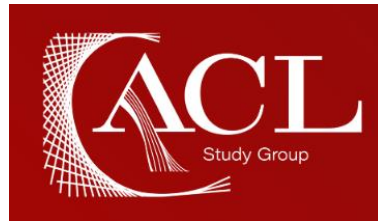


Radiographic incidence of knee osteoarthritis after ACL vs Combined ACL+ALL reconstruction

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DISCLOSURE

- Editorial Board OJSM
- Research support Ramsay & Arthrex
- Educational Consultant Arthrex
- Royalties Arthrex
- Stock Options AREAS



INTRODUCTION

2013

Claes et al

Helito et al

2015

Sonnery Cottet et al

Kittl et al

Musahl et al

2016

Schon et al

Anatomy of the anterolateral ligament of the knee, [Journal of anatomy](#)

Anatomy and histology of the knee anterolateral ligament, [OJSM](#)

Outcome of a combined anterior cruciate ligament and anterolateral ligament reconstruction Technique With a minimum 2 year follow-up, [AJSM](#)

Anterolateral ligament of the knee, fact or fiction? [KSSTA](#)

The role of the anterolateral structures and the ACL in controlling laxity of the intact and ACL-deficient knee, [AJSM](#)

Anatomic anterolateral ligament reconstruction of the knee leads to overconstraint at any fixation angle, [AJSM](#)

INTRODUCTION

- LEAP: abandoned in the 1980s

**AOSSM
Snowmass**

- ALL or Lemaire: reduces the risk of ACL re-rupture by up to 50%

Stability Group

SANTI Group

**2013
ALL**

- But... Overconstraint? Arthrosis?

**What
Now?**

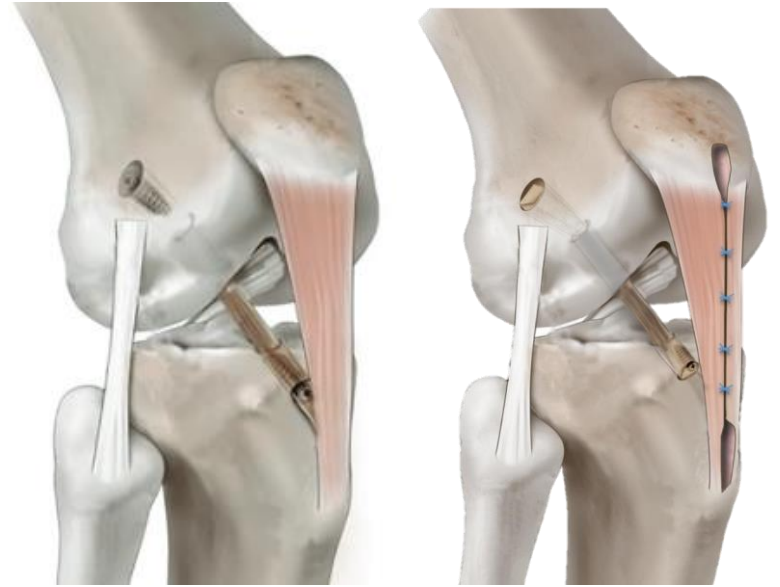
OBJECTIVE

Comparing the prevalence of knee osteoarthritis
10 years after ACL reconstruction

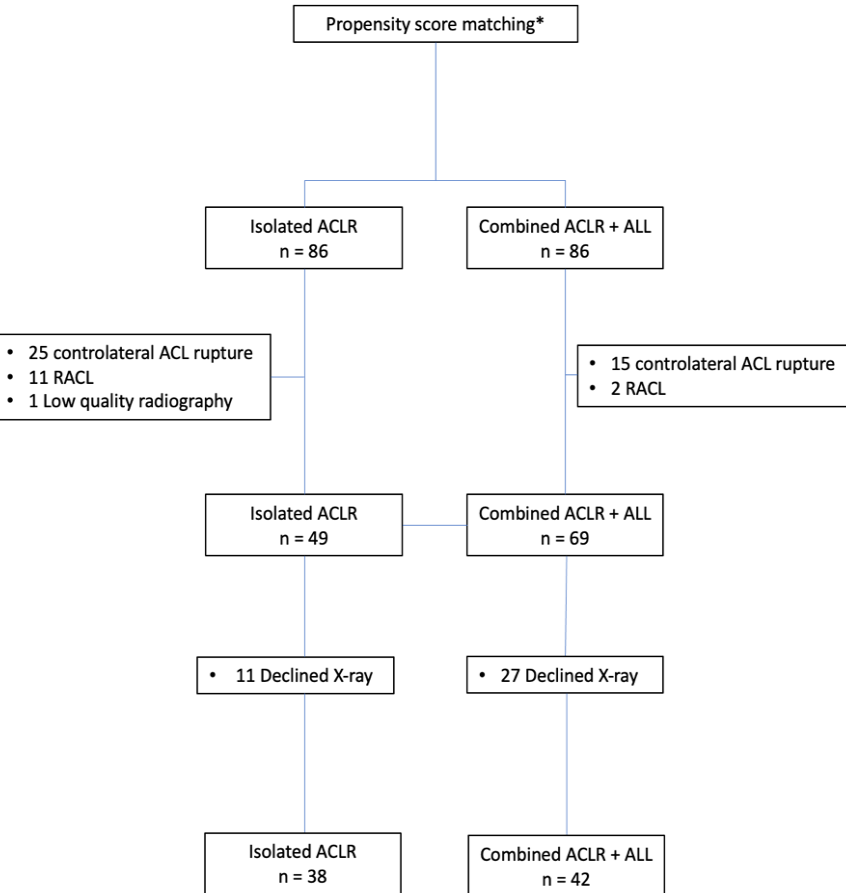
ACL + ALL



Isolated ACL (HT or BPTB)



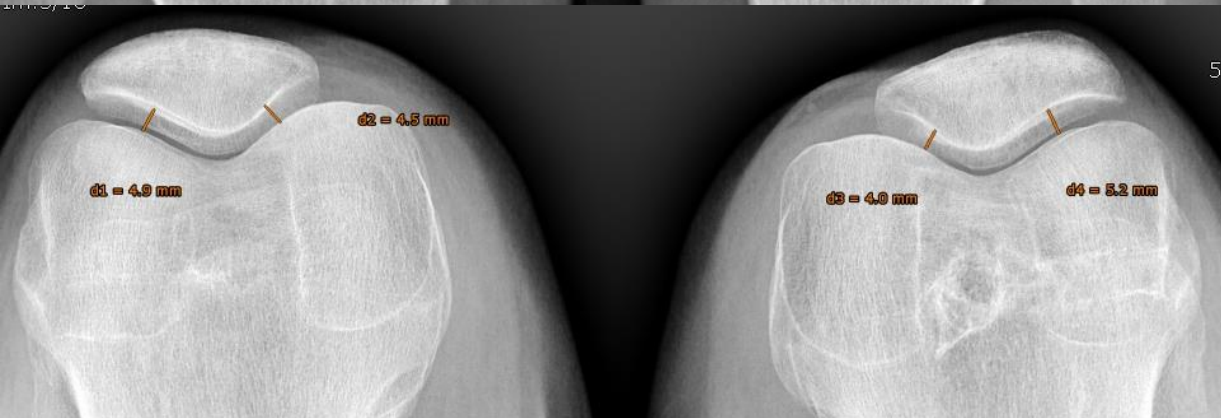
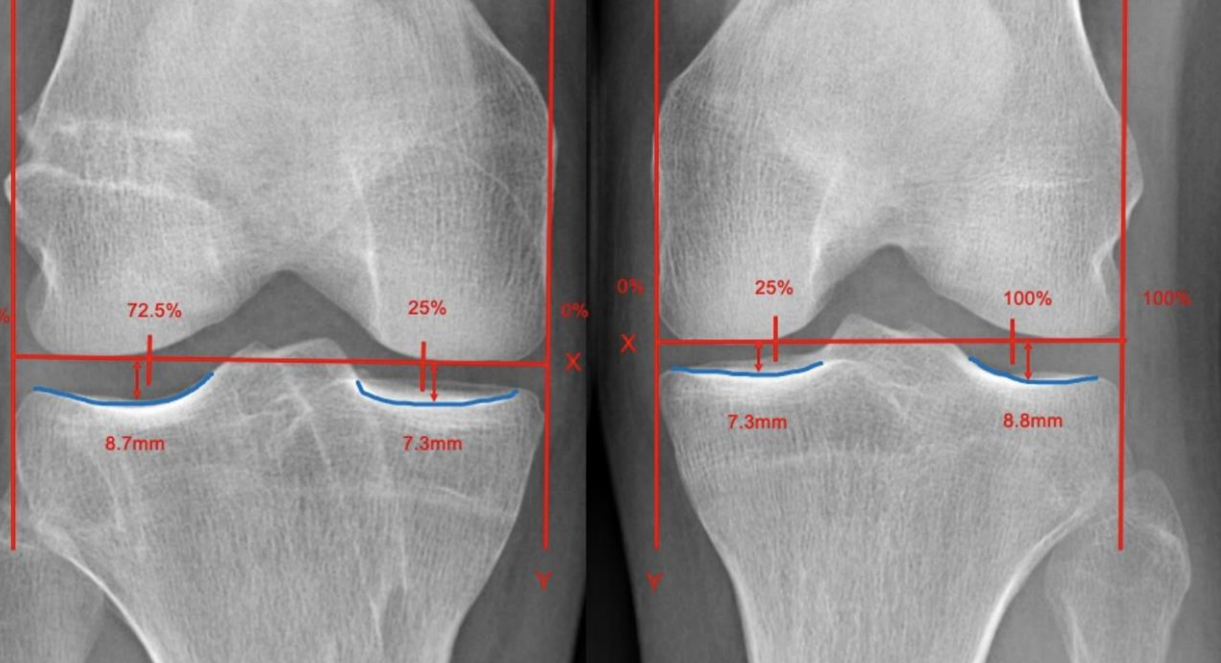
METHODS



Propensity score :

- Age
- Meniscal status
- Cartilage status
- Time between accident and surgery
- BMI
- Pre-op laxity
- Sport pivot/contact

METHODS



SURFACE FIT METHOD

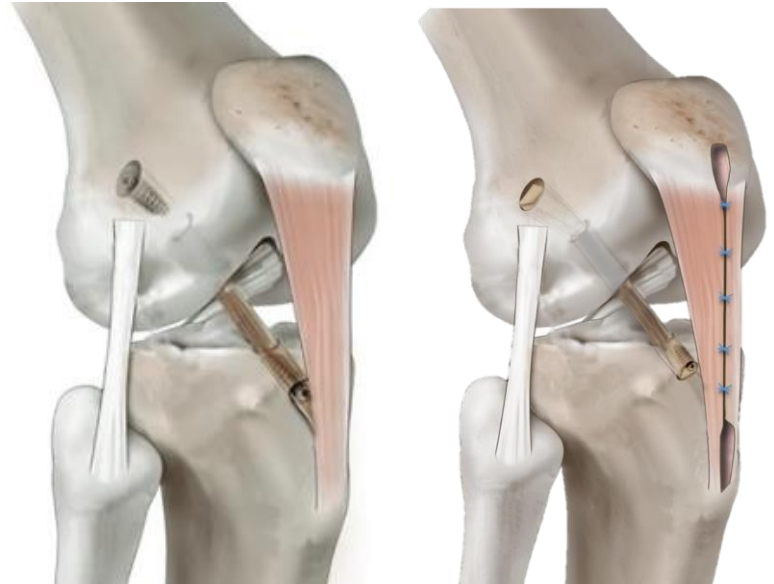
RESULTS

42 ACL + ALL



FU 8.6 years

38 Isolated ACL (HT or BPTB)



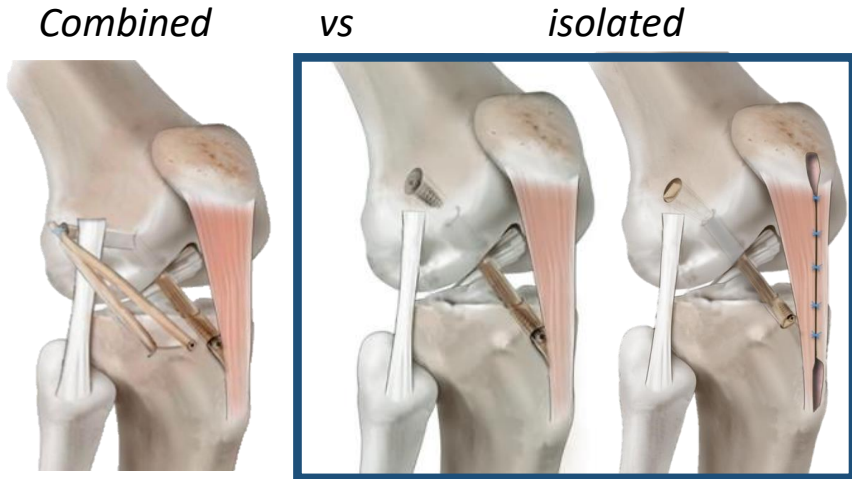
Radiographic Incidence of Knee Osteoarthritis After Isolated ACL Reconstruction Versus Combined ACL and ALL Reconstruction:

A Prospective Matched Study From the SANTI Study Group

Shatrov et al., *AJSM* 2023

RESULTS

Combined vs Isolated = no difference in the tibio-femoral joint



Radiographic Incidence of Knee Osteoarthritis After Isolated ACL Reconstruction Versus Combined ACL and ALL Reconstruction:

A Prospective Matched Study From the SANTI Study Group

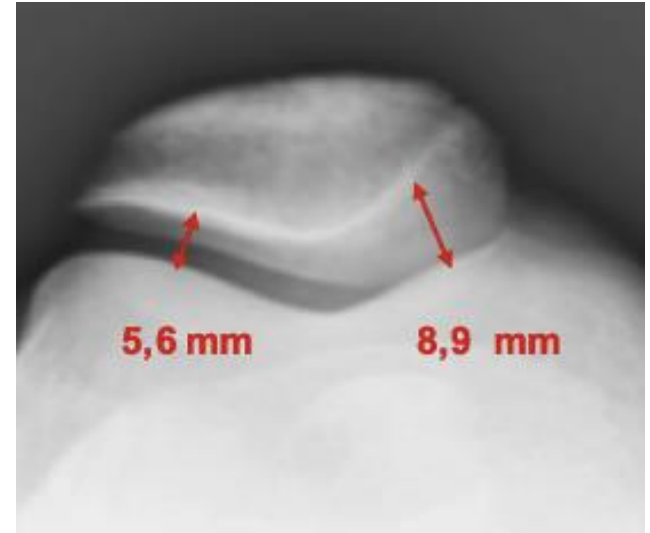
Shatrov et al., **AJSM** 2023

RESULTS

Isolated BPTB = medial patello femoral compartement narrow



OR = **4.8** [1.4-19], $P=.0179$



Radiographic Incidence of Knee Osteoarthritis After Isolated ACL Reconstruction Versus Combined ACL and ALL Reconstruction:

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Shatrov et al., *AJSM* 2023

RESULTS

A lesion of the lateral meniscus increased the risk of lateral compartment narrowing



OR = **4.9** [1.5-19.4], $P=.0123$



Radiographic Incidence of Knee Osteoarthritis After Isolated ACL Reconstruction Versus Combined ACL and ALL Reconstruction:

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Shatrov et al., **AJSM** 2023

CONCLUSION

ALL: does not increase the risk of osteoarthritis!

Lateral meniscectomy: lateral TF joint narrow **x5**

Isolated BPTB: reduced medial PF joint space **x5**



Radiographic Incidence of Knee Osteoarthritis After Isolated ACL Reconstruction Versus Combined ACL and ALL Reconstruction:

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Shatrov et al., *AJSM* 2023

