Hamstring Injuries in Baseball May Be Preventable

COLORADO SPRINGS, CO – Creating a program to prevent hamstring injuries in minor league and major league baseball players might be a possibility say researchers presenting their work today at the American Orthopaedic Society of Sports Medicine’s (AOSSM) Annual Meeting in Colorado Springs, CO.

“Hamstring injuries, both acute and chronic are on the rise in baseball and injury prevention programs may help stem this trend,” says lead author, Holly Silvers-Granelli, MPT, PhD Candidate at the University of Delaware in Newark, Delaware.

Silvers-Granelli and her team assessed 213 athletes from minor league (173 players) and major league (40 players) teams and provided a portion of these individuals with a hamstring injury prevention program, including both concentric and eccentric hamstring exercises and lumbo-pelvic stability exercises preparing the athlete for the demands of competitive baseball from a neuromuscular perspective. The average weighted utilization of the injury prevention program was 25.3 doses for the uninjured group and 13.53 doses in the injured group. In those individuals who followed the injury prevention program there was a 40% reduction in hamstring injuries. In addition there was a significant reduction in playing time lost due to injury in both groups who participated in the program. For the Major League players there were 9 vs. 25.9 days lost, or a 65% reduction. The Minor League players who participated in the prevention program had a similar reduction of 45.3% in lost playing time.

This research was a prospective cluster cohort study. Each athlete completed a questionnaire detailing their hamstring injury history. The injury prevention program was disseminated to each team medical staff (team physician, certified athletic trainer and strength and conditioning coach). The medical staffs were instructed on how to implement the program. At the end of the season, the data was analyzed for compliance and injury rates and compared to the MLB control date in the HITS database.

“Our study confirmed that utilizing hamstring injury prevention programs can help lessen lost play time and be a cost efficient way to do so. Further research is needed to fine tune the best mechanisms for these injury reduction programs,” said Silvers-Granelli.

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The American Orthopaedic Society for Sports Medicine (AOSSM) is a global leader in orthopaedic sports medicine education, research, communication and fellowship, and includes national and international sports medicine leaders. The Society works closely with many other sports medicine specialists, including athletic trainers, physical therapists, family physicians, and others to improve the identification, prevention, treatment, and rehabilitation of sports injuries. AOSSM is also a founding partner of the STOP Sports Injuries campaign to prevent overuse and traumatic injuries in kids.