What is the optimal time for return to sports after anterior cruciate ligament reconstruction?

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Ideal conditions for healing are mostly non-existent in one of the most common sports-related injury, the anterior cruciate ligament (ACL) tear. Furthermore, there are still controversies in regards to the optimal management of a torn ACL and the optimal time for return to sports following ACL reconstruction.

At a mean of six months after ACL reconstruction, objective functional recovery of the knee was generally unsatisfactory and this seemed to be a risk factor for recurrent tears. A systematic review and meta-analysis demonstrates that younger age and return to high level of activity are evident factors leading to recurrent ACL tears. These combined data indicate that nearly one in four young athletic patients who sustain an ACL injury and return to high-risk sports will develop another ACL injury.

The ACL reconstruction does not necessarily enable return to preinjury sports participation. By returning to pivoting sports after ACL reconstruction, athletes are also facing high risks of contralateral ACL injuries. Long-term evaluations in risk assessments after ACL reconstruction are important, as a significant number of subsequent ACL injuries occurs after routine follow-up.

Strong evidence indicates that younger, more active athletes are at particularly high risk for a second ACL injury, and this risk is greatest within the first two years following ACL reconstruction. This highlights a considerable debate in the return to sports decision process as to whether an athlete should wait until two years after ACL reconstruction to return to unrestricted sports activity.

An optimized criterion-based multifactorial return-to-sports approach based on shared decision-making within a biological and psychosocial framework must be carried out. A wide spectrum of sensorimotor and biomechanical outcomes should be assessed comprehensively. In conclusion, we still do not know the optimal time for return to sports following ACL reconstruction.

REFERENCES