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Return to Soccer in Competitive Soccer Players Undergoing Hip Arthroscopy for Femoroacetabular Impingement

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Investigation performed at Hospital for Special Surgery, New York, New York, USA



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Disclosures:

Authors declare no financial interest/arrangement or affiliation with one or more organizations that could be perceived as conflict of interest in the context of the subject of this presentation.



Purpose

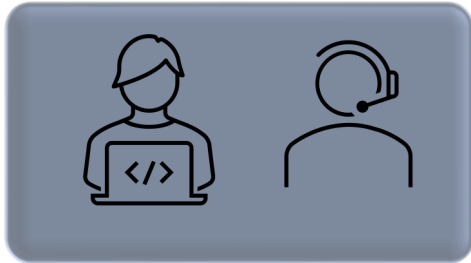
- ▶ To determine **return to soccer rates** and **soccer performance metrics** in a large cohort of competitive soccer players after hip **arthroscopic surgery** for the treatment of FAI.
- ▶ To identify **possible risk factors** associated with **not returning to soccer**.



Methods

- ⚽ An institutional hip preservation registry was retrospectively reviewed for patients identified as competitive soccer players who underwent primary hip arthroscopies for FAI (March 2010 → January 2017).
- ⚽ Patient demographics and injury characteristics as well as clinical and radiographic findings were recorded.
- ⚽ All patients were contacted for return to soccer information using a **soccer specific return to play questionnaire**.
- ⚽ Multivariable logistic regression analysis was used to identify potential risk factors for not returning to soccer.

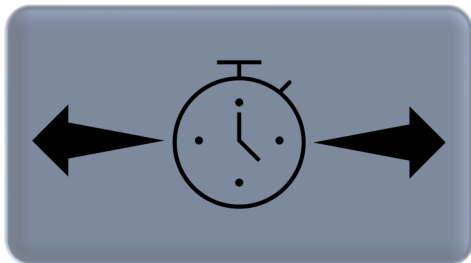
Return To Soccer Questionnaire



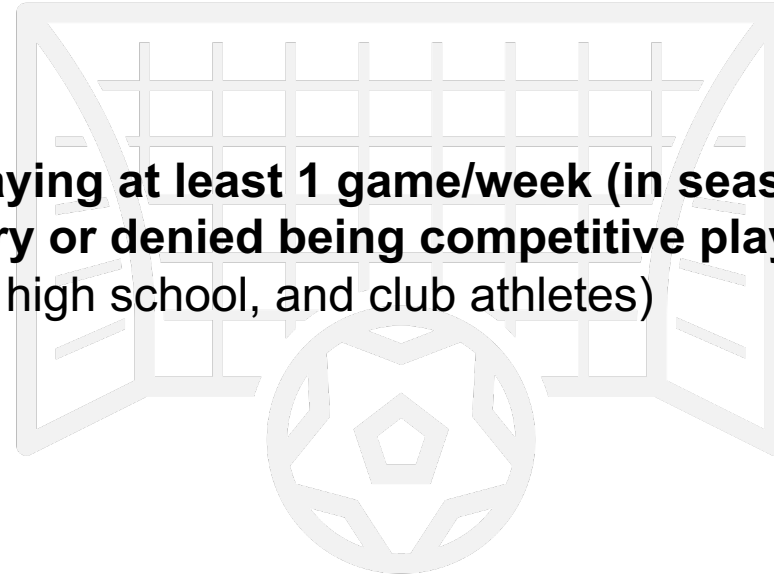
The questionnaire was administered via telephone or email.



Players who denied playing at least 1 game/week (in season) prior to their hip surgery or denied being competitive players (professional, collegiate, high school, and club athletes) were excluded.



The questionnaire included questions on various aspects of soccer play and performance prior to hip symptoms, after presentation of symptoms, and after surgery, as well as specific return to soccer metrics.



Results - Demographics

- **87 competitive soccer players (119 hips) were included.**
- **Mean follow-up time:** 6 ± 2 years.
- **Bilateral hip arthroscopy:** 32 players (37%).
- **Mean age at surgery:** 21.6 ± 7.0 years.
- **Males:** 50 (57.5%).
- **Positions:**
 - Midfielders: 44 (50.6%)
 - Defenders: 23 (26.4%)
 - Strikers: 15 (17.2%)
 - Goalkeepers: 5 (5.7%)

Hip Arthroscopy Procedures

	No. Hips (%)
Femoral cam decompression	102 (85.7)
Acetabular rim decompression	35 (29.4)
Iliac subspine decompression	25 (21.0)
Cam + rim + subspine decompression	
No	97 (81.5)
Yes	22 (18.5)
Ligamentum teres debridement	6 (5.0)
Labrum tear	
Debridement only	12 (10.1)
Repair only	103 (86.6)
Debridement and repair	0 (0.0)
Neither	4 (3.4)

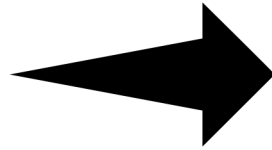


Return to Soccer

- **Returned to soccer:** 65 players (75%).
- **Pre-injury level of play:** 43 players (66%).
- **Most common reasons for not returning to soccer:**
 - Pain or discomfort (12.6%).
 - Fear of re-injury (8%).
- **Among 22 players who did not return to soccer:**
 - **Satisfied from surgery:** 14 (63.6%).
 - **Would choose to repeat surgery:** 15 (68.2%)

Multivariable logistic regression analysis

Female **vs.** Male

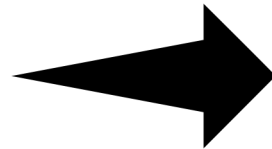


[OR] = 0.27

[CI] = 0.083 to 0.872

P value = 0.003

Older **vs.** Younger



[OR] = 0.9

[CI] = 0.832 to 0.963

P value = 0.029

BMI, Leg Dominance, playing position & bilateral surgery
were not found to be a risk factor

Limitations

- ⚽ We were unable to reach all the players registered as competitive soccer players during conduction of this study.
- ⚽ The return to soccer questionnaire used was specifically designed for this study, however it is not a validated questionnaire.
- ⚽ This study does not report on additional outcomes besides return to soccer.

Conclusions

- ⚽ Majority (**75%**) of competitive soccer players who underwent hip arthroscopy for symptomatic FAI were able to return to soccer, most of them (**66%**) returning to pre-injury level of play and continued playing at mid-term follow-up.
- ⚽ Majority of those who did not return to soccer were nevertheless **satisfied with their outcome**.
- ⚽ **Female and older aged players** were less likely to return to soccer.
- ⚽ These data can better guide clinicians and soccer players with **realistic expectations** related to the arthroscopic management of FAI.

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Thank You!

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Majority of competitive soccer players return to soccer following hip arthroscopy for femoroacetabular impingement: female and older aged players are less likely to return to soccer

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