Athlete

- A Novel Bilateral Data Fusion Approach for EMG-Driven Deep Learning in Post-Stroke Paretic Gesture Recognition
- Return-to-Sport Recommendations for Athletes With Congenital Cervical Spine Pathology: A Modified Delphi Consensus Survey of Expert Opinion
- Return-to-Sport Recommendations for Athletes With Cervical Spine Trauma: A Modified Delphi Consensus Survey of Expert Opinion
- The CAIDE dementia risk score indicates elevated cognitive risk in late adulthood: a structural and functional neuroimaging study
- Effect of Obese Body Mass Index on Clinical Outcomes and Inflammatory Blood Biomarkers following Sport-Related Concussion in Collegiate Athletes and Military Cadets: Findings from the NCAA-DoD CARE Consortium
- Dynamic behavior of the nucleus pulposus within the intervertebral disc loading: a systematic review and meta-analysis exploring the concept of dynamic disc model
- SankeyNetwork: A clear and concise visualization tool for bibliometric data
- In Reply: Does Mechanism of Injury Affect Recovery After Sport-Related Concussion in Basketball? A Pilot Study

Sports Concussion Assessment Tool 5 (SCAT5) is a standardized concussion assessment, available as a pdf or online , used by healthcare providers when a concussion is suspected in athletes ages 12 and older.

Neck pain in a concussion population is an emerging area of study that has been shown to have a negative influence on recovery. This effect has not yet been studied in collegiate athletes.

Hypothesis: New or worsened neck pain is common after a concussion (>30%), negatively influences recovery, and is associated with patient sex and level of contact in sport.

Study design: Cohort study; Level of evidence, 2.

Methods: Varsity-level athletes from 29 National Collegiate Athletic Association member institutions as well as nonvarsity sport athletes at military service academies were eligible for enrollment. Participants completed a preseason baseline assessment and follow-up assessments at 6 and 24 to 48 hours after a concussion, when they were symptom-free, and when they returned to unrestricted play. Data collection occurred between January 2014 and September 2018.

Results: A total of 2163 injuries were studied. New or worsened neck pain was reported with 47.0% of injuries. New or worsened neck pain was associated with patient sex (higher in female athletes), an altered mental status after the injury, the mechanism of injury, and what the athlete collided with. The presence of new/worsened neck pain was associated with delayed recovery. Those with new or worsened neck pain had 11.1 days of symptoms versus 8.8 days in those without ($P < .001$). They were also less likely to have a resolution of self-reported symptoms in ≤7 days ($P < .001$). However, the mean duration of the return-to-play protocol was not significantly different for those with new or worsened neck pain (7.5 ± 7.7 days) than those without (7.4 ± 8.3 days) ($P = .592$).

This novel study shows that neck pain was common in collegiate athletes sustaining a concussion, was influenced by many factors, and negatively affected recovery. [1)]

The purpose of a study of Yamashita et al. was to determine the frequency of nonspecific low back pain (NSLBP) in adolescent athletes diagnosed by general orthopedic surgeons and by spine surgeons.

A total of 69 adolescent athletes consulted our sports spine clinic to seek a second opinion for low back pain. Data on age, sex, type of sport played, the previous diagnosis made by general orthopedic surgeons, and the final diagnosis made by spine surgeons were collected retrospectively from medical records.

The frequency of NSLBP diagnosed by general orthopedic surgeons was 18.9% and decreased to 1.4% after careful imaging and functional nerve block examination by spine surgeons. The final diagnoses made by spine surgeons for those patients previously diagnosed as having NSLBP by general orthopedic surgeons were as follows: early-stage lumbar spondylolysis, discogenic low back pain, facet joint arthritis, lumbar disc herniation, and lumbar apophyseal ring fracture.

In adolescent athletes, the rate of NSLBP diagnosed by general orthopedic surgeons decreased markedly when the diagnosis was made by spine surgeons. A thorough medical interview, careful physical examination, appropriate diagnostic imaging, and selective nerve block examination can effectively identify the cause of low back pain [2].

1)
King JA, Nelson LD, Cheever K, Brett B, Gliedt J, Szabo A, Dong H, Huber DL, Broglio SP, McAllister TW, McCrea M, Pasquina P, Feigenbaum LA, Hoy A, Mihalik JP, Duma SM, Buckley T, Kelly LA, Miles C, Goldman JT, Benjamin HJ, Master CL, Ortega J, Kontos A, Clugston JR, Cameron KL, Kaminski TW, Chrisman SP, Eckner JT, Port N, McGinty G. The Prevalence and Influence of New or Worsened Neck Pain After a Sport-Related Concussion in Collegiate Athletes: A Study From the CARE Consortium. Am J Sports Med. 2024 May 14:3635465241247212. doi: 10.1177/03635465241247212. Epub ahead of print. PMID: 38742422.

2)
Yamashita K, Sakai T, Takata Y, Tezuka F, Manabe H, Morimoto M, Kinoshita Y, Yonezu H, Chikawa T, Mase Y, Sairyo K. Low Back Pain in Adolescent Athletes: Comparison of Diagnoses Made by General Orthopedic Surgeons and Spine Surgeons. Int J Spine Surg. 2019 Apr 30;13(2):178-185. doi: 10.14444/6024. eCollection 2019 Apr. PubMed PMID: 31131218; PubMed Central PMCID: PMC6510183.