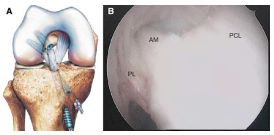
Double-bundle versus single-bundle anterior cruciate ligament reconstruction: a prospective, randomize clinical study
Timo Jarvela 2007 KSSTA
Finland



Pivot Shift DB <SB (P = 0,02)
35 DB 30 SB

Hofbauer KSSTA 2010

- Rotational and translational laxity after computer-navigated
- single- and double-bundle anterior cruciate ligament
- reconstruction
- M. Hofbauer • P. Valentin • R. Kdolsky •
- R. C. Ostermann • A. Graf • M. Figl •
- S. Aldrian

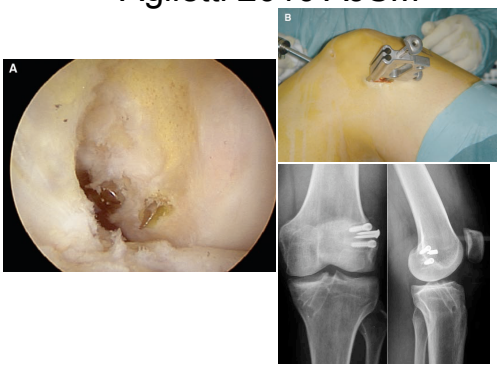
Hoffbauer Vienna KSSTA 2010

- 55 patients , minimum 24 months FU
- IR postoperative DB > SB p= 0.029
- AP translation NS
- Pivot shift (2 yrs) 1 + DB > SB p = 0.020

Aglietti 2010 AJSM

- Level 1
- 70 patients
- Failures DB 1 SB 3
- Pivot 1+ DB 14 % SB 26 % P = 0.08
- KT 1000 DB 1,2 mm SB 2.1 P =0.03

Aglietti 2010 AJSM



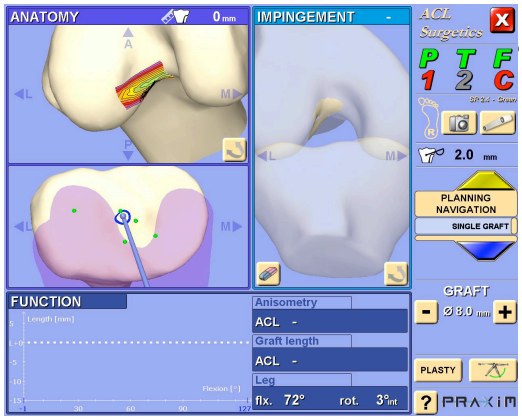
Sastre 2010 Barcelona KSSTA

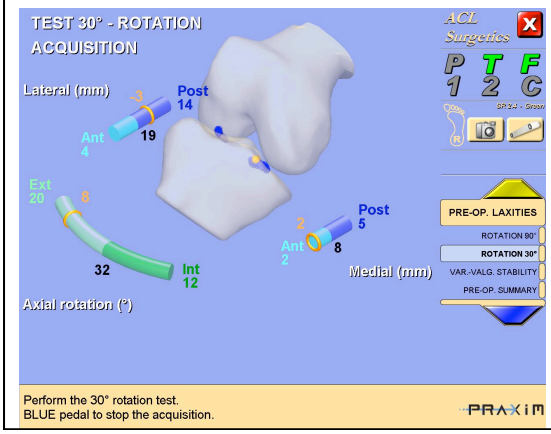
- 40 patients
- Hamstring SB vs DB (SB oblique through AM portal
- Evaluation by IKDC (current practice)
- No differences between groups
  - (KT 1000, Pivot Shift , anterior laxity)

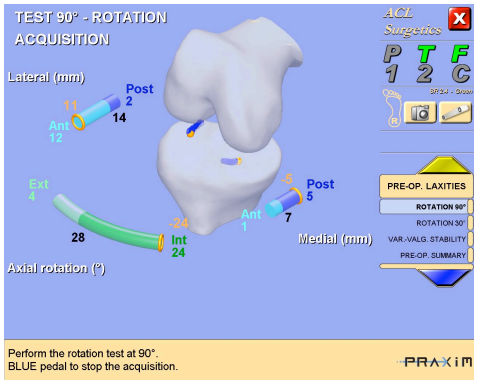
Ho Arthroscopy 2009

- Cadaver specimen n = 16
- Equal restoration of translation and rotation

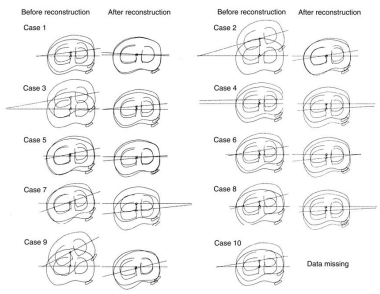
Equal Kinematics Between Central Anatomic Single-Bundle and Double-Bundle Anterior Cruciate Ligament Reconstructions
Jason Y. Ho, M.D., Aaron Gardiner, M.D., Vivek Shah, M.D., and Mark E. Steiner, M.D.







Rotational correction Amis 2002



Conclusion

- Difficult to objectively measure and explain improvements
- Current results are not optimal
- Measurement tools NEEDED