



ISAKOS
CONGRESS
2023



Boston
Massachusetts
June 18–June 21

Simultaneous reconstruction of the anterior cruciate ligament & medial collateral ligament using semitendinosus & gracilis autografts: a minimum 2-year follow-up study.

Miten Rajendra Sheth

The Knee Clinic, Mumbai





ISAKOS
CONGRESS
2023



Boston
Massachusetts
June 18–June 21

Disclosures: None



Introduction

In cases of combined ACL and MCL injuries, non-operative treatment of the MCL lesion may lead to valgus instability, rotatory instability and/or failure of the reconstructed ACL.

Use of gracilis tendon in isolation for MCL reconstruction, has not been described.

Presenting a case series of **14 patients** who underwent simultaneous ACL-MCL reconstruction using semitendinosus (ACL) and gracilis (MCL) autografts, with a 2- to 5-year follow-up.



ISAKOS
CONGRESS
2023



Boston
Massachusetts
June 18–June 21



Methods

14 patients - simultaneous ACL-MCL reconstruction - Jan 2017 & June 2020.

Both acute (<6 weeks) and chronic injury patterns were addressed with the same surgical procedure and meniscal lesions were treated in the same setting.

Exclusions: Patients with additional ligament injuries, cartilage lesions and limb malalignment.

Procedure: Anatomic single bundle ACL reconstruction using a quadrupled semitendinosus autograft. Anatomic MCL reconstruction was done using a gracilis autograft. Graft fixed on femur and distal tibia with an adjustable loop and on proximal tibia with a suture anchor (SMCL) and a bio-interference screw (POL). 2 yr Follow up.

Results

- The postoperative medial knee opening (side-to-side difference) was significantly reduced to 2.7 ± 0.6 mm (range, 2.2 to 4.6 mm) compared with 8.0 ± 0.8 mm (range, 7.1 to 9 mm) preoperatively ($p < 0.01$).
- Preoperatively, a grade III anterior drawer was seen in all patients. 2 patients had a grade II drawer and none had grade III instability at the last follow-up.
- The mean IKDC subjective score improved overall from 48.4 ± 9.0 preoperatively to 85.7 ± 11.2 at the last follow-up ($p < 0.01$).
- Postoperative ROM ($0-128^* \pm 6^*$) was not significantly different from preoperative ROM ($0-134^* \pm 7^*$), excluding two patients.

One patient had hyperextension of 10^* pre-surgery, which she regained at 2 year follow-up. One had decrease in flexion range after surgery, preoperative ROM $0-125^*$ to postoperative ROM $0-95^*$ at last follow up.



ISAKOS
CONGRESS
2023



Boston
Massachusetts
June 18–June 21



Conclusion

In patients with combined ACL-MCL instability, **simultaneous reconstruction of the ACL and MCL, with hamstring autografts** can significantly improve the stability and functional outcomes, without compromising range of motion.



ISAKOS
CONGRESS
2023



Boston
Massachusetts
June 18–June 21

