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CORR Insights®: Labral Reattachment in Femoroacetabular Impingement Surgery Results in Increased 10-year Survivorship Compared With Resection

J. W. Thomas Byrd MD

Where Are We Now?

Labral tear management has progressed considerably during the last quarter century. The change began when we recognized

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the existence of these disorders as a cause of pain and dysfunction [2]. Débridement alone often resulted in measurable improvement, providing some hope for these patients who, in the past, simply were resigned to living within the constraints of their symptoms [3]. Subsequently, understanding of the etiology has strengthened the ability to address the causation with an opportunity for more durable results [5]. Crediting the intuition, experience, and observations of accomplished clinicians, there is a growing body of evidence to support the role of restoration over simple débridement of the acetabular labrum.

In a landmark article on the topic, Espinosa and colleagues [4] reported superior Merle d’Aubigné scores and less radiographic progression of

arthritis when the labrum was restored after taking it down for performing an acetabular rim trimming compared to prior experiences when it was simply excised. In the arthroscopic setting, labral repair was found to be a predictor of better outcomes over débridement in the presence of FAI based on the modified Harris Hip Score [9]. Another study [7] similarly noted better modified Harris Hip Scores in the correction of FAI when the labrum was repaired compared to débridement. In a randomized controlled study of débridement versus repair among women [6], the study authors again observed superior results using the Hip Outcomes Score when the labrum was restored. In the current study, Anwander and colleagues present a 10-year followup on the original series by Espinosa and colleagues [4], demonstrating increased mean survivorship among the labral reattachment group (78%) compared to labral resection (46%).

By this author’s account, the original study by Espinosa and colleagues

J. W. T. Byrd MD (✉)
Nashville Sports Medicine Foundation,
2011 Church Street, Suite 100, Nashville,
TN 37203, USA
e-mail: byrd@nsmoc.com;
sharon@nsmoc.com

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is the most-frequently misrepresented study in the hip-preservation literature. It is referenced as a reason for repairing a torn labrum instead of débriding it [4]. However, this study was not about what to do with a torn labrum; it was about what to do with a labrum that had been taken down in order to perform an acetabuloplasty. The study also showed that removing large parts of the labrum was a bad idea. This alone cannot be extrapolated to imply harmful effects of simply débriding the symptomatic, damaged portion of a labrum.

While this previous study and this most-recent update are important in emphasizing the importance of labral preservation, it is equally important that the implications be properly interpreted. Perhaps labral débridement is not always a bad idea.

There are methodological flaws in all of the reports indicating superior outcomes of labral preservation versus débridement. Even the level-one randomized study by Krych and colleagues [6] was flawed by lack of blinding. Obviously the surgeon was not blinded, but more importantly, the patients were not blinded, either, leaving open the possibility of bias in the patients' assessments of how they were doing. In the study by Philippon and colleagues [9], it seems to me that selection bias was an important factor, in terms of why some patients were

chosen for repair and others for débridement. Similar to the study by Espinosa and colleagues [4] and this more-recent report, Drs. Larson and Giveans [7] used a historical control group with its inherent shortcomings. It is uncertain how coexistent improvements in technique, technology, and rehabilitation may have represented a confounding variable in comparing the study groups.

All that said, there are no studies of which I am aware that suggest it is beneficial to débride rather than restore the labrum.

Where Do We Need to Go?

Whether we approach the hip with an arthroscope or an open surgical technique, our purposes may be palliative, preventative, or both. Palliative procedures seek to reduce discomfort and improve function. Preventative ones can seek to influence favorably the natural history of the condition in question.

The available evidence is largely sufficient to support that labral repair results in better patient-reported outcomes with restoration compared to débridement. Longer followup might further substantiate the palliative successes of these procedures, but does not necessarily imply that they are preventative. Stating that the natural

history is being altered requires a control group of symptomatic patients in whom surgical intervention is not performed.

What about the patient who is minimally symptomatic? Should early surgical intervention be recommended? Some studies have tried to answer this question in the affirmative, based on poorer outcomes among patients with longer duration of symptoms [1, 8]. However, this implies that those with longer duration of symptoms would have been better off had they been operated on earlier, which is not a conclusion that can be drawn based on this observation alone.

How Do We Get There?

Today's challenge is not simply the microscopic view of labral débridement versus restoration, but more broadly, whether the currently available comprehensive surgical strategies for hip preservation provide more favorable long-term results improving outcomes over the natural history of the underlying disease process. Like so many areas within orthopaedics, this requires more properly structured prospective studies with well-matched control groups. To perform these ethically requires a level of confidence and clinical balance where one treatment is not clearly superior to another.

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Although the understanding of FAI—the most common etiology associated with labral pathology—is incomplete, the harmful impact of neglecting symptomatic patients is increasingly compelling, creating an ethical challenge to a perfectly structured randomized study. Ultimately, it is greater volume and greater followup with the highest levels of medical evidence that will confirm and define the most-effective management strategies.

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