AACCS American Academy of Orthopaedic Surgeons

For Immediate Release: March 10, 2025 at 12:01 am PST

Majority of Racket Sport Players Able to Return to Play at Similar Skill Level After Joint Arthroplasty

SAN DIEGO (March 10, 2025)—While participation in pickleball and other sports is growing, data on returning to play after joint arthroplasty (JA) is limited. Presented at the 2025 Annual Meeting of the <u>American Academy of Orthopaedic Surgeons</u> (AAOS), a <u>new study</u> found that a majority of patients who played racket sports were able to return to play after JA within six months and at a similar skill level without an increase in reoperation rates. Patients who returned to play also had higher physical function scores after surgery compared to those who did not return to play.

Racket sports are incredibly popular in the United States, fueled by pickleball which has seen a 159% increase in participation since 2019.ⁱ Many who play racket sports are over the age of 60, an age group which is more prone to hip and knee <u>osteoarthritis</u> (OA), presenting overlap in racket sports players and patients seeking JA.ⁱⁱ There is no clear consensus on which activities are safe to resume following surgery, varying by surgeon.ⁱⁱⁱ

An online survey was sent to 7,200 patients who had undergone at least one primary JA at a single academic center over the past 10 years (January 2014 to October 2023). The survey asked patients about their prior and current racket sports participation, including ability level, expectations, limitations and reoperations. Demographics, patient-reported outcomes, and reoperations were also captured through chart review. All surveys included Patient-Reported Outcomes Measurement Information System v2.0 Physical Function and Short Form v1.1 Global Health (PROs) regardless of playing status.

Of the 1,284 respondents, the average follow-up time was 3.6 years, and the average age was 66.9 years at the time of the survey. Results included:

- Out of the total respondents, 61.7% (n =792) had never played a racket sport, 25.3% (n = 325) had last played a racket sport more than two years before JA (remote players), and 13.0% (n = 167) had played a racket sport within two years prior to JA (recent players).
- Of the recent players, 71.9% returned to play after surgery, compared to 30.2% of remote players.
- The most common time window to return to play was four to six months for each sport with 44.4% of pickleball players, 36.2% of tennis players and 39.1% of other racket sport players.
- When compared to remote and never players, recent racket sports players had the highest PROs across physical function, physical health and mental health.
- For those who returned to play after JA, the majority reported an increase or similar level of enjoyment in playing their desired racket sport. The majority of patients reported being very satisfied or satisfied with their JA in allowing them to return to their desired sport, with 90% of tennis players, 77.2% of pickleball players, and 86.9% of other racket sport players.
- Of the recent players, there was no difference in return to play based on pre-operative self-reported skill levels with 72.5% of beginners, 76.2% of intermediate, and 65.6% of advanced players returning.
- The most common reasons for recent and remote players to avoid returning to play were fear of injury in tennis players (29.7%) and loss of interest in pickleball players (35.3%).
- Rates of reoperation were not significantly different between patients who did and did not return to play.
- The study's limitations included being survey-based and susceptible to biases, participants had to self-report skill levels, which could lead to inaccuracies, and there was no objective mechanism for tracking racket ability changes over time.

###

2025 AAOS Annual Meeting Disclosure Statement

About the AAOS

With more than 39,000 members, the <u>American Academy of Orthopaedic Surgeons</u> is the world's largest medical association of musculoskeletal specialists. The AAOS is the trusted leader in advancing musculoskeletal health. It provides the highest quality, most comprehensive education to help orthopaedic surgeons and allied health professionals at every career level to best treat patients in their daily practices. AAOS is the source for information on bone and joint conditions, treatments and related musculoskeletal healthcare issues; and it leads the healthcare discussion on advancing quality.

Follow the AAOS on Facebook, X, LinkedIn and Instagram.

For more information, contact:			
Deanna Killackey	847-384-4035	630-815-5195	killackey@aaos.org

ⁱ Akabas L. Americans More Active Despite Team Sports' Decline: Data VIZ. Sportico.

https://www.sportico.com/business/sports/2023/most-popular-sports-participation-2022-1234710470/. Published Feb. 22, 2023. Accessed Feb. 12, 2025.

ⁱⁱ Loeser RF. The Role of Aging in the Development of Osteoarthritis. Trans Am Clin Climatol Assoc. 2017;128:44-54.

^{III} Swanson EA, Schmalzried TP, Dorey FJ. Activity recommendations after total hip and knee arthroplasty: a survey of the American Association for Hip and Knee Surgeons. J Arthroplasty. 2009;24(6 Suppl):120-6.