

Prospective comparative study on the lateral retinacular release during MPFL reconstruction Randomized clinical trial with a minimum of follow up of two years

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INTRODUCTION: Reconstruction of the medial patellofemoral ligament (MPFL) has become the gold standard for the treatment of the recurrent patellar dislocation (RPD). Lateral retinacular release can be performed in association with MPFL reconstruction, but the effect on outcomes is not clear. To evaluate the effect of lateral release on outcomes following MPFL reconstruction is the aim of this study. It is hypothesized that isolated MPFL reconstruction was not inferior to MPFL reconstruction and lateral retinacular release in terms of IKDC subjective score and patellar tilt (PT).

METHODS: Patients between ages 18 and 45 scheduled to undergo MPFL reconstruction without an associated bony procedure (tibial tubercle osteotomy or trochleoplasty) were randomized to isolated MPFL reconstruction or MPFL reconstruction (no LRR group) and arthroscopic LRR (LRR group). Evaluation criteria were subjective IKDC score as the primary outcome and PT evaluated with a CT-scan. PT was evaluated with the quadriceps relaxed (PTQR) and contracted (PTQC).

RESULTS:

Of 140 patients included in the trial, 3 were excluded for bony procedure, 8 were lost of follow-up, 4 were not able to complete evaluation because of medical reasons, and 125 patients were evaluated with a minimum of 24 months and a median follow-up of 36 (24-144) months. The average subjective IKDC score was at 78 ± 15 (29-98) in the LRR group and 81 ± 15 (33-100) in the no LRR group. The PTQR was at $21^\circ \pm 9^\circ$ (4-39) in the LRR group and 17 ± 8 (2-43) in the no LRR group (n.s). The PTQC was at $24^\circ \pm 10^\circ$ (5-45) in the LRR group and 21 ± 9 (7-43) in the no LRR group (n.s). Three complications were noted in either group : 3 stiffness in the LRR group, 1 stiffness, 1 nevroma and 1 desunion in the no LRR group.

DISCUSSION AND CONCLUSION:

The IKDC score were not inferior in the no LRR group based on the addition of an arthroscopic LRR to an MPFL reconstruction in patients with RPD not undergoing associated bony procedures. There is no indication to a systematic lateral retinacular release in association with MPFL reconstruction in the treatment of RPD.