

Editorial Commentary: Hip Central Acetabular Osteophyte Treatment Improves Outcome: Flip Your Arthroscope 90° and Look Down!



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Abstract: Three goals are at the top of our minds when achieving optimal outcomes for the arthroscopic treatment of femoroacetabular impingement syndrome in the primary setting: (1) accurate bony correction, (2) labral function restoration—typically with labral repair—and (3) comprehensive capsular management—which involves capsular preservation and closure. Notwithstanding, additional intra-articular concomitant conditions require our attention as well. Central acetabular impingement is characterized by the presence of central acetabular osteophytes at the cotyloid fossa. It has been proposed that central acetabular osteophytes lead to lateralization of the femoral head with relative femoroacetabular incongruity that increases contact force and mechanical cartilage abrasion.

See related article on page 2441

Residual bony deformity, labral re-tear, and capsular deficiency are the most common reasons for failed primary hip arthroscopy in the context of femoroacetabular impingement syndrome.¹⁻² Therefore, it makes sense to invest most of our time and attention to the technical details for the following 3 pillars: accurate bony correction,³ labral function restoration,⁴ and comprehensive capsular management.⁵ However, addressing additional intraoperative findings can elevate a good outcome to a great outcome.

Central acetabular osteophytes (CAOs) at the cotyloid fossa may lead to lateralization of the femoral head with relative incongruity within the acetabulum that increases contact force and mechanical abrasion.⁶ The term central acetabular impingement has been used to describe this phenomenon.⁷

In the retrospective study “The Presence of Central Acetabular Osteophytes May Negatively Affect the Outcome After Primary Arthroscopic Therapy of Femoroacetabular Impingement Syndrome,” Yang, Huang,

Mamtimin, Xu, Zhang, and Wang⁸ propensity matched—according to age, sex, body mass index, Tönnis grade, symptom duration, and follow-up time—46 patients with CAOs that were not removed to a control group of 46 patient without CAOs. At minimum 2-year follow-up, the authors reported significant improvement in all patient-reported outcome scores in both groups; nevertheless, the control group experienced significantly greater improvement than the study group. Furthermore, the patients in the CAO group were less likely to achieve the minimal clinically important difference and the patient acceptable symptomatic state for the modified Harris Hip Score.

Based on these results, it seems that performing a central acetabular decompression would be advisable in the presence of CAO, but one query that I have is whether the presence of CAO was the reason for the detrimental outcomes found by Yang et al. or was a reflection of a confounding prearthritic hip state that is difficult to identify on radiographs. In a cross-sectional study, Lodhia et al.⁹ compared 2 matched groups of patients, with and without CAO, who underwent primary hip arthroscopy, and similar to Yang et al., a greater prevalence of femoral head chondral damage was found in the CAO group. Also, Lodhia et al.¹⁰ demonstrated that patients with CAO can obtain comparable short-term outcomes to a control group without CAO when a central acetabular decompression was performed. In my experience, arthroscopic central

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acetabular decompression has been a suitable and safe alternative for the CAO treatment.

I applaud the work presented by Yang et al. for setting the foundations for future research in this matter. Prospective and eventually randomized studies on CAO management within the scene of femoroacetabular impingement syndrome will be the next step.

Finally, remember that it is attention to detail that separates average from exceptional.

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