ISAKOS CONGRESS 2025 | MUNICH GERMANY June 8–11

Facultad de Medicina
Clínica Alemana - Universidad del Desarrollo

Adductor Sling Versus Anatomical Technique in Medial Patellofemoral Ligament Reconstruction: A Retrospective Multicenter Study

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Faculty Disclosure Information

A.V.

- Arthrex, Inc: Paid presenter or speaker
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- Orthopaedic Journal of Sports Medicine: Editorial or governing board
- Revista Chilena de Ortopedia y Traumatología: Editorial or governing board
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R.C.

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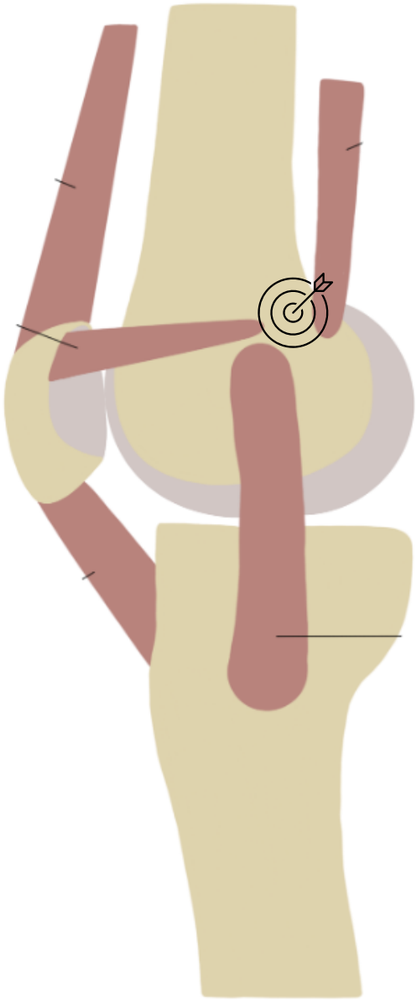
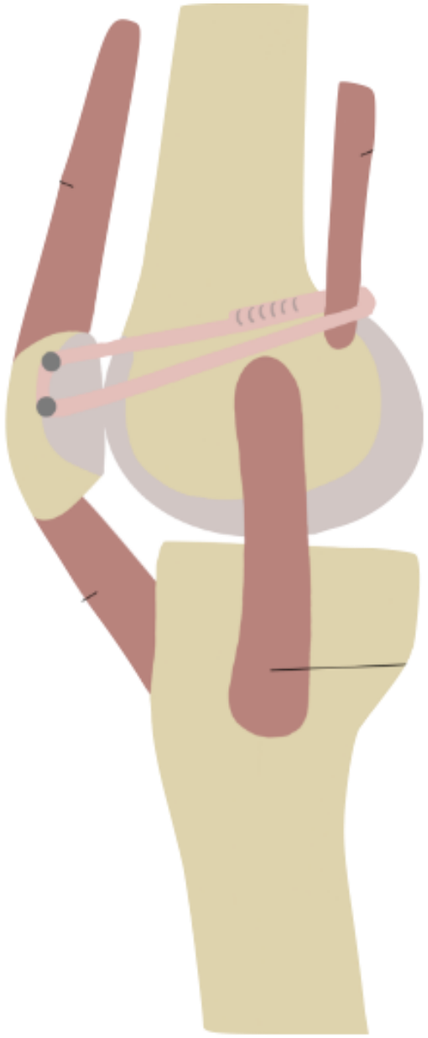
Introduction

Medial Patellofemoral Ligament Reconstruction (MPFL-R) techniques:

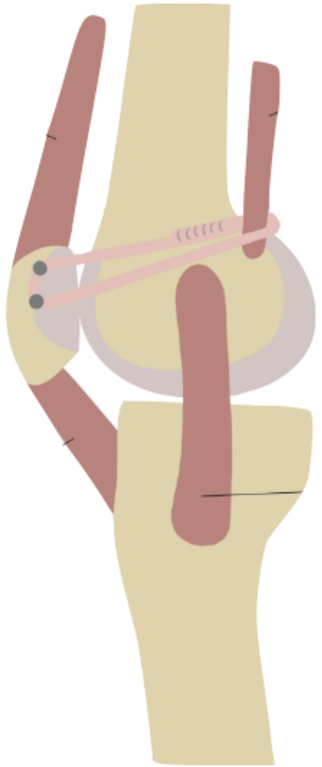


Anatomic Technique (AT) - Schöttle



Dynamic fixation - Adductor Sling (AS)

Introduction



AS supported by Dr Monllau et al.:

- **Not inferior than AT.**

- 4 studies
- Low “n”
- Pediatric

Knee Surg Sports Traumatol Arthrosc
DOI 10.1007/s00167-015-3934-8

KNEE

Clinical and radiological outcomes after a quasi-anatomical reconstruction of medial patellofemoral ligament with gracilis tendon autograft

Joan C. Monllau[1] · Àngel Masferrer-Pino[1] · Gerard Ginovart[3] · Daniel Pérez-Prieto[1] · Pablo E. Gelber[2] · Vicente Sanchis-Alfonso[4]

Knee Surgery, Sports Traumatology, Arthroscopy
https://doi.org/10.1007/s00167-020-06016-2

KNEE

Isolated reconstruction of medial patellofemoral ligament with an elastic femoral fixation leads to excellent clinical results

Vincent Marot[1] · Vicente Sanchis-Alfonso[2] · Simone Perelli[3] · Pablo E. Gelber[3,4] · Christian Javier Sánchez Rábago[5] · Gerard Ginovart[6] · Joan C. Monllau[3,7]

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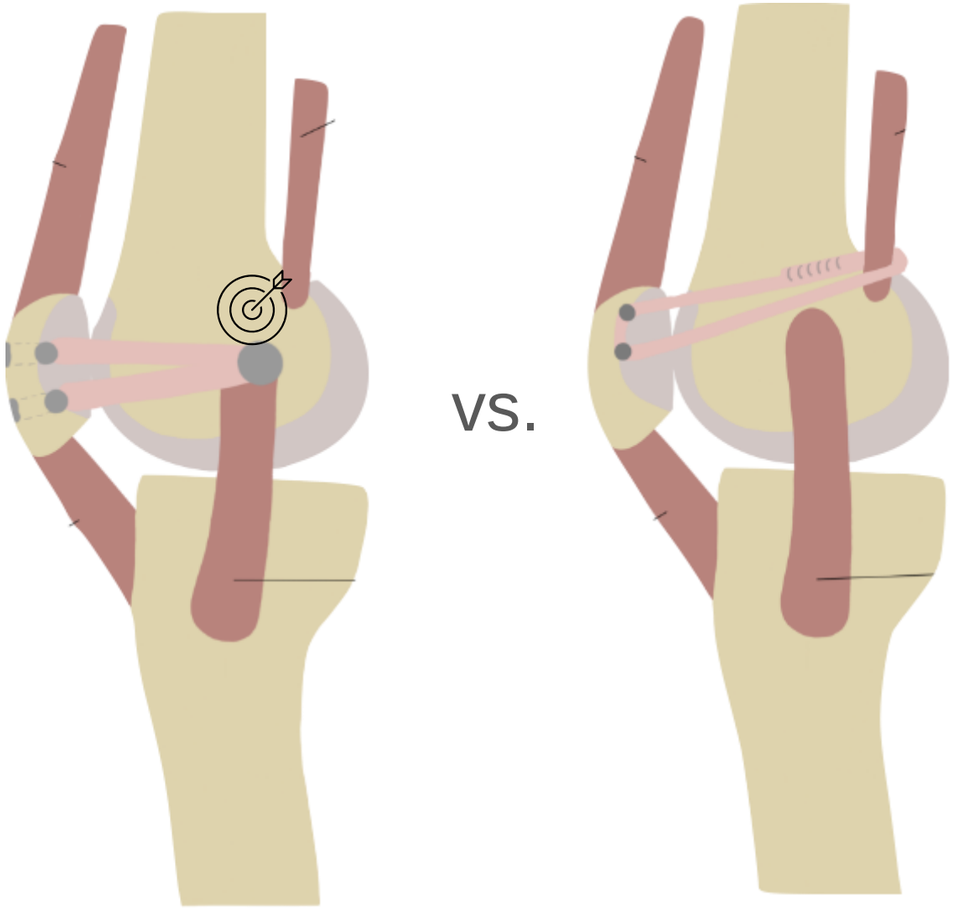
Combination of the medial patellofemoral ligament reconstruction with the quasi-anatomic technique, tibial tuberosity osteotomy, lateral retinaculum release and mosaicplasty produces satisfactory results for patients with patello-femoral instability. 2-Year follow-up

Luis Miguel Pacheco-Garcia [a], Lidia A. Martín-Domínguez [c,d], Simone Perelli [d,e], Juan Carlos Monllau [d,e], Francisco J. Simón-Sánchez [d], Jorge Gutiérrez-de la O [b,f], Luis Alberto Melo Messa [g], João Espregueira-Mendes [h,i], Karla V. Martínez-Guajardo [a], Rodolfo Morales-Avalos [a,b,*]

Objectives

Main: Compare functional outcomes of MPFL-R with AS and AT

Secondary: Evaluate the impact of anterior tibial tubercle osteotomy (ATT-O)



AT vs. SA

Methodology:

Inclusion criteria:

- Skelletally mature
- MPFL-R between 2019 – 2024 for recurrent patelofemoral instability
- Patellar fixation with two anchors

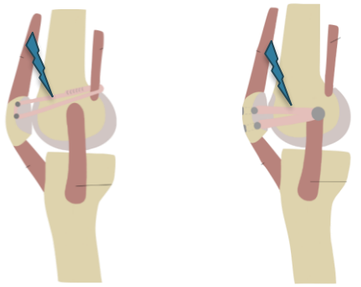
Exclusion criteria:

- Trochleoplasty
- Varus or derrotating osteotomies
- Follow up less than 6 months

OUTCOMES

Kujala Score

Instability
(Subjective)



Failure
(Objectively assessed or requiring re-intervention)

Subgroup of patients who also underwent ATT-O was reviewed.

Statistical analysis was conducted using the Mann–Whitney U and Fisher's tests ($p < 0.05$).

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Results

	Adductor Sling	Anatomical Technique	p - value
Number of patients	20	65	
Age	22.85	25.49	0.051
Sex	55%	61.54%	0.612
Follow-up (months)	18(6-25)	37(14-87)	**0.001**

	Adductor Sling (n)	Anatomical Technique (n)	p - value
Failure rate	0% (0)	1.5% (1)	p = 0.999

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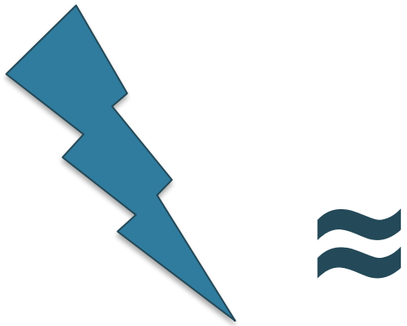
Results:

Failure (Objectively assessed or requiring re-intervention)



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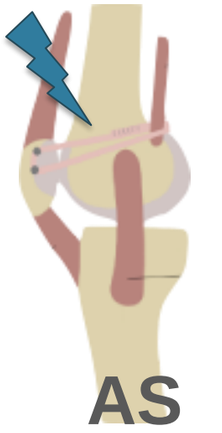
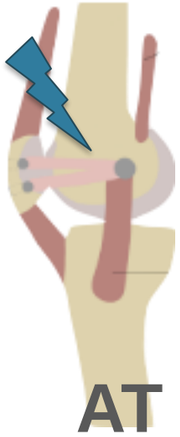


AS

n = 0



AT

n = 1 (1,5%)

p = 0,999

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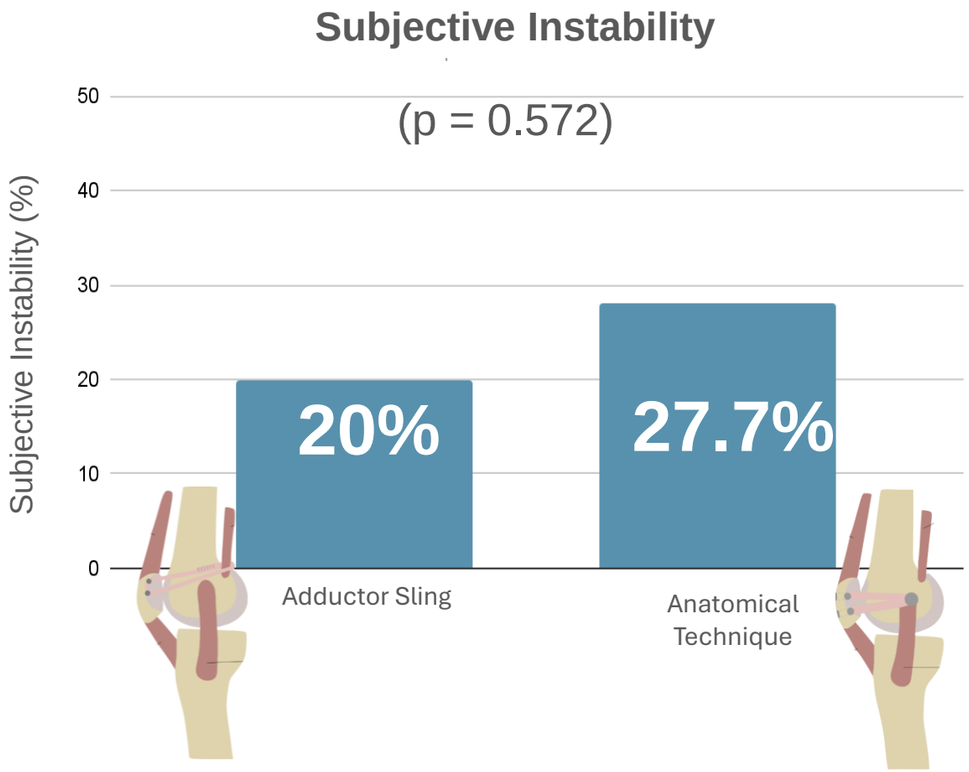
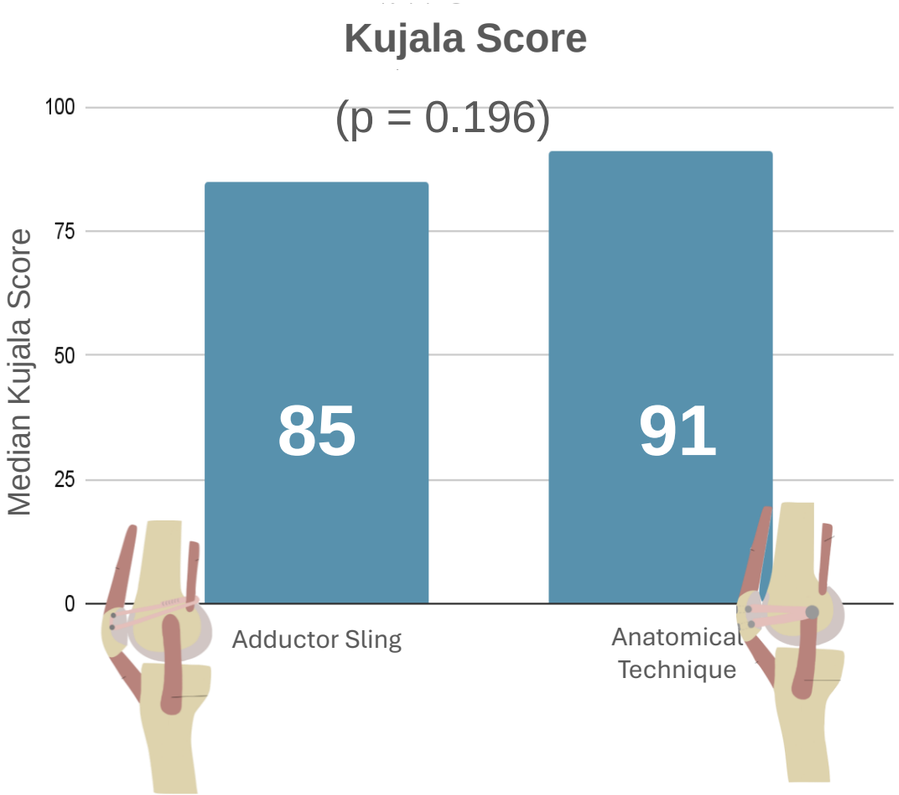
Results





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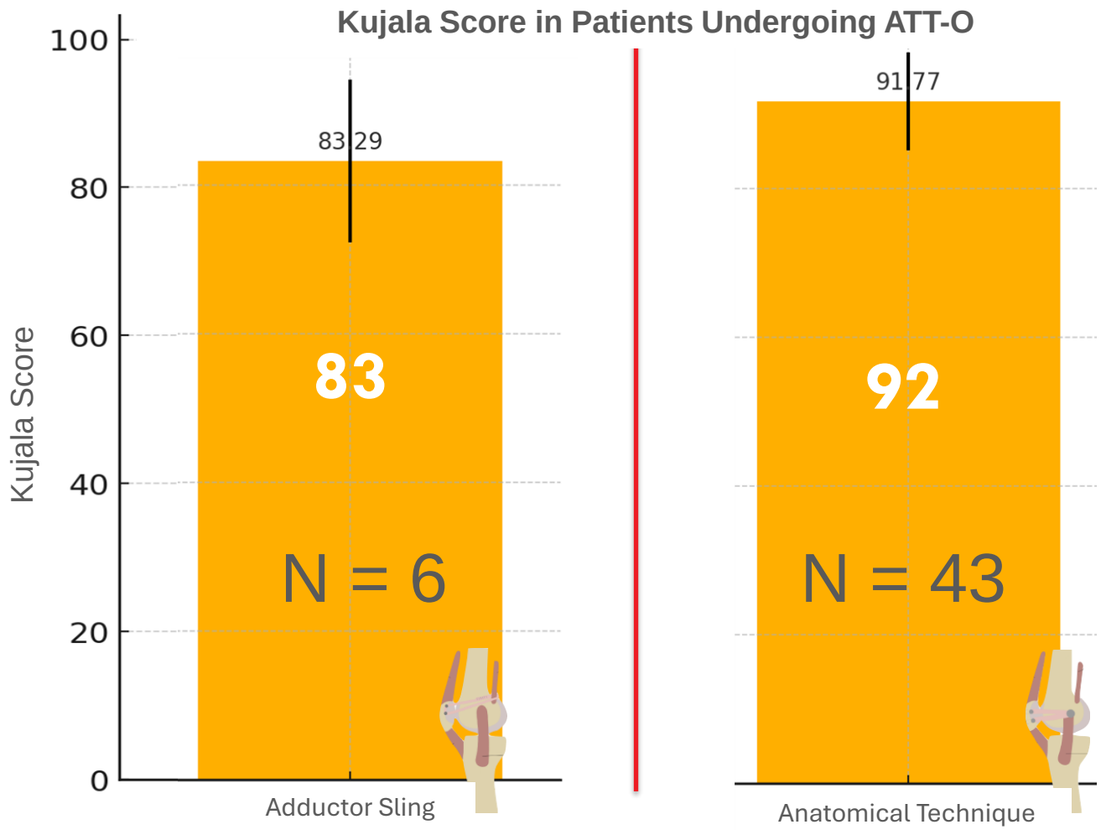
Results



Subgroup with OTT:

There was a difference in the **Kujala** Score favoring TA over SA (p = 0.0072).

Discussion

The Adductor Sling technique is safe and serves as a useful tool for centers with fewer resources.

There is no comparative evidence with the anatomical technique that evaluates outcomes when performing concomitant associated procedures.

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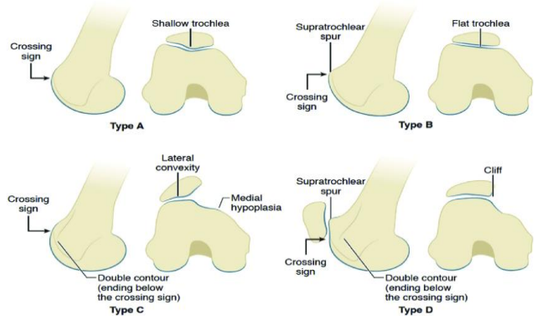
Limitations

Small sample size (especially in the ATT-O subgroup)

Differences in follow-up times: SA is a newer technique

Extrapolation: Procedures for trochlear dysplasia, valgus, femoral anteversion, and external tibial torsion where not studied



Conclusion

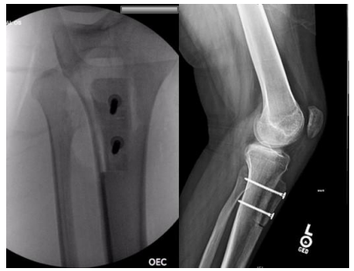
In this retrospective, multicenter study, no significant differences were found between the SA and TA techniques for MPFL-R regarding:

Instability

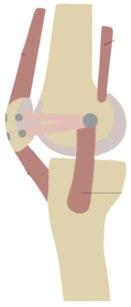
Kujala

Failure

There is significant differences in the subgroup of patients who underwent ATT-O in Kujala score favoring the AT.



Kujala



TA

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