

# Editorial Commentary: How Do We Measure Return-to-Sport “Success” After Hip Arthroscopy for Femoroacetabular Impingement?



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**Abstract:** Hip arthroscopy for femoroacetabular impingement has generally been considered to enjoy a high rate of success. These patients tend to be young and active. One measure of “success” has been return to sport. However, much of the literature has used subjective return criteria and reported on diverse groups in terms of skill levels, sports, and sexes, as well as small numbers, thus limiting specific recommendations.

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Historically, knee arthroscopy was purely diagnostic, progressing through stages of debridement, repair, and reconstruction. Initially, procedures were too often applied in somewhat of a “scattershot” manner. Over the years, we have refined the indications, and we now understand that certain procedures should not be performed in certain patient cohorts. Hip arthroscopy has progressed through the stages much more rapidly. The technical aspects of hip arthroscopy have been fairly well defined. For example, we now know, as has been confirmed in knee arthroscopy, that hip arthroscopy in the face of significant arthritis is a relative contraindication. Multiple recent articles have also tried to refine the indications for hip arthroscopy in various populations and specifically in different sports. Return to sport is a complex issue and could be affected by a preoperative delay in treatment, the specific demands of individual sports, the level of competition, age, or sex.<sup>1</sup> A recent meta-analysis reported an overall return-to-sport rate after hip arthroscopy of 75% at the same level or a higher level of competition.<sup>2</sup> Some series have shown a trend toward a higher rate of return in professional athletes compared with recreational athletes.<sup>3,4</sup> Two series have shown no significant difference in the rates of return to

sport between professional football, basketball, hockey, and baseball players, although both series showed that professional hockey players had a shorter post-arthroscopy career.<sup>5,6</sup> Shibata et al.<sup>7</sup> stated that there was no difference in the rate of return to sport between male and female patients. However, in many series, including the current article, return to sport was based on the patient’s self-report with no independent objective confirmation of performance. There have also frequently been small numbers (<50 hips) and a relative paucity of objective data to compare different sports.

In the article “Return to Basketball After Hip Arthroscopy: Minimum 2-Year Follow-Up,” Chen, Craig, Mu, Go, Ortiz, Maldonado, and Domb<sup>8</sup> from the American Hip Institute have done their usual excellent job of providing comprehensive prospective data. However, they have gone further than most articles by reporting on the patient acceptable symptomatic state and minimal clinically important difference. Their overall results are consistent with those of most other authors, with a return-to-sport rate of 74.2% in high-demand sports participants. However, with only 31 patients, the study is small compared with many other studies. More than half of the series consisted of recreational athletes; therefore, extrapolation to elite athletes is limited. In addition, because of the chronology of the study, one-third of the hips underwent debridement only, one-third of the hips underwent no capsular repair, and only 1 labral reconstruction was performed, which makes extrapolation to more “advanced” techniques limited. No dislocations

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occurred, which brings into question the routine capsular closure. However, one-quarter of the patients required subsequent surgical procedures (with 5 patients requiring repeated arthroscopy and 3 patients requiring conversion to total hip arthroplasty). In addition, although basketball is certainly a high-demand sport, no direct comparison was made to American football, hockey, or soccer, as has been performed in other series. The 3 patients (who were significantly older) who required conversion to total hip arthroplasty emphasizes the importance of good patient selection. We must continue to strive for more objective measures for patient selection and to more accurately determine safe return to sport.

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