



Low Failure Rates And Promising Outcomes In Primary Acl Repair: A Retrospective Cohort Study In A Carefully Selected Patient Population

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DISCLOSURE

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The authors declare no conflicts of interest

INTRODUCTION



Review Article

Anterior Cruciate Ligament Repair: Historical Perspective, Indications, Techniques, and Outcomes

MAJ Shawn M. Gee, MD
CPT David R. Peterson, MD
MAJ Liang Zhou, MD
Craig R. Bottoni, MD

AAOS 2020

REVIEW

Anterior cruciate ligament repair – past, present and future

Piyush Mahapatra* , Saman Horriat and Bobby S. Anand

2018

When they
compare:

Proximal repair / mid third / distal → **>50% failure**

Only proximal lesions → **2% - 15% failure**

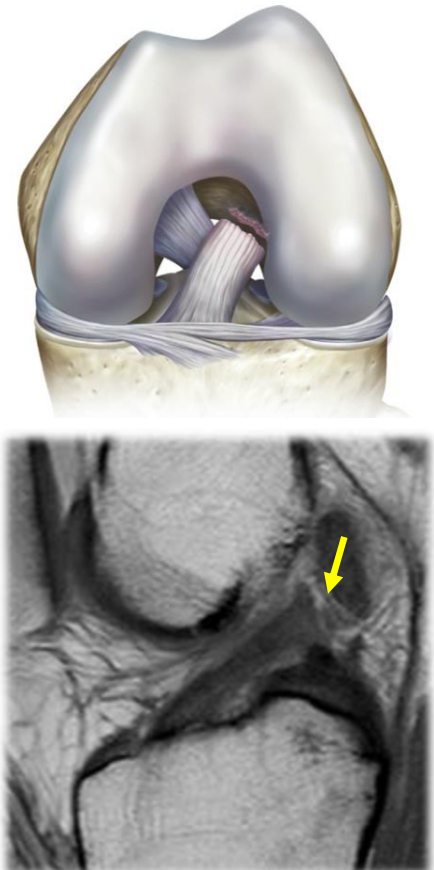
GOOD RESULTS when →

PROXIMAL LESIONS



OBJECTIVE

Main Objective: To evaluate the **failure rate** of a series of patients operated on for an **ACL repair**



MATERIAL Y METHODS

Retrospective cohort

2018 - 2023 (n=13)

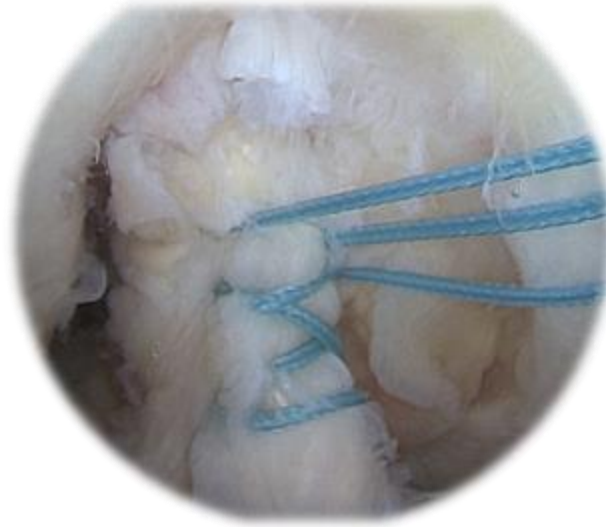
Minimum FU 2 years

Lesions Type I and II (Sherman)

We evaluated:

- Failure rate
- MRI: preop. & at last FU
- KT1000
- Lysholm & IKDC

SURGICAL TECHNIQUE



01

Stitches to the AM
& PL bundle



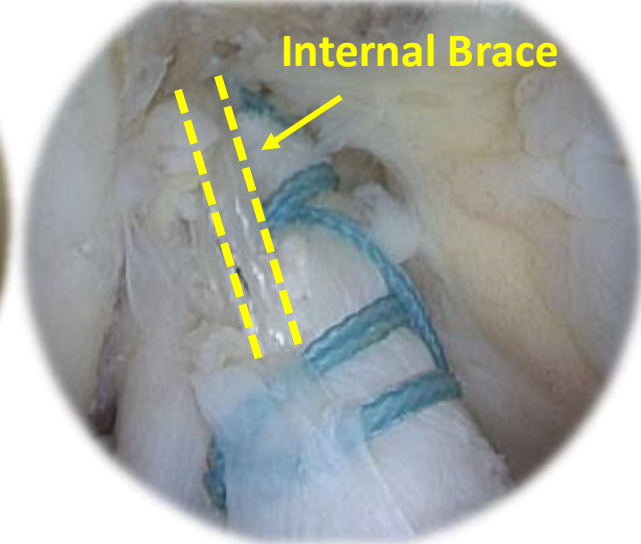
02

Femoral & tibial
tunnel (4.5 mm)



03

Passage and fixation of
the ACL button and
Internal Brace



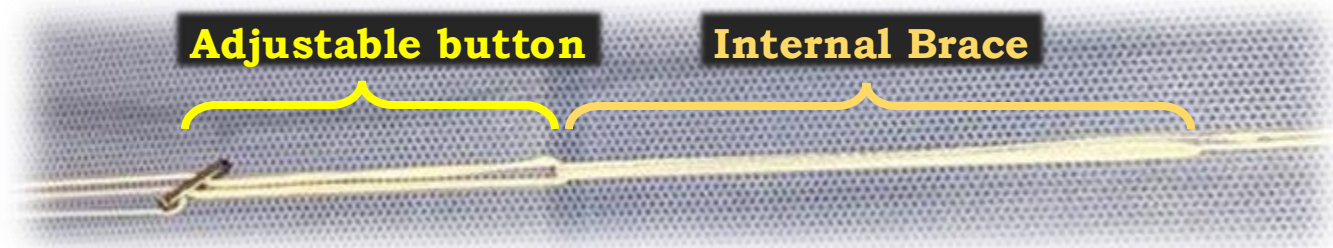
04

Final Result

Reparación del Ligamento Cruzado Anterior
con Utilización de Tutor Interno:
Técnica Quirúrgica y Revisión de la Literatura



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RESULTS

Patients operated on = 13

Mean age: 36 years (IQR 31 – 42)

> 2 years FU: **11 patients**

Mean FU: 35 months (SD 5.6)

Time lesion – surgery: 51 days (SD 9.2)

EVOLUTION

2 Re-rupture (19%)

Time-to-failure: 16 months / 20 months

Both returned to their sport (soccer).

Both had a TRAUMATIC cause

SPORTS

6 patients: Tegner 5

7 patients: Tegner 7

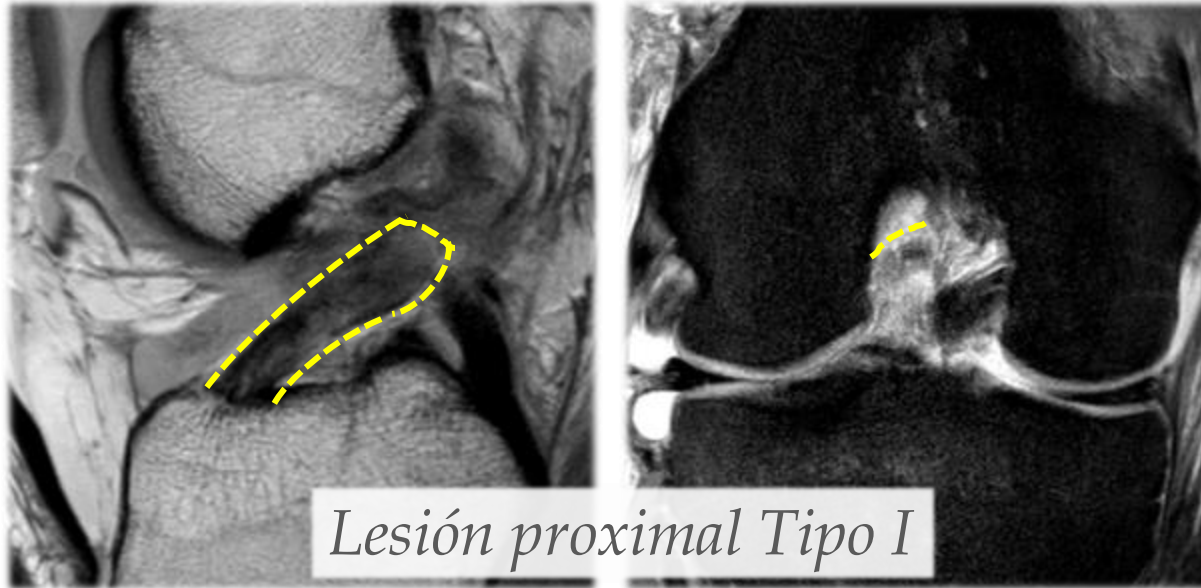
100% return-to-sports

KT-1000

(Evaluation at final FU > 2 años)

Mean PRE: 6 mm

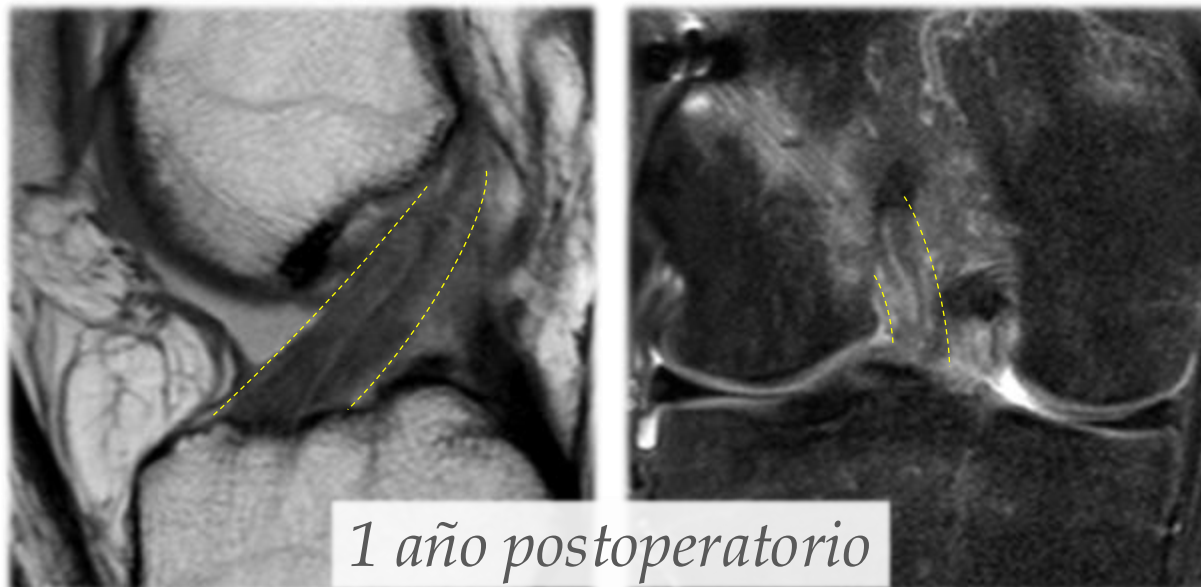
Mean POST: **1 mm**



MRI

80% had an MRI after 1 year FU

78% (IC95% 40-97%) homogeneity of the repaired ACL fibers



FUNCIONAL SCALES

Lysholm

Pre: 65 (RIC 63-70)

Post: 90 (RIC 87-95)

$P = <0.001$

IKDC

Pre: 45 (RIC 40-51)

Post: 90 (RIC 85-93)

$P = <0.001$

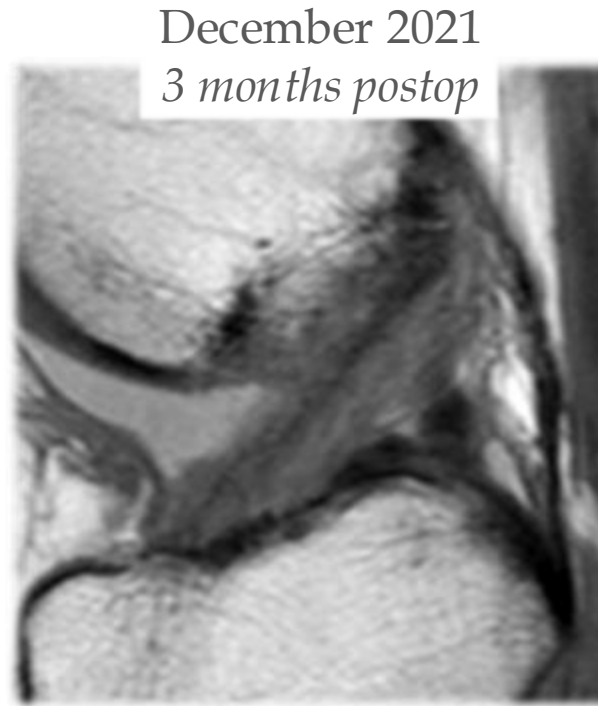
CLINICAL CASE



26 years.
Basquet.

Surger: Sep 2021

2 months postop.





CONCLUSION

ACL REPAIR Series

VERY specific indication

ONLY proximal Type I lesions (evaluate typo II)

- Ideal NO pivoting sports
- 81% success (2 traumátic re-ruptures)
- 100% Return-to-sports

IMPORTANT: *Patient selection*





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