

Arthroscopic Treatment of Femoroacetabular Impingement in Adolescent Athletes

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Summary:

Symptomatic FAI among adolescents has a high correlation with athletic activities and correction results in significant improvement but does not result in uniform return to sports.

Abstract:

INTRODUCTION

There is a high prevalence of sports participation among adolescents who develop symptomatic FAI. This study reports outcomes of arthroscopic treatment in this population.

METHODS

104 consecutive adolescent (<18 years) athletes (117 hips) underwent arthroscopic surgery for FAI and had minimum one-year follow-up. This cohort represents the substance of this report.

RESULTS

47 males; 57 females averaged 16 years of age (range 12-17 years). Follow-up averaged 28 months (range 12-60 months). 113 (97%) hips improved an average of 22 points (preop 73; postop 95) with 112 (96%) good and excellent results. 16 did not return to sports (5 unable; 6 choice; 5 completed high school). Common sports included football (15), soccer, basketball (13 each), dance (11), volleyball, cross-country, swim (7 each), gymnastics (5), and baseball, softball, lacrosse (4 each). Correction of 33 cam, 17 pincer, and 67 combined lesions was performed. 107 labral tears underwent 82 refixations, 24 debridements. There were 99 acetabular chondral lesions (42 Grade I, 18 Grade II, 34 Grade III, 5 Grade IV). Seven loose bodies were removed and 19 ligamentum teres lesions debrided. Concomitant procedures included 13 iliopsoas tendon releases, two IT band tendoplasties, and one trochanteric bursectomy. Two transient pudendal neurapraxias resolved within two weeks. Four patients underwent repeat arthroscopy and one a PAO.

DISCUSSION & CONCLUSIONS

Athletic activities are implicated in the development of symptomatic FAI at a young age, and this study reports favorable arthroscopic treatment among adolescent athletes. Return to sport may be influenced by factors other than the success of the procedure.