Tibial tunnel evaluation in ACL reconstruction with and without remnant preservation. Are we in the correct place?

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SYNTHETIC GRAFT FAILED DUE TO LACK OF INTEGRATION
IN THE ACL REMNANT

VASCULARIZATION

MECHANORECEPTORS

Dhillon MS, Differences among mechanoreceptors in healthy and injured anterior cruciate ligaments and their clinical importance. Muscles Ligaments Tendons J. 2012
BIOLOGY - CELLS PRESERVATION

STRENGTH  →  ACL GRAFT

“Scaffold”
FEMORAL OUT-IN TECHNIQUE

NO ACL REMNANT DAMAGE DURING FEMORAL TUNNEL DRILLING
TIBIA TUNNEL

"SAMBBBA" TECHNIQUE

Anterior Cruciate Ligament Reconstruction and Preservation: The Single—Anteromedial Bundle Biological Augmentation (SAMBBBA) Technique

Bertrand Sonnery-Cottet
7 WEEKS POST OP

GOOD INTEGRATION GRAFT AND REMNANT
OBJECTIVE

- COMPARE TIBIAL TUNNEL POSITION

WITHOUT X WITH ACL REMNANT
MATERIAL AND METHODS

- 2 GROUP OF 9 PATIENTS
- 9 WITH ACL REMNANT AND 9 WITHOUT
- REMNANT COVER ALL TIBIA FOOTPRINT
- LCA - OUT - IN
- HAMSTRING ATTACHED TO TIBIA
- 3D CT (60 DAYS AFTER SURGERY)
3D CT TIBIAL TUNNEL MEASUREMENT

at/AP
ANTERO-POSTERIOR

AP

ML

mt/ML
MEDIAL-LATERAL
RESULTS

WITH REMNANT

\[
\text{at/AP} = 36,92\% \, (+-3,5\%)
\]
\[
\text{mt/ML} = 47,27\% \, (+-2,8\%)
\]

WITHOUT REMNANT

\[
\text{at/AP} = 34,13\% \, (+-2,1\%)
\]
\[
\text{mt/ML} = 47,42\% \, (+-2,4\%)
\]

t-student

no difference

ANTERO-POSTERIOR

MEDIAL-LATERAL
ACL RECONSTRUCTION WITH REMNANT PRESERVATION

Same tibial tunnel position with and without remnant

Keep proprioception - collagen - vascularization
CONCLUSION

ACL RECONSTRUCTION WITH REMNANT PRESERVATION

CORRECT TIBIAL TUNNEL POSITION

CORRECT BIOMECANICS

KEEP ORIGINAL BIOLOGY | MECHANORECEPTORS

VASCULARIZATION

THANK YOU

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