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Isolated Anatomic Reconstruction of Anterior Cruciate Ligament in Sportsmen with High Pivot Shift Grade: Is it Enough for Rotational Stability?

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Disclosures:

- Authors (or a member of their immediate family) **DO NOT** have a financial interest or other relationship with a commercial company or institution.
- Authors declare that there is **NO CONFLICT OF INTEREST.**



BACKGROUND:

- Rotational instability of the knee remains an issue after anterior cruciate ligament (ACL) reconstruction
- In fact, the association of antero-lateral ligament reconstruction seems to yield to better outcomes in patients with high grade pivot shift, however it remains a topic of discussion



OBJECTIVE:

- Our aim was to evaluate functional outcomes as well as clinical residual laxity after isolated anatomic ACL reconstruction in amateur sportsmen with high grade pivot shift



METHODS:

- Our retrospective study included 74 non-professional athletic patients participating in pivoting sports with at least grade II pivot shift who have had primary anatomic single-bundle reconstruction with hamstrings tendon graft for isolated acute ACL injury with minimum follow-up of two years



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RESULTS:

- The mean time between injury and surgery was 4 months
- At the last follow-up, 5% of our patients still have anterior residual laxity at the Lachman Test and 8% still have positive pivot shift (4 patients Grade I and 2 patients Grade II)



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RESULTS:

- Mean Lysholm-Tegner score was 70.6 ± 5.2 before the surgery and 92.3 ± 4.7 after the surgery
- The mean IKDC score was 61.2 ± 4.3 before the surgery and 95.3 ± 2.4 after the surgery



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RESULTS:

- 72% of patients have returned to their athletic activity with mean time interval of 8 months
- Only shorter time interval between trauma and surgery was statistically associated to a better functional result



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DISCUSSION:

- Isolated anatomic ACL reconstruction was found to be effective in improving outcomes and allows a reliable control of anteroposterior as well as rotatory stability of the knee with satisfying functional results in amateur sportsmen with high pivot shift grade [1,2]
- Anterolateral ligament reconstruction should not be performed routinely for all patients undergoing ACL reconstruction [3,4]



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CONCLUSION:

- Additional reconstruction with anterolateral ligament maybe not mandatory in amateur sportsmen with high pivot shift grade, however reduction of the time interval between trauma and surgery is recommended for a better result



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