



**3rd Advanced Course on
Knee Surgery**

January 17th - 22nd 2010

Future directions
CAOS in ACL Reconstruction

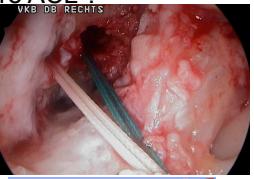


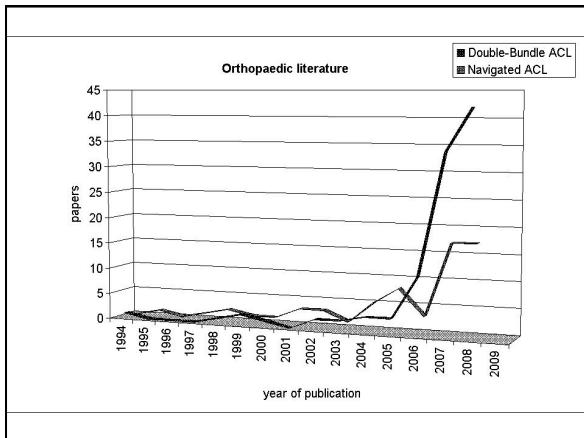
ICON



Future ACL ?

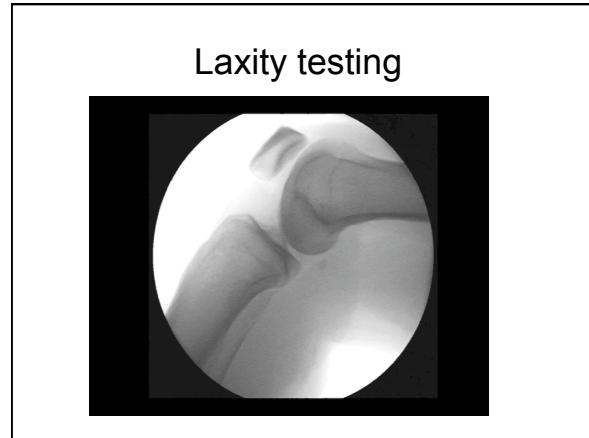
- DB reconstruction
- Computer navigation





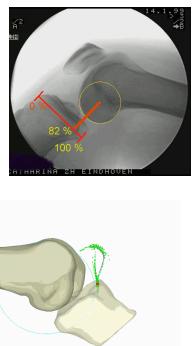
Current Concepts (accepted)

- Computer assisted anterior cruciate ligament reconstruction.
- An evidence based approach of the first fifteen years.
- S.Zaffagnini, TVS.Klos, S.Bignozzi
- Laboratorio di Biomeccanica,
- Instituto Ortopedico Rizzoli,
- Bologna, Italy
- ICONE orthopaedics & sports traumatology, Nuenen, Netherlands

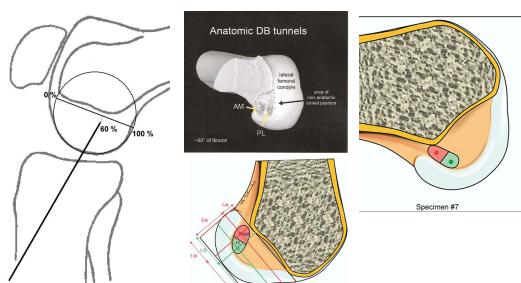



CAOS generations

- 1. CAS Drill hole placement
- 2. Quality control (laxity pre-post-contralat)
- 3. Kinematics (Pivot Shift , collateral damage)
- 4. A la carte reconstruction >
 - ACL one / double
 - Extra articular
 - Medial collateral
 - Combined ACL / Osteotomy



Anatomic Placement DB



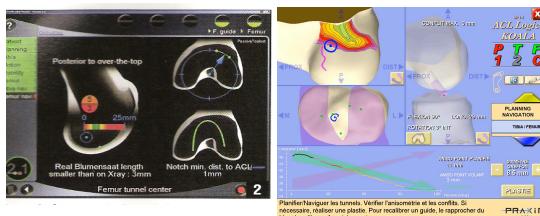
DB /Transtibial

- PL
- AM
- PTB
- Ham



• Courtesy J Eichhorn De

Femoral placement



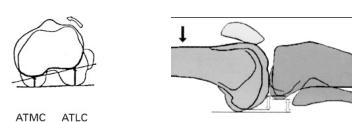
Laxity (2)

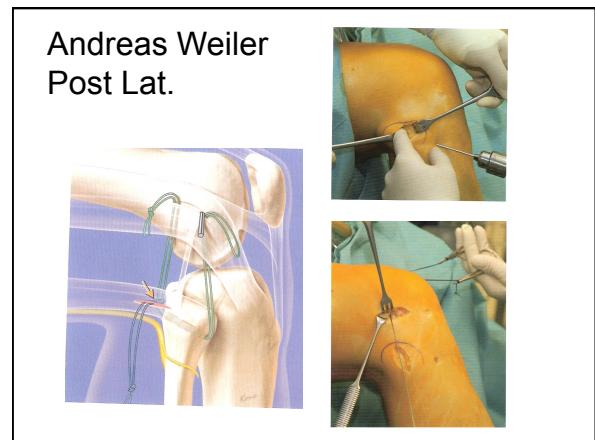
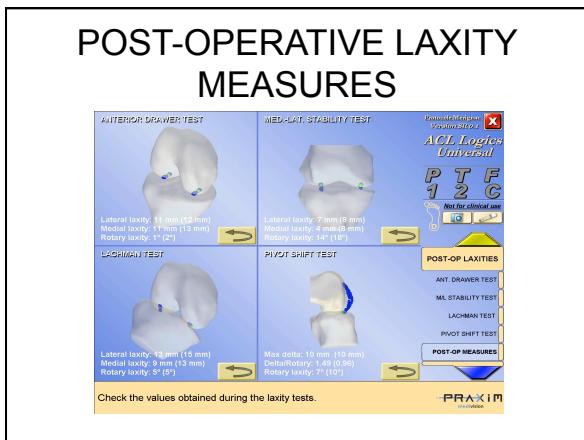
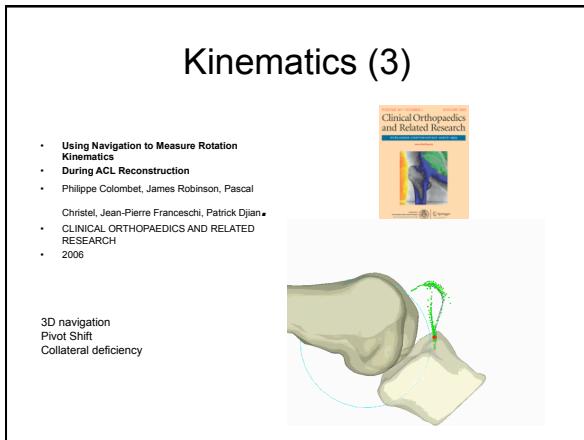
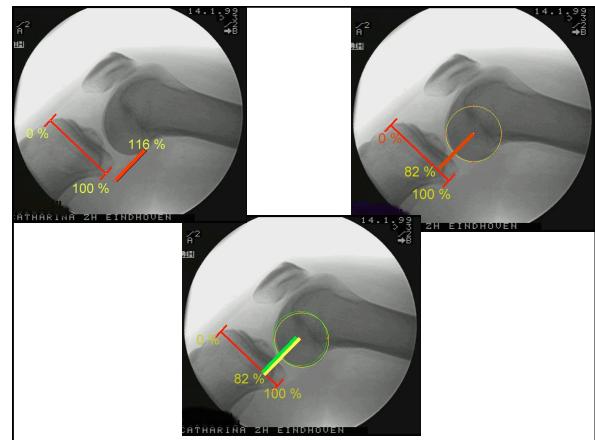
Stress Radiographical Measurements of Post-Traumatic Knee Instability: A Clinical Study
Klaus Jacobsen ,
Copenhagen, Denmark

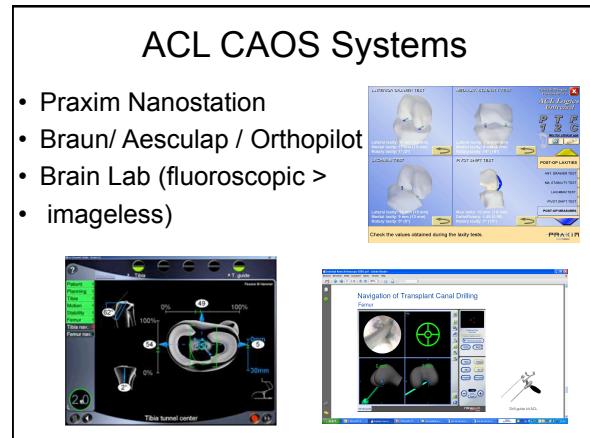
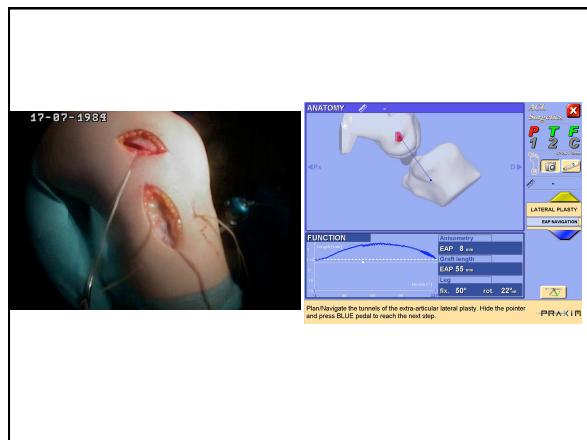


Lerat & Moyen Lyon France

Knee instability after injury to the anterior cruciate ligament
QUANTIFICATION OF THE LACHMAN TEST
J. L. Lerat, B. L. Moyen, F. Cladière, J. L. Besse, H. Abidi







Future technical development mini chip

- GPS-enabled chip could make it possible for individuals to be physically located by latitude, longitude, altitude, speed, and direction of movement.
- A medical devices company, Calypso Medical, has developed a technology that it calls "GPS for the body", which is implanted into prostate cancer patients to help monitor the position of the prostate during radiation therapy.

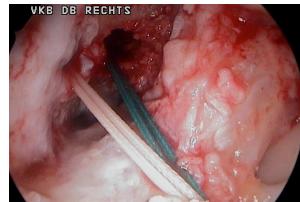


Conclusion

- Computer assisted ACL reconstruction
- Gen 1 :Improved registration
- Gen 2 : Laxity quality control :

Conclusion 2

- Gen 3 Kinematics > improving techniques
 - DB > SB restoring rotation
- Gen 4 A la Carte > individual reconstruction :
 - MCL/ med
 - SB vs DB



2010 congres

