

Place of ACL reconstruction in UKA surgery

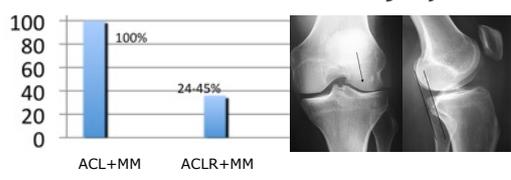
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Natural evolution of ACL injury



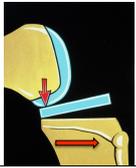
Meniscus status	Percentage
ACL+MM	100%
ACLR+MM	24.45%

ARTHROSIS
Meniscus status
Young patients



UKA and ACL deficiency

- Early/Mid-term failure rates ?
- 17 to 86%
- Accelerated wear and loosening ? Tibial component
- Both mobile and fixed-bearing UKA designs
- Instability ?

- Argenson, Parratte Clin Orthop 2006
- Deschamps Rev Chir Orthop 1987
- Goodfellow JW J Bone Joint Surg 1988
- ...



Place of ACLR around UKA??

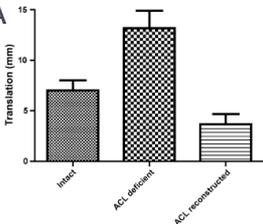
- Before?
- Same surgical procedure?
- Sequential?





Litt: ACL and UKA

- Theoretically possible!!
- Combined ACLR and UKA restored IN VIVO adequate kinematics



Condition	Translation (mm)
Intact	~7
ACL deficient	~13
ACL reconstructed	~4

Pearle A
Knee Surg Sports Traumatol Arthrosc 2011

Pandit H
Knee 2008



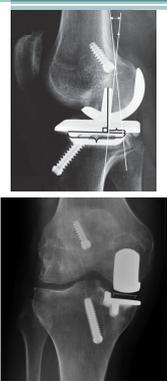
Outcome of combined unicompartmental knee replacement and combined or sequential anterior cruciate ligament reconstruction

A STUDY OF 52 CASES WITH MEAN FOLLOW-UP OF FIVE YEARS
Weston-Simons, Oxford Team
J Bone Joint Surg Br 2012

- 33 simultaneous
- 18 staged
- 93% survival rate
- No difference BPTB Vs Hamstrings
- No difference > and < 50 years old



ACL and UKA



- Tunnel placement sub-optimal
- HT=BPTB
- Strong fixation
- Tibial tunnel vertical to limit stress on the medial side (medial UKA)
- Femoral tunnel vertical if lateral UKA

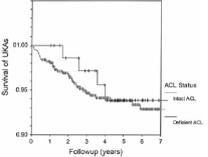


UKA without ACLR

Clin Orthop Relat Res
DOI 10.1007/s11999-013-2982-y
SYMPOSIUM: 2013 KNEE SOCIETY PROCEEDINGS

Unicondylar Arthroplasty in Knees With Deficient Anterior Cruciate Ligaments

Gerard A. Engh MD, Deborah J. Ammeen BS



- UKA alone with intraop diag of ACL insufficiency
- No functional instability
- No difference survivorship
- 6 years
- Fixed Bearing tibial component




UKA Without ACLR

Knee Surg Sports Traumatol Arthrosc (2013) 21:2480-2486
DOI 10.1007/s00167-012-2101-8
KNEE

No difference in survivorship after unicompartmental knee arthroplasty with or without an intact anterior cruciate ligament

Adam Boissonnault · Hemant Pandit · Elise Pegg · Cathy Jenkins · Harinderjit Singh Gill · Christopher A. F. Dodd · Christopher L. M. H. Gibbons · David W. Murray

- Oxford
- 5 years FU
- No difference functional scores nor reop rates
- Diag of ACL insufficiency= peroperatively
- No preop functional instability
- Assessment of ACL quality??




Conclusions:

- Patient selection++
- Age
- Functional demand
- Frontal laxity- translation
- And AP laxity
- If AP laxity >10mm: caution
- Same indications for a standard UNI




UKA AND ACL Combined or staged procedure: possible!!

- Patient selection+++ Young age
- If Pain and instability: UKA and ACLR
- If pain and significant laxity: UKA and ACLR
- No reasonable place for isolated UKA if instability or severe laxity
- Define place for isolated UKA with mild laxity, or old ACLR




If combined procedure:

- HT=BPTB
- Medial compartment: mobile=fixed bearing tibial plateau
- Lateral compartment: fixed
- Consider HTO+ACL first



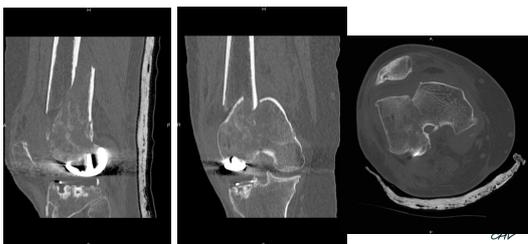
Clinical case
Mrs R

- 40 years old
- 1990 ACL rupture: Lemaire (lat extraarticular tenodesis)+Lat meniscectomy
- Pain for 5 years
- Lachman++
- Normal ROM
- Medical treatment, hyaluronic acid, cast... Failure



6 years after...

- Fall from stairs



?

- ACL OK
- no loosening



