

An Isolated Lateral Extra-Articular Procedure can be Indicated for Symptomatic Patients with Minor Instabilities and Intact Graft After Anterior Cruciate Ligament Reconstruction

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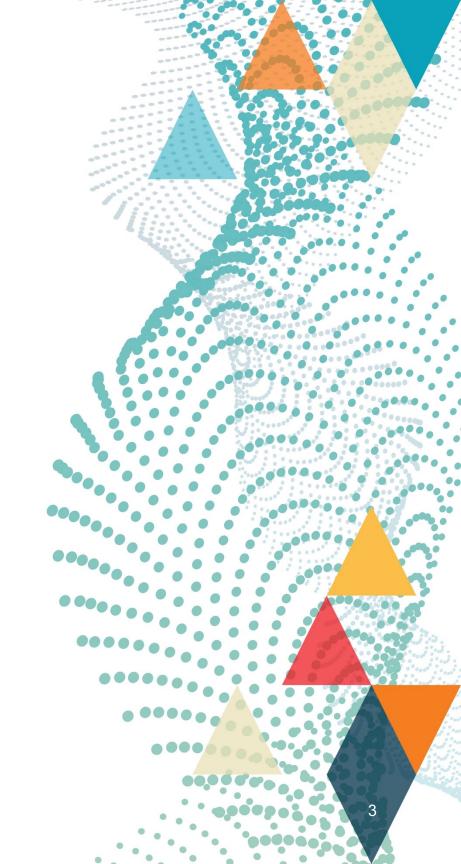
# **Faculty Disclosure Information**

Nothing to disclose



## INTRODUCTION

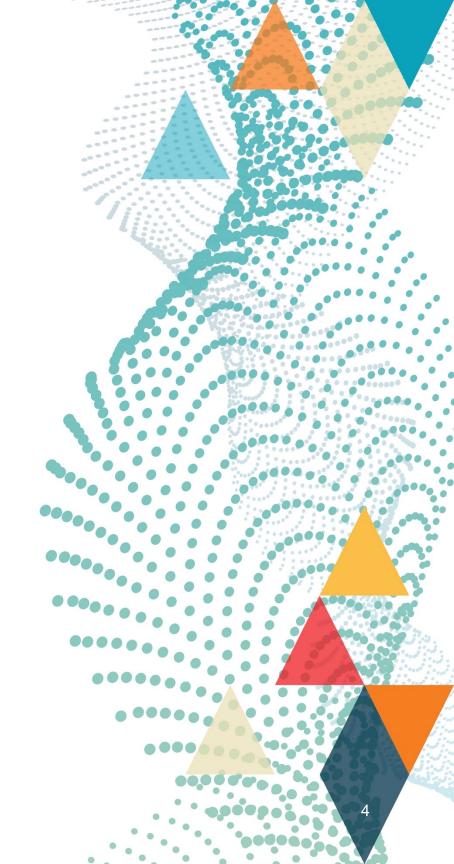
Some patients undergoing isolated ACL reconstruction may experience mild but symptomatic postoperative rotational instability, despite having no significant anteroposterior instability and an intact ACL graft, thus not meeting the classic criteria for revision surgery.





#### **OBJECTIVE**

The objective of this study was to evaluate a population with mild rotatory instability following ACL reconstruction, which was submitted to an isolated extra-articular procedure.





## **METHODS**

Patients submitted to an isolated extra-articular procedure after ACL reconstruction were retrospectively evaluated. Only patients presenting anterior knee instability of less than 5 mm, pivot-shift of a maximum of 1+, and ACL graft intact were included. Demographic data, physical examination and subjective functional scales were evaluated.

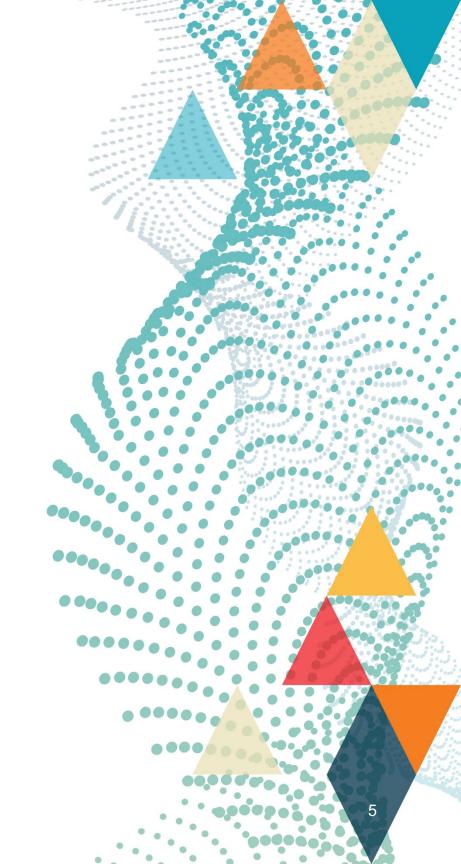
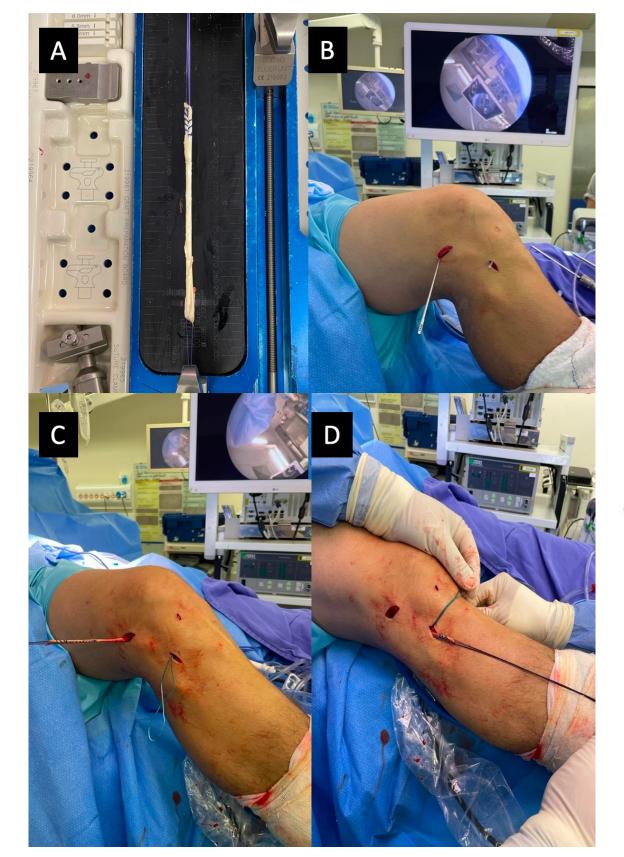
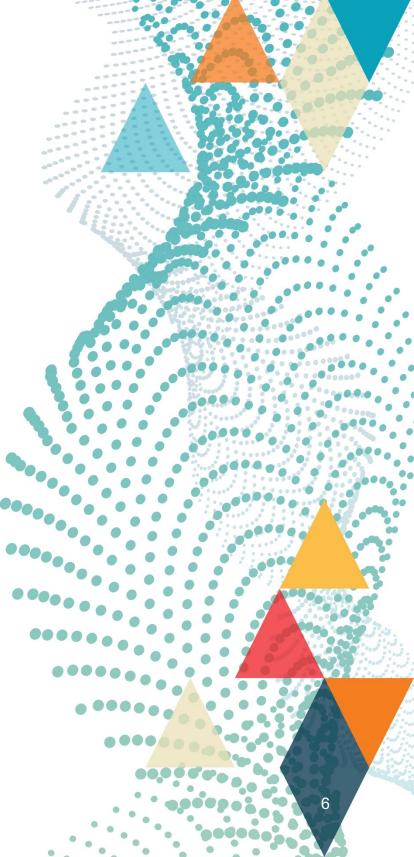




Figure 1. Isolated allograft anterolateral ligament (ALL) reconstruction of the right knee. A previous ACL reconstruction was performed with bone-patellar tendonbone (BTB) graft. The graft is prepared (A), the points for the extra-articular ALL reconstruction are marked (posterior and proximal from the lateral epicondyle and between Gerdy's tubercle and the fibular head) (B), the graft is fixed to the femur (C) and passes deep to the iliotibial band before entering the tibial tunnel (D).



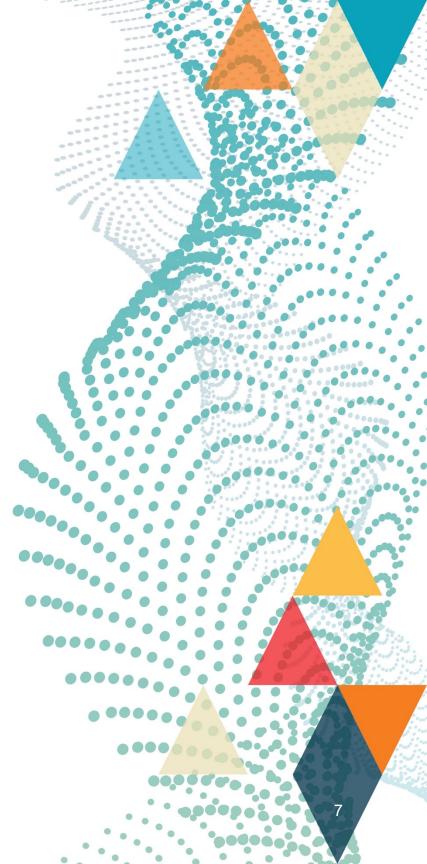




**Figure 2.** Isolated lateral extra-articular tenodesis on the left knee. A previous ACL reconstruction was performed with hamstrings graft. A strip of the iliotibial band is dissected for the modified Lemaire tenodesis.

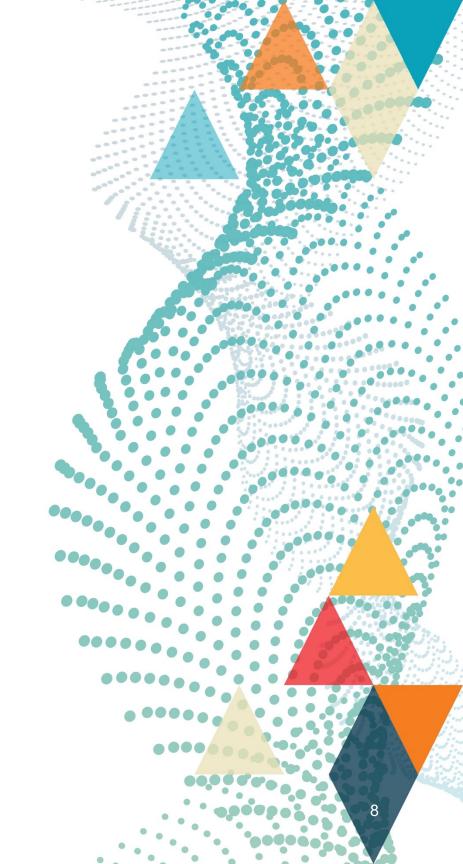






## **RESULTS**

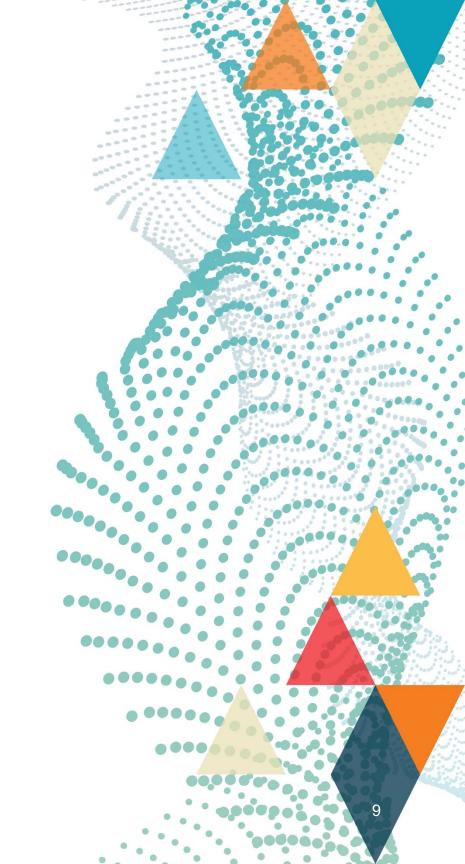
In total, twenty patients were included. The mean age was  $27.0 \pm 7.3$  years. The follow-up time after the extra-articular procedure was  $27.5 \pm 6.2$  months. The KT-1000 decreased from 3.0 mm  $\pm 0.7$  mm to 2 mm  $\pm 0.4$  mm (p = 0.00016). The pivot-shift improved from 100% of grade 1 positivity to 30% (6/20 patients) of grade 1 positivity (p < 0.0001).





#### **RESULTS**

The IKDC showed no difference (74.4  $\pm$  11.8 vs. 87.6  $\pm$  5.8; p = 0.087), but the percentage of patients who passed the PASS IKDC cutoff value increased from 45% (9/20) to 95% (19/20) (p= 0.0012). The Lysholm increased from 81.1  $\pm$  7.3 to 91.2  $\pm$  5.7 (p = 0.0001).







#### CONCLUSION

Patients submitted to isolated extra-articular procedure due to residual instability after ACL reconstruction showed improvement in physical examination (KT-1000 and pivot-shift) and subjective functional scales. This procedure can be considered for a specific population with minor instabilities and intact ACL graft, avoiding a complete ACL revision.



# REFERENCES





