Patients With Borderline Hip Dysplasia Demonstrate Favorable Long-Term Return to Sport Rates

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Disclosures

I (and/or my co-authors) have something to disclose.

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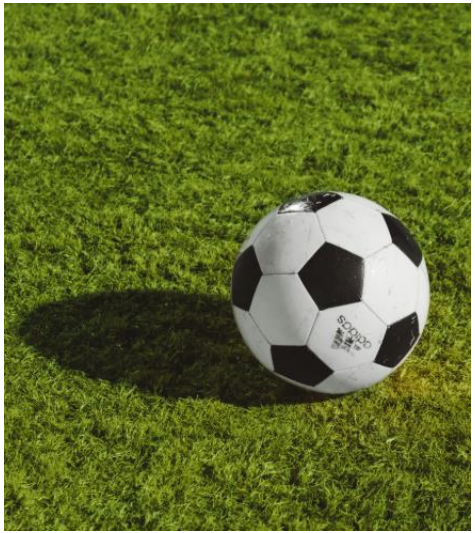
Introduction

- Borderline hip dysplasia (BHD), commonly defined by a lateral center-edge angle (LCEA) ranging from 18 to 25 degrees, represents a challenging condition for hip preservation surgeons

- Hip arthroscopy, often employed for treating labral pathology, microinstability, and femoroacetabular impingement syndrome (FAIS), has become an increasingly common option for patients with BHD.

- The literature remains sparse regarding long-term outcomes, particularly for athletes, a group for whom successful return-to-sport (RTS) is a critical measure of surgical success.



Purpose and Hypothesis

- The purpose of this study is to report minimum 10-year PROs and RTS rates in athletes with BHD following primary hip arthroscopy with capsular plication and to compare these outcomes to a propensity-matched control group of athletes with normal acetabular coverage.

- We hypothesize that (1) athletes with BHD will demonstrate sustained improvements in PROs and RTS rates at a minimum 10-year follow-up and (2) outcomes in this group will be comparable to those observed in athletes with normal acetabular coverage.

Methods

- Looking at patients from a single surgery center between September 2008 and May 2014

- Patients in the BHD study group self-reported participation in a sport within one year preoperatively and had a lateral center-edge angle (LCEA) between 18° and 25° in the affected hip.
  - Sport level = recreational, organized amateur, high school, college, or professional.

- Patients were excluded if they had a prior ipsilateral hip surgery, prior hip conditions, Tönnis grade > 1, LCEA < 18°, or workers' compensation status. Patients were excluded from RTS analysis if they did not attempt to RTS due to reasons unrelated to the hip.

- Patients in the BHD study group were propensity matched to a group of athletes with normal acetabular coverage (LCEA 25° to 40°)

Results

- 50 patients (53 hips) in the study group
- No significant demographic differences between the BHD and control cohorts
- Both the BHD group and control cohort demonstrated durable improvements in mHHS, NAHS, HOS-SSS, and VAS ($p < 0.01$) as well as high satisfaction rates
- The control cohort achieved a higher postoperative iHOT-12 value and lower levels of postoperative VAS compared to the BHD group ($p < 0.05$)

Results Continued

- Out of the 46 BHD patients who attempted to return, 40 (87.0%) reported a successful return at short to mid-term follow-up.
- Out of the 48 control patients who attempted to return, 41 (85.4%) were successful at some point postoperatively.
- Of the 28 BHD patients and 30 control patients who attempted to continue playing at 10 years post-op after having previously successfully returned to sport, 23 patients (82.1%) from the BHD cohort and 25 patients (83.3%) from the control cohort successfully continued their sport at a minimum of 10 years postoperatively
- No differences in these rates ($p > 0.05$)

Conclusion

- Athletes with BHD who underwent primary hip arthroscopy with capsular plication and labral treatment demonstrated a high rate of return to sport at short term follow up, high rate of continuation of sport at long-term follow up, and favorable long-term results.

- Loss of interest or lifestyle transitions had a greater impact on continuation of sport at long-term follow-up than persistent symptoms related to the hip.

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