Infographic. Aspetar clinical practice guideline on rehabilitation after ACL reconstruction: an interactive figure

Roula Kotsifaki 💿 , Vasileios Korakakis 💿 , Enda King, Olivia Barbosa, Dustin Maree, Michail Pantouveris, Andreas Bjerregaard, Julius Luomajoki, Jan Wilhelmsen, Rod Whiteley 💿

This infographic interactively summarises the recommendations derived from the Aspetar clinical practice guideline on rehabilitation after anterior cruciate ligament reconstruction (ACLR).¹ The recommendations can be used by patients, clinicians, researchers and healthcare decision makers as a simple way of knowing the evidence for the effectiveness of interventions during rehabilitation after ACLR and the return to activities criteria.

The guideline was developed in accordance with the Appraisal of Guidelines forREsearch & Evaluation (AGREE II) instrument and used the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) approach. A guideline development group systematically reviewed evidence from randomised clinical trials and systematic reviews to evaluate the effectiveness of rehabilitation interventions and guide clinicians and patients on the content of the optimal rehabilitation protocol after ACLR.

The guideline highlights several new elements of ACLR management such as: exercise initiation, eccentric training, plyometrics training, and cross education which complement a recent systematic review² and other existing guidelines.³

Exercise interventions should be considered the mainstay of ACLR rehabilitation. Adding modalities in the early phase may allow earlier pain-free commencement of exercise rehabilitation. However, the evidence for some modalities is conflicting, and the adverse effects, as well as the cost and time, required probably outweigh any benefits. Return to running and return to training/activity are key milestones for rehabilitation after ACLR however there is no evidence on which progression or discharge criteria should be used.4 5 We therefore propose return to running and return to sport criteria based on the current literature and our clinical expertise.

While there is a very low level of certainty for most components of rehabilitation, most of the recommendations were agreed to by expert clinicians. These data may be used as the basis in developing care pathways for rehabilitation after ACLR.

Rehabilitation Department, Aspetar Orthopaedic and Sports Medicine Hospital, Doha, Qatar



For more detail, an interactive version of this infographic is available at: https://www.aspetar.com/acl-recommendations

Correspondence to Dr Roula Kotsifaki, Rehabilitation, Aspetar Orthopaedic and Sports Medicine Hospital, Doha, Qatar; argyro.kotsifaki@aspetar.com

Twitter Roula Kotsifaki @RoulaKotsifaki, Vasileios Korakakis @KorakakisV, Julius Luomajoki @JMLuomajoki and Rod Whiteley @RodWhiteley

Contributors All authors contributed to the development of this infographic.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.







Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/ licenses/by-nc/4.0/.

© Author(s) (or their employer(s)) 2023. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ. Check for updates

To cite Kotsifaki R, Korakakis V, King E, et al. Br J Sports Med 2023;57:551–552.

Accepted 20 February 2023 Published Online First 6 April 2023

Br J Sports Med 2023;**57**:551–552. doi:10.1136/bjsports-2022-106679

ORCID iDs

Roula Kotsifaki http://orcid.org/0000-0002-7902-9206 Vasileios Korakakis http://orcid.org/0000-0002-8033-3934

Rod Whiteley http://orcid.org/0000-0002-1452-6228

REFERENCES

1 Kotsifaki R, Korakakis V, King E, *et al*. Aspetar clinical practice guideline on rehabilitation after anterior

cruciate ligament reconstruction. *Br J Sports Med* 2023;57:500–14.

- 2 Culvenor AG, Girdwood MA, Juhl CB, et al. Rehabilitation after anterior cruciate ligament and meniscal injuries: a best-evidence synthesis of systematic reviews for the OPTIKNEE consensus. Br J Sports Med 2022;56:1445–53.
- 3 Andrade R, Pereira R, van Cingel R, et al. How should clinicians rehabilitate patients after ACL reconstruction? A systematic review of clinical practice guidelines (CpGs) with a focus on quality appraisal (agree II). Br J Sports Med 2020;54:512–9.
- 4 Burgi CR, Peters S, Ardern CL, et al. Which criteria are used to clear patients to return to sport after primary ACL reconstruction? A scoping review. Br J Sports Med 2019;53:1154–61.
- 5 Rambaud AJM, Ardern CL, Thoreux P, et al. Criteria for return to running after anterior cruciate ligament reconstruction: a scoping review. Br J Sports Med 2018;52:1437–44.