

Loss Of Desire, A Busy Work Or Family Life And Fear Are The Main Drivers For Patients Failing To Return To Pivoting Sports After Anterior Cruciate Ligament Reconstruction

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Faculty Disclosure Information

- Ross Radic
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Background

- Primary goal after ACLR is RTS, with most patients expecting to return to their pre-injury activity level post-surgery¹
- RTS rates are varied, also depending on the cohort, though many studies reporting lower than expected RTS rates^{2,3}

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Expectations for Return to Preinjury Sport Before and After Anterior Cruciate Ligament Reconstruction

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Return to the Pre-Injury Level of Sport after Anterior Cruciate Ligament Reconstruction: A Practical Review with Medical Recommendations

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Background

- Different factors that affect RTS after ACLR⁴
 - Type of sports
 - surgical technique
 - Rehabilitation program/therapy
 - physical and psychological performance
 - Patient-related factors



Aim

- Investigation of the 2-year RTS rate in community-level ACLR (Hamstring autograft)
- Analysis of impact of sex and concomitant meniscal repair
- Observation of patient-perceived sporting performance level
- Understand patient-reported reasons for not returning to pre-injury pivoting sports after ACLR



Materials & Methods

- 276 community-level patients, 6/2015 – 6/2022
- ACLR with hamstring autograft \pm meniscal repair/LET
- Injury mechanism heterogenous (ball sports, skiing, fighting, other activities)
- Semi-structured questionnaire 2 years post-surgery
- Statistical analysis



Results

- n = 232 included for final analysis (n = 44 not participating in pivoting sports pre-injury)

Variable	Measure	n=276
Age (y)	Mean (SD)	28.2 (8.5)
	Range	16-50
Body Mass Index	Mean (SD)	25.7 (3.3)
	Range	18.0-39.8
Time Injury to Surgery (weeks)	Mean (SD)	10.8 (15.8)
	Range	1-150
Sex (males)	n (%)	149 (54.0%)
Injured Knee is Dominant Limb	n (%)	126 (45.7%)
Injured Activity		
Pivoting Sports	n (%)	232 (83.7%)
Other non-pivoting sport/recreational activity	n (%)	32 (11.6%)
Other	n (%)	13 (4.7%)
Concomitant Surgery		
Meniscus Repair	n (%)	142 (51.4%)
Lateral Tenodesis	n (%)	8 (2.9%)

Results

- 140/232 patients returned to pre-injury sport
 - 98/130 patients at same perceived level
- 92/232 patients did not return to pre-injury sport; main reasons:
 - Work/family reasons (23%)
 - Lost interest in primary pivoting sport (22%)
 - Fear of re-injury (17%)



Results

- Significant difference RTS male vs female ($p = 0.024$)
- No sex-based difference in 'No RTS' ($p = 0.790$) or \pm meniscal repair ($p = 0.708$)

RTS Status	Males (n=127)	Females (n=105)
RTS	85 (66.9%)	55 (52.4%)
RTS (at same pre-injury performance level)	59 (69.4%)	37 (67.3%)
RTS (below pre-injury performance level)	26 (30.6%)	18 (32.7%)
No RTS	42 (33.1%)	50 (47.6%)

Discussion & Limitations

- RTS align with literature⁵
- Reasons for not returning to pre-injury pivoting sports is multifactorial and sex-related
- Choice of graft (100% Hamstring graft)
- Inclusion of concomitant meniscal repair
- Community-level patients with various rehabilitation programs



Conclusion

- Only 2/3 of community-level patients return to pivoting sports after ACLR within 2 years
- RTS males > females
- No sex-based differences in patient-perceived performance



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