

# 10<sup>th</sup> Advanced Course on Knee Surgery

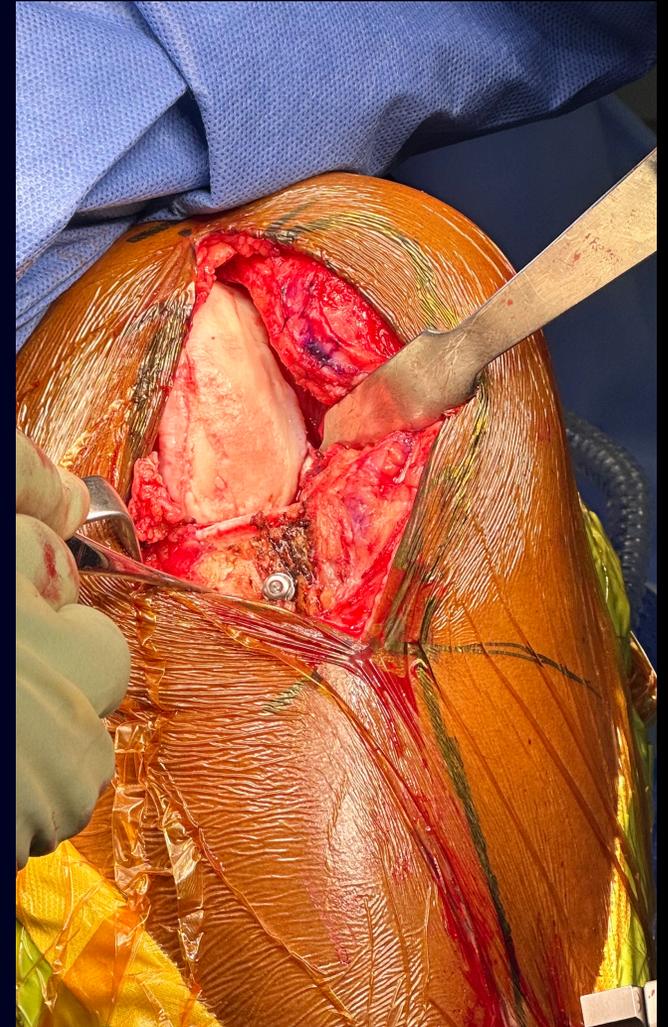
## Lateral UKA

*My best patients*

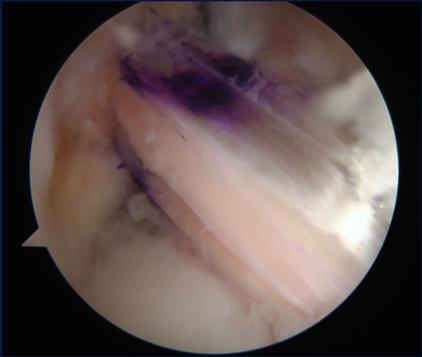
Sam Oussedik

Consultant Orthopaedic Surgeon, Head of Dept, UCLH, London, UK

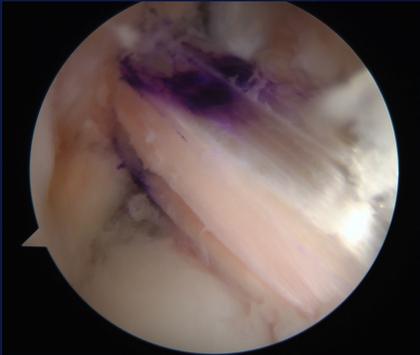
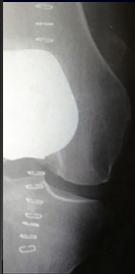
Hon Assoc Prof, UCL



# Knee Surgery



# Knee Surgery



# Lateral UKA

## Indications:

- Isolated lateral disease
- Correctable deformity
- Competent MCL/ACL
- (More functionally demanding patient)



# Lateral UKA

74 yo female

Previous bad experience  
following Left THR elsewhere

Isolated left lateral knee pain



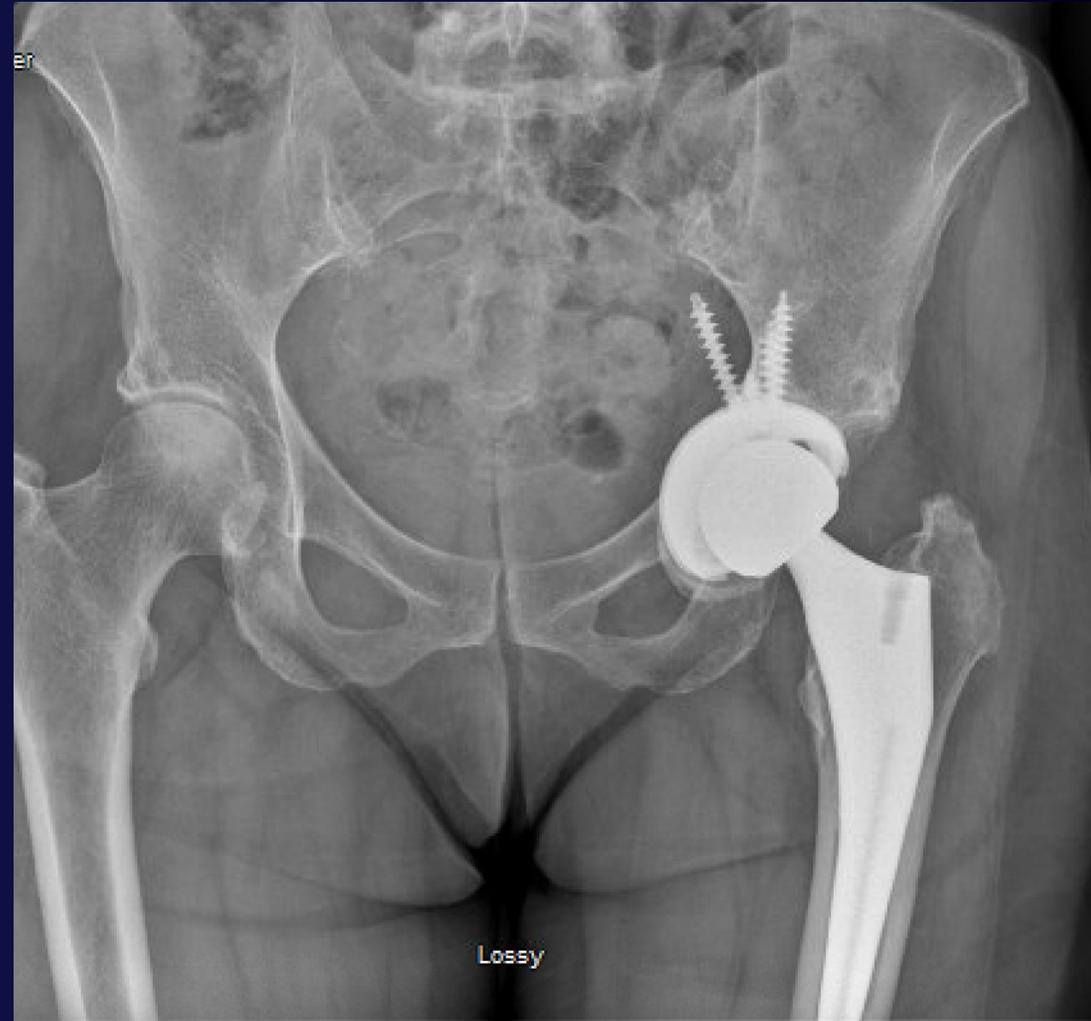
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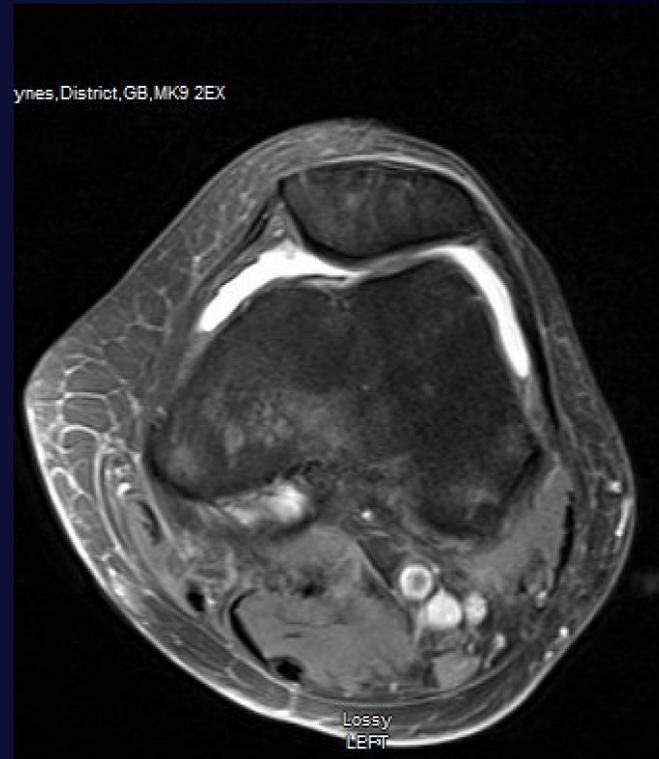
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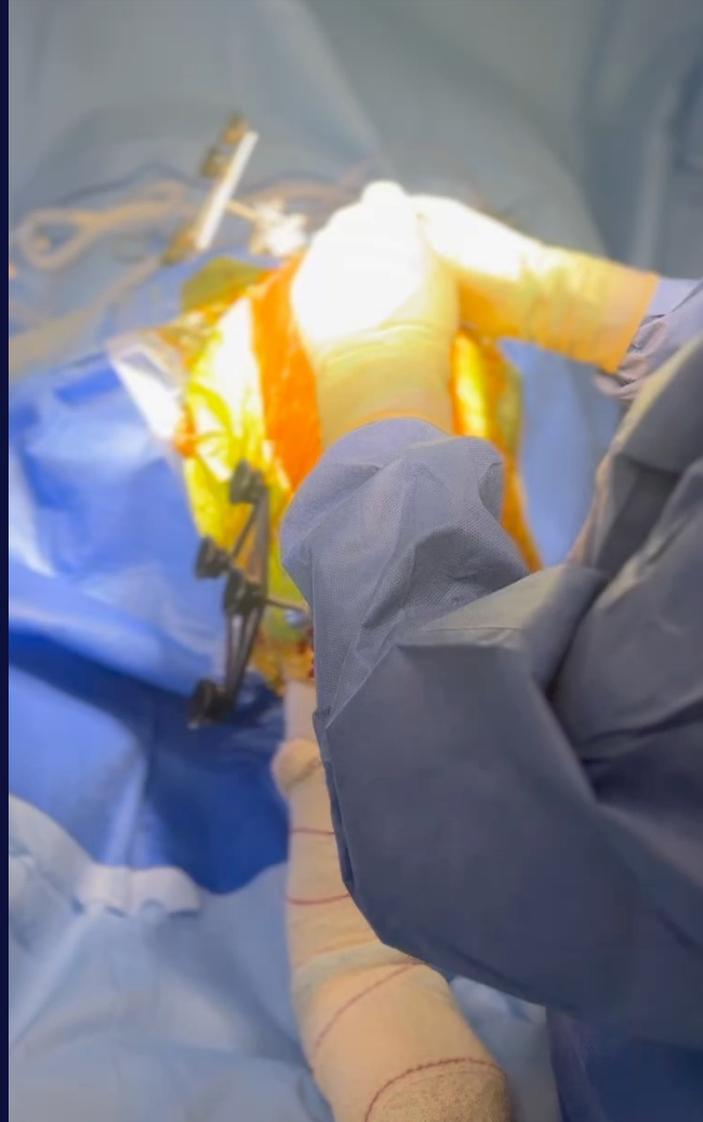
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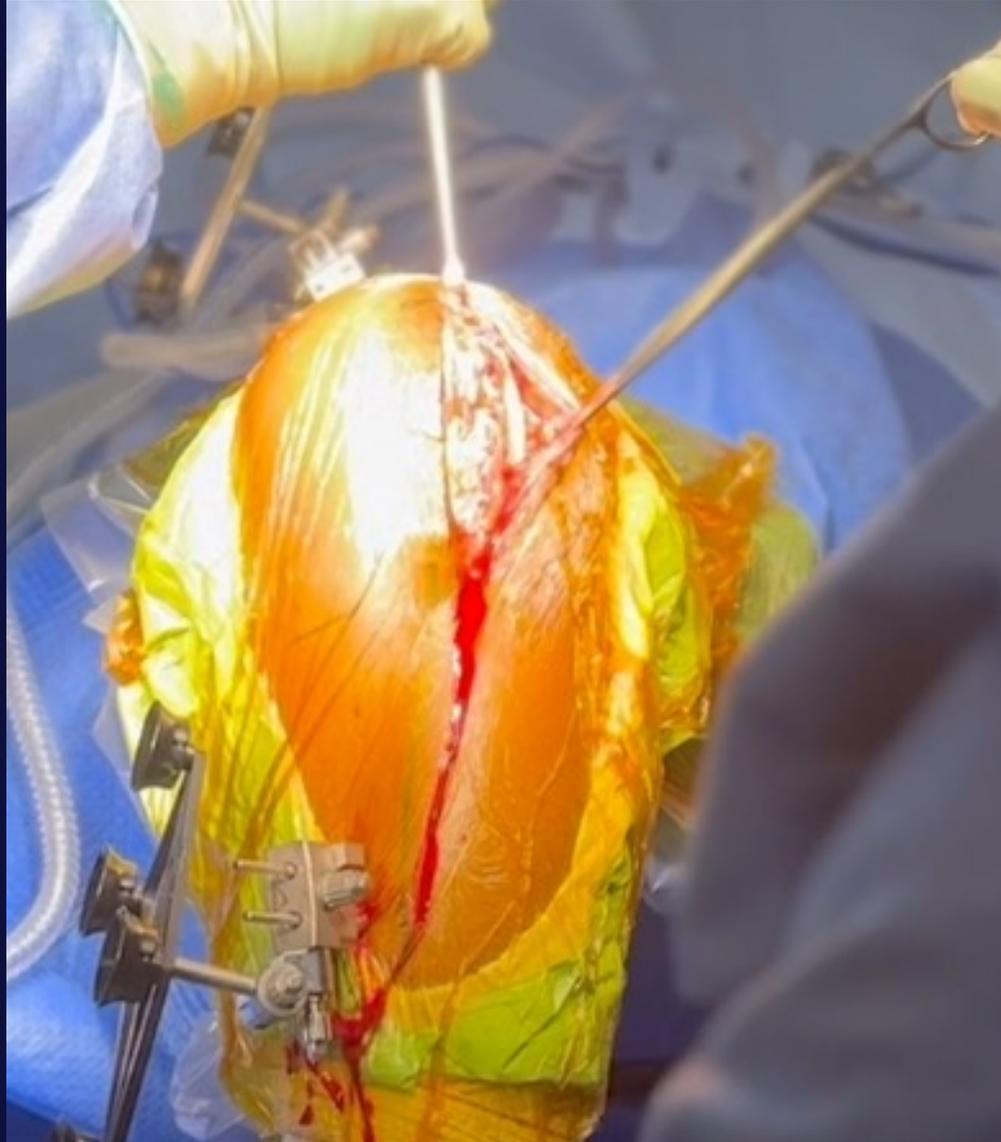
# Surgical technique



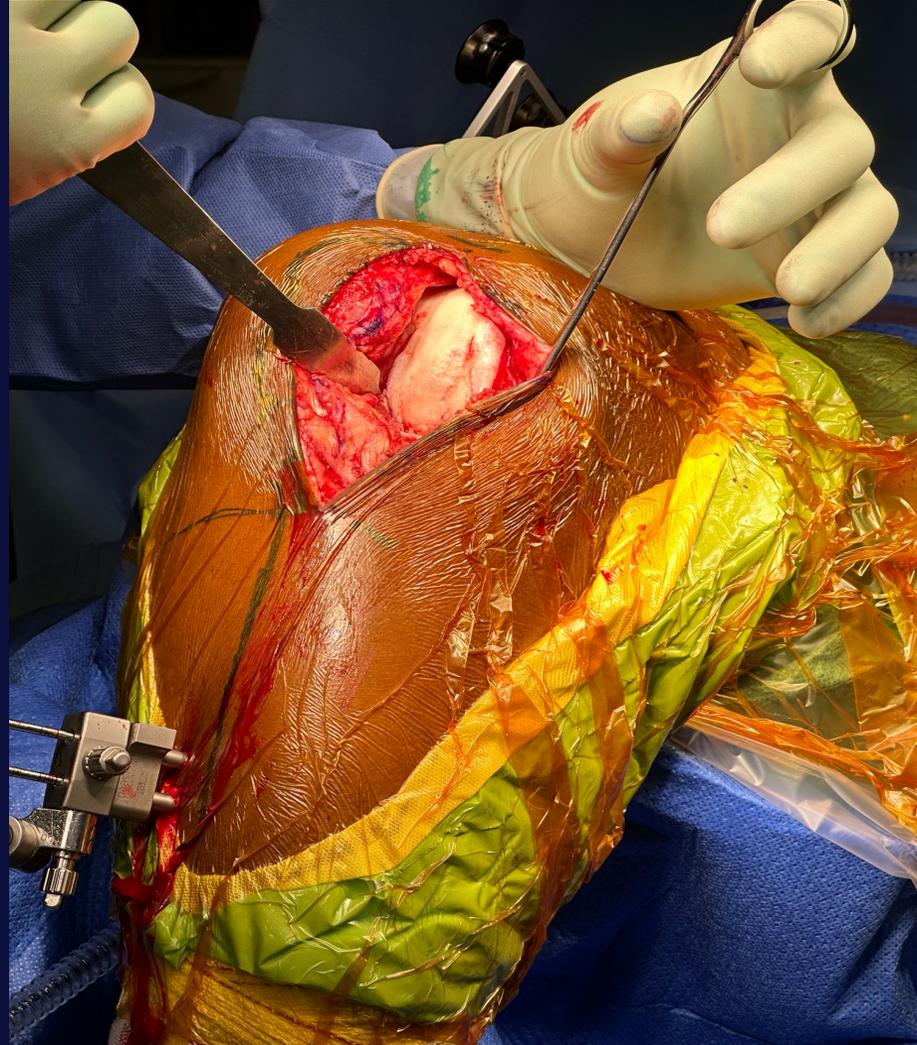
# Surgical technique



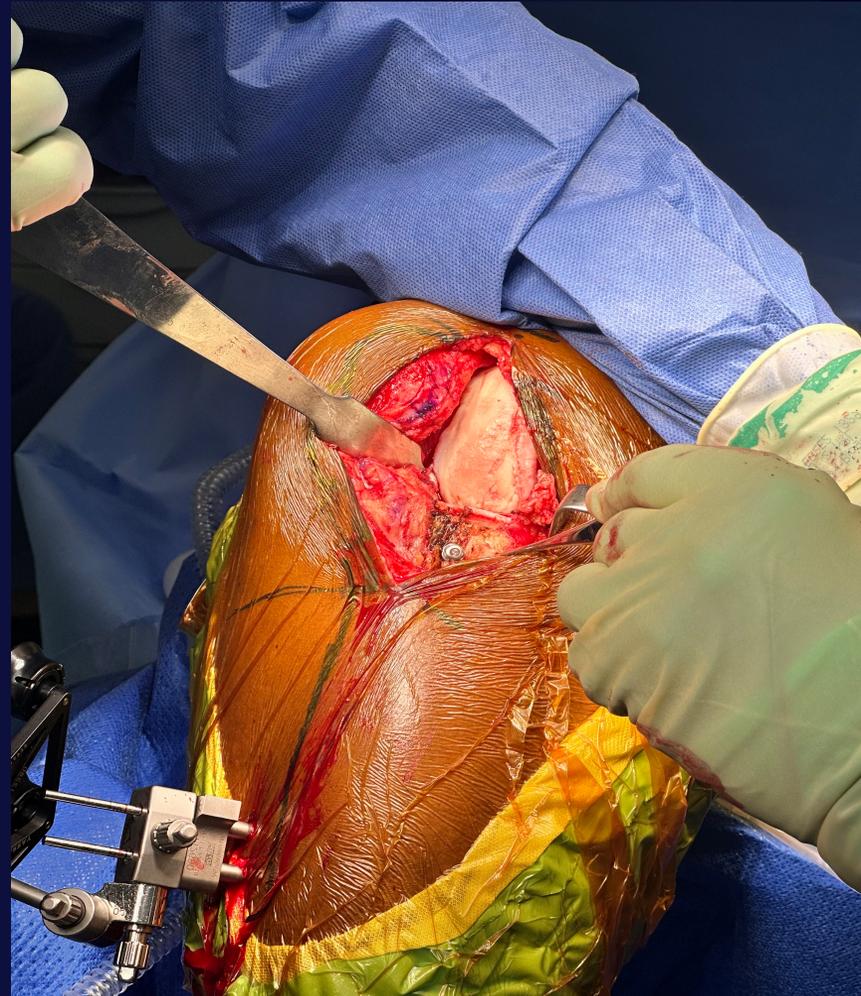
# Surgical technique



# Surgical technique

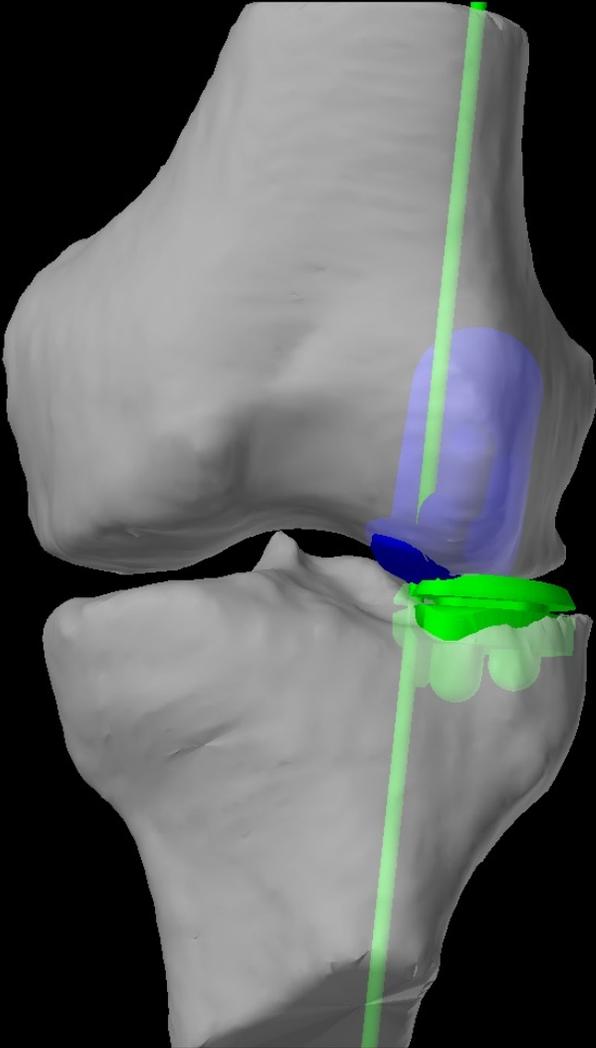


# Surgical technique



# Surgical technique

MAKO Case Planning Pre-Op RIO Check Bone Registration **Intra-Op Planning** Bone Preparation Case Completion Options **Screen**



Flexion  
1.0°

Valgus  
4.0°

Tibia External  
8.5°

0 Poses

Capture Delete

Live Review

MAKO Surgical recommends that you follow standard surgical practice and take at least 4 poses - full extension, full flexion, and two angles in between.

Joint Balancing

Back Next

# Surgical technique

MAKO Case Planning Pre-Op RIO Check Bone Registration Intra-Op Planning Bone Preparation Case Completion Options Screen

**TRANSVERSE**

Med

Internal **4.5°**

**CORONAL**

Med

Varus **0.0°**

**SAGITTAL**

P

P. Slope **5.0°**

**Loose (mm)**

**Tight (mm)**

**Angle (degrees)**

RESTORIS® MCK Lateral Onlay PKA

Implant View: Lateral Tibia - Primary

Size: 1

Poly: 9.0 mm

Proud 4.5 mm

Flexion 4.5°

Undo Recenter Cross-hair

Map Point/Surface Clear Point/Surface

Map Cartilage Visual Menu

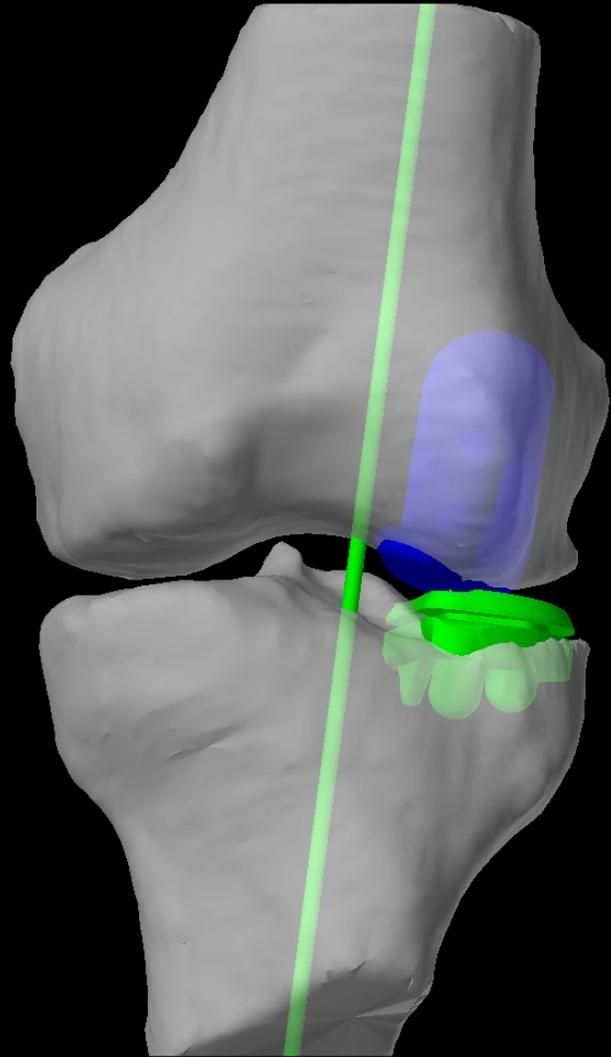
Operative Side: left  
Tight: 1.0 mm at 4.5°

Implant Planning

Back Next

# Surgical technique

MAKO Case Planning Pre-Op RIO Check Bone Registration **Intra-Op Planning** Bone Preparation Case Completion Options **Screen**



Extension  
1.0°

Valgus  
1.0°

Tibia External  
12.0°

8 Poses

Capture  
Delete  
Live  
Review

MAKO Surgical recommends that you follow standard surgical practice and take at least 4 poses - full extension, full flexion, and two angles in between.

Joint Balancing  
Back Next

# Surgical technique



# Surgical technique



18 days later...

Permission granted by  
patient for showing video



18 days later...



# Outcomes

Original Research

## Fixed-Bearing Unicompartmental Knee Arthroplasty of the Lateral Compartment: A Series of 246 Cases

Michael Fitzsimons, MCh <sup>a,\*</sup>, Johan van der Stok, PhD <sup>a</sup>, Joseph M. Queally, MD <sup>a</sup>,  
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[Arthroplasty Today 23 \(2023\) 101183](#)

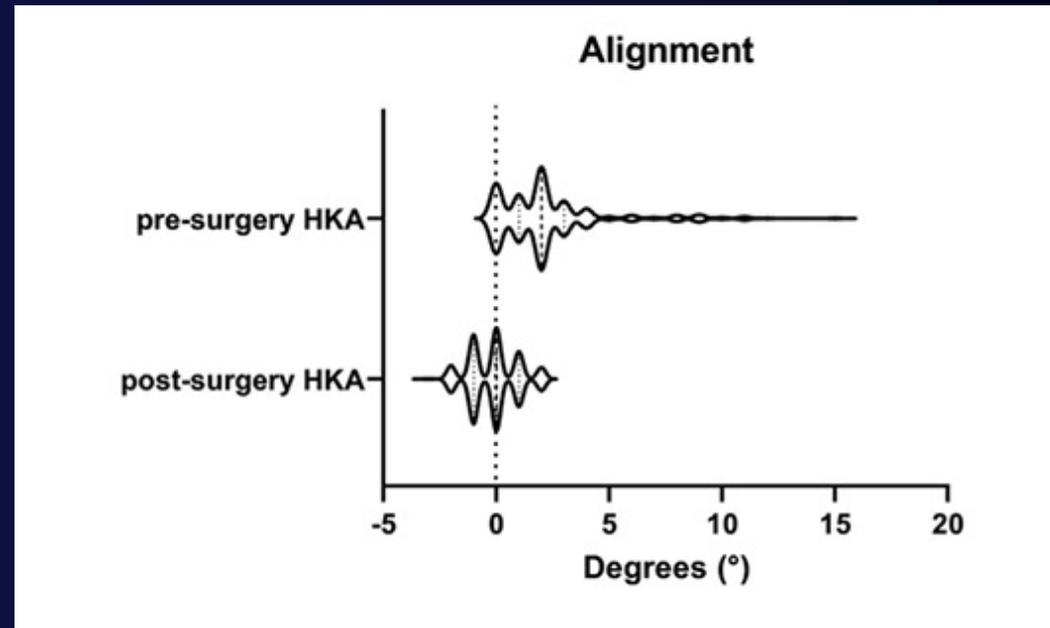
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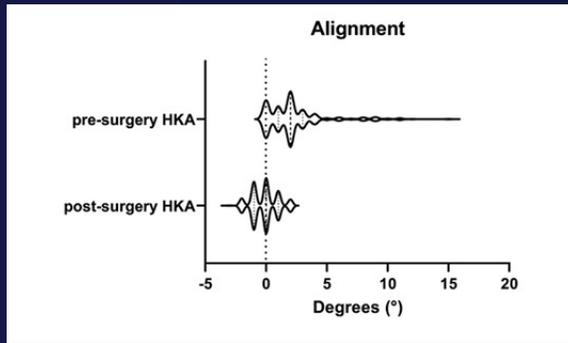
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Arthroplasty Today 23 (2023) 101183



	(n = 255)
Follow-up (y)	6.6 ± 2.2 (range 2-10.8)
Lost to follow-up	4% (n = 9)
Implant revision rate	1.6% (n = 4)
PJI	1
Progression of OA	2
Instability	1
Reoperation rate	2% (n = 5)
Partial meniscectomy	5
Complication rate	17.6% (n = 43)
Stiffness	38
Wound dehiscence	3
Neurapraxia	1
Intraoperative fracture of lateral femoral condyle	1

1.6% revision rate at mean 6.6 yr f/u (2-10.8)

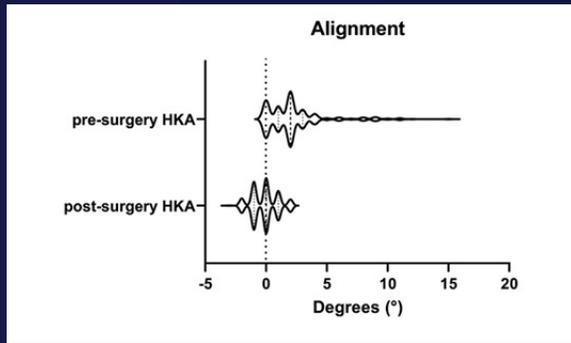
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WOMAC score.

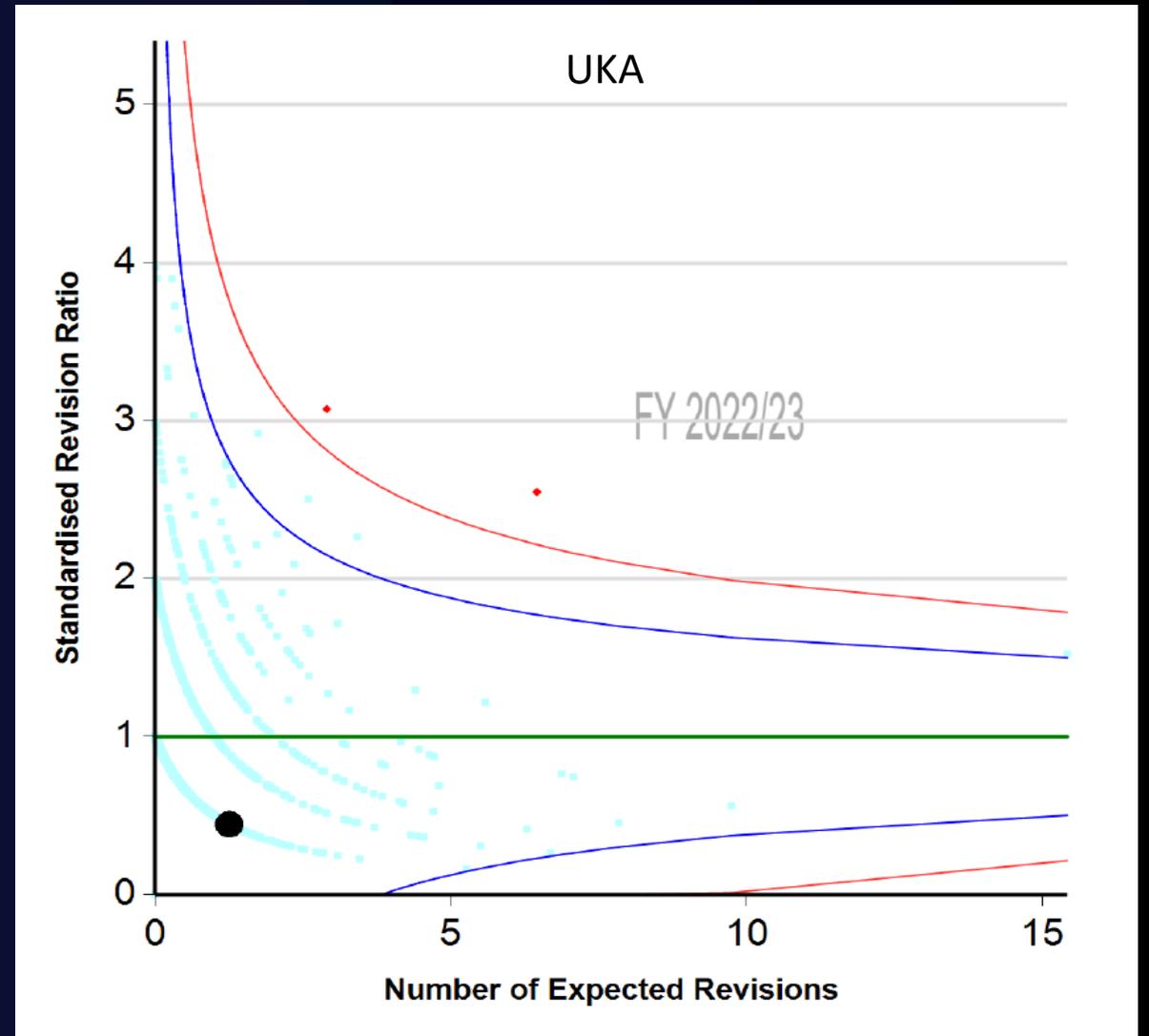
	Presurgery (n = 255)	6 wk (n = 255)	6 mo (n = 255)	Final (n = 242)	P-value
WOMAC - pain	6.1 ± 1.2	11.1 ± 2.3	13.9 ± 2.8	16.6 ± 2.5	<.001
WOMAC - flexion	6.2 ± 0.9	7.1 ± 1.1	5.9 ± 0.8	8.0 ± 0.9	<.001
WOMAC - function	48.9 ± 2.6	49.6 ± 3.8	54.3 ± 4.2	60.8 ± 4.6	<.001
WOMAC - total	61.3 ± 3.5	67.6 ± 8.1	75.1 ± 6.8	85.3 ± 7.5	<.001

Mean 24 pt improvement on WOMAC at final F/U

Friedmann test with Dunn's correction.

# Outcomes

- Personal UKA survivorship from NJR
- Fewer than half the expected revisions



# Conclusion

- Lateral UKA a viable option in isolated lateral disease
- Avoids problems of altering lateral joint line
- Avoid over-correction
- Insufficient literature to provide robust evidence in favour or against
- For the right indications, does result in happy patients!



Thank you



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