Single-bundle ACL Reconstruction Offers Positive Results for Patients

Orlando, FL – Single and double-bundle techniques may provide similar outcomes in patients undergoing ACL reconstruction, as noted in research presented today at the American Orthopaedic Society for Sports Medicine’s (AOSSM) Specialty Day. The study shows patients in both groups demonstrate similar performance during recovery.

The original research group included 105 patients (33 women, 70 men) ranging in age from 18-52 years old. A total of 87 patients were available for the 5-year follow-up and were included in the study. All patients underwent post-operative rehabilitation under the same guidelines and supervision of physical therapists. Follow-up exams included multiple subjective and objective evaluation tests, including range of motion (ROM), one-leg-hop test, square-hop test, and knee injury osteoarthritis outcome score (KOOS).

"Patients treated with single or double-bundle ACL reconstruction showed no significant difference in major performance tests," noted lead author Ioannis Karikis from NU Hospital Group in Uddevella, Sweden. "Most notably, 89% of the single-bundle and 84% of the double-bundle groups had a negative pivot-shift test, suggesting both groups had similar knee stability and health."

"While several studies have shown double-bundle ACL reconstruction is preferable over single-bundle, our research suggests both may be successful surgical approaches for patients," commented Karikis. "If nothing else, the double-bundle technique did not offer better performance for patients recovering from ACL surgery."

The study also noted that the presence of osteoarthritis (OA) in patients was similar during follow-up evaluations, regardless of technique used during ACL surgery.

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The American Orthopaedic Society for Sports Medicine (AOSSM) is a world leader in sports medicine education, research, communication and fellowship, and includes national and international orthopaedic 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. For more information on AOSSM or the STOP Sports Injuries campaign, visit www.sportsmed.org or www.stopsportsinjuries.org