Return to Performance Following ACL Reconstruction: The Need for a Specific Method of Assessment for Elite Athletes

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I have no financial conflicts to disclose
Introduction

• Many outcome measures exist to assess ACL reconstruction surgery outcomes
• The 5 most common in the literature are:
  – IKDC
  – Lysholm
  – Tegner
  – KOOS
  – Cincinnati scores
Introduction

• These are excellent at describing surgical outcomes but it is unknown if they address whether an athlete is suitable to return to play and whether the level of performance will be the same for that athlete

• The aim was to determine their suitability within elite sport
Methods

• We reviewed the 5 most common outcome scores used following ACL reconstruction
• We recorded:
  – the frequency of use of the scores
  – the relevance of the score to the time to return to play in the elite athlete
  – determination of the time when it is suitable for an athlete to return to play
  – calculated the contribution of sport to the overall score
Systematic Review

• Search criteria – Return To Play and ACL
• Eligibility criteria: - Outcome score/Criteria
  - >15 patients
  - >1 year follow up
• 1200 Results
• 900 excluded on abstract
• 300 abstract reviewed
• 31 accepted
• Only 5 elite specific patient group
Results

- IKDC (71.4% of studies), Lysohlm (63%), Tegner (42%), KOOS (20.2%) & Cincinnati (8.4%) are the most common scores used

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency of use (% of studies observed)</th>
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</thead>
<tbody>
<tr>
<td>IKDC</td>
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</table>
Return To Performance Elite

Max Score possible without RTP | Max Score possible with RTP
--- | ---
IKDC | 98.9% | 100%
Lysholm | 100% | 100%
Tegner | 9/10 | 10/10
KOOS | 95% | 100%
Cincinatti | 96% | 100%
Results

• Mean age of score: 30 years (range 19 to 35 years)

• Collectively 49% (range 12% to 80%) of the questions within these scoring systems were related to sport and 18.5% (range 12% to 40%) specific to sport

• It is possible for a patient to achieve an outcome score of >90% post ACL reconstruction and not have a return to sport
Results

• In terms of specifically recording return to play this was covered by one score

• The Tegner activity scale is the only one that qualifies the level of return to play

• Growing evidence that psychology plays important part in return to play
  
  – Should score incorporate psychological element?
Conclusions

• The majority of the literature describes outcomes from ACL surgery that does not convey relevance to the elite athlete nor defines when an elite athlete may return to play.

• A sport specific ACL outcome assessment for the elite athlete would help determine return to play time and return to performance level to aid research in this specialist sub-group of patients.
Thank you

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