and adult recovery times from a concussion are the same.

False: The brain continues to develop roughly up to the age of 22. During this developmental time, the brain is less resilient to the forces of a concussion. The typical time frame for recovery from a concussion is 7 to 10 days, but it is common for adolescents to take longer.

If I wear a "concussion" helmet, headband or mouth guard I will be protected from sustaining a concussion

False: Unfortunately there is no helmet, headband or any other type of protective equipment that can eliminate the chance of a concussion. The best prevention is to wear properly fitted equipment, avoid dangerous playing styles and immediately report if a concussion has occurred.