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“Arthroscraping”



The term “arthroscope” was coined back in the early 1980s when I first began doing knee arthroscopy, and I can honestly say, having performed over 15,000 knee arthroscopies over the past 38 years, that I have “arthrosclaped” a significant number of femoral condyles during my career. The articles by Compton et al.¹ and Harris et al. confirm² that this is a common occurrence and results in permanent damage to the articular surface. This occurs when we encounter a very “tight” medial compartment incapable of housing a 4- to 4.5-mm arthroscope and/or using relatively large tools to access the “far reaches” of the posterior compartment to complete a satisfactory meniscectomy despite valgus stress on the knee during the case. In the mid 1980s, I was involved in the manufacturing of an “electrocautery loop probe” that was developed in order to avoid damage to the articular surface by affording a flexible base with an exposed “cutting” wire that had to be used in a nonconductive fluid medium. I had watched one of my urology colleagues “looping out” a small bladder tumor using water as the nonconductive fluid medium and for this reason began using a similar device as a way of avoiding articular cartilage surface damage and published the results in *Arthroscopy* in 1992.³ This tool is no longer available and thus it is important to liberally release the medial collateral ligament to avoid cartilage surface injury as has been noted by multiple authors which the literature confirms does *not* result in *any* long-term instability.⁴⁻⁷ First, I would urge everyone who performs knee arthroscopy to make certain that they use a knee holder placed as little as 3 cm superior to the superior pole of the patella to allow for significant leverage when putting valgus stress on the knee. Second, I have a very low tolerance for releasing the MCL whether by “pie-crusting” the proximal MCL, releasing it superior to the meniscus intra-articularly with a cautery, or releasing it inferior to the meniscus with an awl. It is critical to avoid “arthrosclaping” the articular surface of the knee since

it has absolutely no ability to heal.⁸ As we know, even removing a minimal amount of the meniscus during a meniscectomy results in the development of articular cartilage degeneration. Thus, we must try to avoid hastening this progression by maintaining a “pristine” articular surface during surgery to avoid rapid advancement of degenerative arthritis. With the recent trend to put “metal and plastic” in younger and younger patients, it is up to us as arthroscopic surgeons to do our best to avoid articular cartilage damage during arthroscopic surgery.

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Regarding “Operative Versus Nonoperative Treatment of Femoroacetabular Impingement Syndrome: A Meta-analysis of Short-Term Outcomes”



We recently read with interest the article titled “Operative Versus Nonoperative Treatment of Femoroacetabular Impingement Syndrome: A Meta-analysis of Short-Term Outcomes.”¹ The authors conducted a meta-analysis of patient-reported outcomes of both treatment strategies and concluded that patients with femoroacetabular impingement (FAI) syndrome treated with hip arthroscopy have superior hip-related outcomes in the short term compared with patients receiving physical therapy. We have some queries about the statistical methods and interpretation of those pooled analysis results.

The first concern relates to the heterogeneity of input values used in the meta-analysis. Dwyer et al.¹ not only conducted a pooled study indiscriminately using unadjusted and adjusted mean differences in International Hip Outcome Tool 33 (iHOT-33) scores but also pooled the 6- and 12-month follow-up scores even though all 3 included trials reported 6-month follow-up scores.²⁻⁴ Also, the authors even used a fixed-effects model in their pooled study and considered an I^2 statistic of 41% as low heterogeneity, but usually in medicine, there is consensus that a random-effects model is recommended to avoid overestimation of the study results.⁵ The study concluded that hip arthroscopy is associated with superior hip-related outcomes in the short term compared with physical therapy for FAI; however, if the meta-analysis were performed using matched data and appropriate statistical methods, one might generate the opposite findings.

Our second concern is about the interpretation of the meta-analysis results. Even though the authors showed a superior International Hip Outcome Tool 33 (iHOT-33) score for the hip arthroscopy group compared with the physical therapy group in their pooled results,¹ is it prudent to generalize this to all hip-related outcomes? As the authors mentioned in the “Discussion” section,

the number of included studies was relatively small and the trial designs were variable, so we think it would be more sensible to reserve conclusions about the superiority of one treatment strategy over the other until larger-scale robust trials can be performed.

With the ongoing debate about which strategy is better for treating FAI syndrome, we worry that this report could unnecessarily mislead people. We hope that the authors address the points presented because the overall discussion of the presented points will only serve to benefit the research community at large.

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